



# CFA Institute

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## CFA Institute Research Challenge

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## HOLD

Price: €27.9  
Target Price: €30.3  
Upside: 8.7%  
Dividend Yield: 0.8%  
Total Shareholder Return: 9.5%

Listed on: Italian Stock Exchange  
Ticker: IP:IM (BB), ITPG.MI (TR)

### Market Data

Main Shareholders	
IPG Holding	23.3%
Fidelity	5.3%
Fin Tel	4.1%
Caisse des Depots & Consignations	3.0%
Treasury Shares	3.0%
Free Float	61.3%
Shares Outstanding [m]	106.2
Market Cap [€bn]	3.0

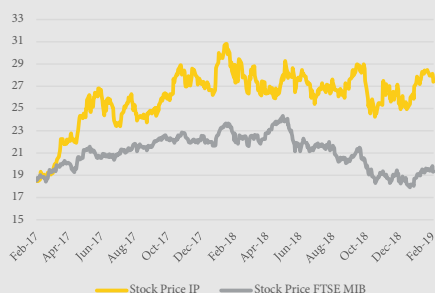
### Stock Data

52 w H/L [€]	29.5/24.2
Avg. Daily Volume (52w) [m]	0.2

### Key Financials

	18E	19E	20E
EPS	1.61	1.57	1.69
DPS	0.22	0.23	0.24
Dividend Yield	0.8%	0.8%	0.9%
Price to Book	3.1x	2.9x	2.5x
ROE	20.9%	17.6%	16.4%
ROIC	14.8%	14.8%	15.4%

### 2Y Price Performance



Source: FactSet

## CFA Institute Research Challenge

Italy | Producer Manufacturing | Industrial Machinery

# Interpump Group S.p.A.

	2017A	2018E	2019E	2020E	2021E	2022E	2023E
Revenues [€m]	1,087	1,270	1,312	1,384	1,462	1,542	1,626
EBITDA [€m]	249	284	295	312	331	350	370
Margin	22.9%	22.3%	22.5%	22.5%	22.6%	22.7%	22.8%
Net Income [€m]	134	171	167	180	194	207	221
Margin	12.4%	13.4%	12.7%	13.0%	13.2%	13.4%	13.6%
EPS [€]	1.25	1.61	1.57	1.69	1.82	1.95	2.08
P/E	20.9x	16.2x	17.8x	16.5x	15.3x	14.3x	13.4x
EV/EBITDA	12.6x	10.7x	10.6x	9.6x	8.7x	7.8x	7.0x
DPS [€]	0.21	0.22	0.23	0.24	0.25	0.26	0.27
Dividend Yield	0.8%	0.8%	0.8%	0.9%	0.9%	0.9%	1.0%
Net Debt [€m]	324	273	161	47	-85	-222	-368

Source: Team Estimates

### Interpump, a fairly-priced rough diamond

We initiate our coverage on Interpump Group (IP) with a HOLD recommendation and a year-end target price of €30.3, implying a 9.5% Total Shareholder Return on the 11th February 2019 closing price (€27.9).

Perceived as a strong industrial Group which rests its success on 40+ value-accretive M&As underpinned by a sound balance sheet fed by generous free cash flows (FCFs), IP primps in front of the market with double-digit revenues and EPS growth and best-in-class margins. However, the diamond is rough: (few) synergies, (dis)similarities among divisions and an (un)convincing M&A value-creation mechanism reinvigorate and jeopardize its luster at once. Although its carats are not fully weighed by the market (8.7% potential upside), we deem fair the expectations currently factored in in the stock price.

### A strong dual-nature Group...

A bit industrial, a bit financial: IP is a two-faced Group. One may think about a neither-flesh-nor-fowl Company but this is not the case: with (i) double-digit top-line growth (11.6% 2008-2018E CAGR), (ii) best-in-class margins (22.3% 2018E EBITDA margin), (iii) fast-growing EPS (11.4% 2008-2018E EPS CAGR) and (iv) an extremely flexible balance sheet (0.96x 2018E Net Debt/EBITDA), IP shines in the industrial machinery landscape. Furthermore, with 40+ acquisitions from 1996 IPO, M&As are at the core of IP equity story: remarkable scouting, negotiation and operating optimization skills turned a long list of deals into a robust track-record of successful and value-accretive acquisitions.

### ...but all that glitters is not gold

Sustained by world-class performances, in the eyes of an investor the industrial side of IP could seem bulletproof. However, from an accurate analysis some blemishes emerge: (i) the 20-years-long diversification strategy has not significantly reduced IP sensitivity to macroeconomic dynamics, (ii) the peculiar soft-integration policy of the Group results in few synergies among subsidiaries and divisions, (iii) the well-working cash generation machine (net cash starting from 2021E) conceals inefficiencies in cash conversion cycle (155 days in 2018E), (iv) the eye-catching high margins (26.6% 2018E EBITDA margin) of a division (i.e. Water-Jetting) hide a worrying ROIC ex. gdw decreasing trend (ca. -1400bsp in 2012-2018E) and (v) the low investments in R&D resulting in a portfolio of not-innovative products appear poor to tackle the incoming new-technologies wave (e.g. IoT, electrification).

Similarly, digging in IP M&A value creation mechanism, the perceived industrial soundness seems to fade, being the convenient deal price the real value driver: running a Montecarlo simulation with 10,000 bearish scenarios, it turns out that in 93% of cases IP was certain to generate extra-value from an acquisition even if worst scenarios would have come true without carrying out any synergy but simply leveraging the low price paid.

### Bullish on near term, bearish on long run

Bullish on the Group competitive advantages preservation in the near term, we are bearish on their long run sustainability: confident the grey areas identified will not undermine IP near future, we believe they raise concerns in the LT. Firstly, while in 2019E-2023E IP organic revenues will be pulled by the cycle reaching a YoY 5.5% 2023E growth rate, we foresee them to converge to a 2% LT growth, slowed down by IP technological gap with competitors and markets maturation. Secondly, high margins and returns do not seem to be threatened in the near future but the extra-profitability is expected to fade over a broader time span considering increasing competition. Finally, we forecast M&As at current pace (9% YoY inorganic growth rate) only in the short term: IP soft-integration strategy seems inadequate to manage a Group expected to double its size in the near future (2022E) and its M&A price-paid-based value creation mechanism strongly depends on the availability of suitable targets.

### Fair valuation at €30.3: shiny, impure but correctly-priced

As many diamond impurities are too tiny to be seen by anyone other than a trained diamond grader capable of going beyond the external sparkle, so IP value assessment required us to dig deep below its eye-catching performances, resulting in a €30.3 year-end target price, well-below consensus (€33.1, FactSet), obtained through a three-stage DCF model for the organic part of the business (€26.1) and a time series of on-top DCFs for the future M&As contribution (€4.2).

## Investment Summary

### Interpump: high performances, high expectations

**1 Group,  
2 divisions,  
3 market segments**

We initiate our coverage on Interpump Group (IP) with a **HOLD** recommendation and a year-end target price of €30.3, implying a 9.5% Total Shareholder Return dividend included on the 11th February 2019 closing price (€27.9). Capable of turning 40+ deals into successful M&A stories, IP tripled its size in the last decade through a double-digit growth rate, shining in the Italian machinery industry landscape with its far-above-the-average margins. Combining a well-structured product and end-market diversification path with operating optimization, IP showed eye-catching performances over the years, rising optimistic expectations (almost) completely factored in in the current stock price.

With a €3.0bn Market Cap and more than €1.2bn in revenues in 2018E, IP is an Italy-based multinational industrial Group, operating through 2 divisions (Hydraulics and Water-Jetting) in 3 market segments of the vast Machinery industry: Hydraulics Components (HC), High- and Very High-Pressure Piston Pumps (HPP & VHPP) and Fluid Handling Systems (FHS). Leveraging (i) a **leadership position in the HPP & VHPP niche which ensures generous FCFs**, (ii) a **20-years-long successful M&As track-record** which resulted in sustained inorganic growth and portfolio, end-markets and geographical diversification and (iii) a **structural flexibility which allows quick decision-making and high responsiveness**, IP exhibits a double-digit top-line growth (11.6% 2008-2018E CAGR), best-in-class margins (22.3% 2018E EBITDA margin), fast-growing EPS (11.4% 2008-2018E EPS CAGR) and an extremely flexible balance sheet (0.96x 2018E Net Debt/EBITDA). However, **digging deep some grey areas emerge**: the diversification strategy has not significantly reduced IP sensitivity to macroeconomics dynamics, (ii) the peculiar soft-integration policy of the Group results in few synergies among subsidiaries and divisions, (iii) the well-working cash generation machine (net cash starting from 2021E) conceals inefficiencies in cash conversion cycle (155 days in 2018E), (iv) the eye-catching high margins of Water-Jetting division (26.6% 2018E EBITDA margin) hide a worrying ROIC ex. gdw decreasing trend (ca. -1400bsp in 2012-2018E), differently from Hydraulics and (v) the low investments in R&D resulting in a portfolio of not-innovative products appear poor to tackle the incoming new-technologies wave (e.g. IoT, electrification).

### M&As at core of the equity story

With 40+ acquisitions from 1996 IPO, **M&As are at the core of IP equity story**. Despite limited cross-selling synergies, the management has always been able to bring lower-EBITDA-margin acquisitions (17.2% 2008-2018E average) to IP values in short time periods, leveraging on (soft) cost synergies and acquired company optimization and avoiding knock-on effect on Group increasing margins.

Nevertheless, **we believe the real M&A value-creation driver of IP to be the low price paid** rather than industrial synergies generation. Indeed, according to our analysis the Group is usually able to acquire well-run, privately owned companies with no turnaround or restructuring stories paying a lower-than-market-average multiple (6.8x avg. EV/EBITDA paid by IP vs. 10.3x market average). Running a Montecarlo simulation with 10,000 bearish scenarios, it turns out that in 93% of cases IP was sure to generate extra-value from an acquisition even if worst scenarios would have come true without the need to carry out any synergy but simply leveraging the low price paid. Should an investor perceive it as a benefit, we posit that IP will face hard times in replicating this M&A price-based value creation mechanism in case the pool of suitable targets will shrink.

### Relevant risks

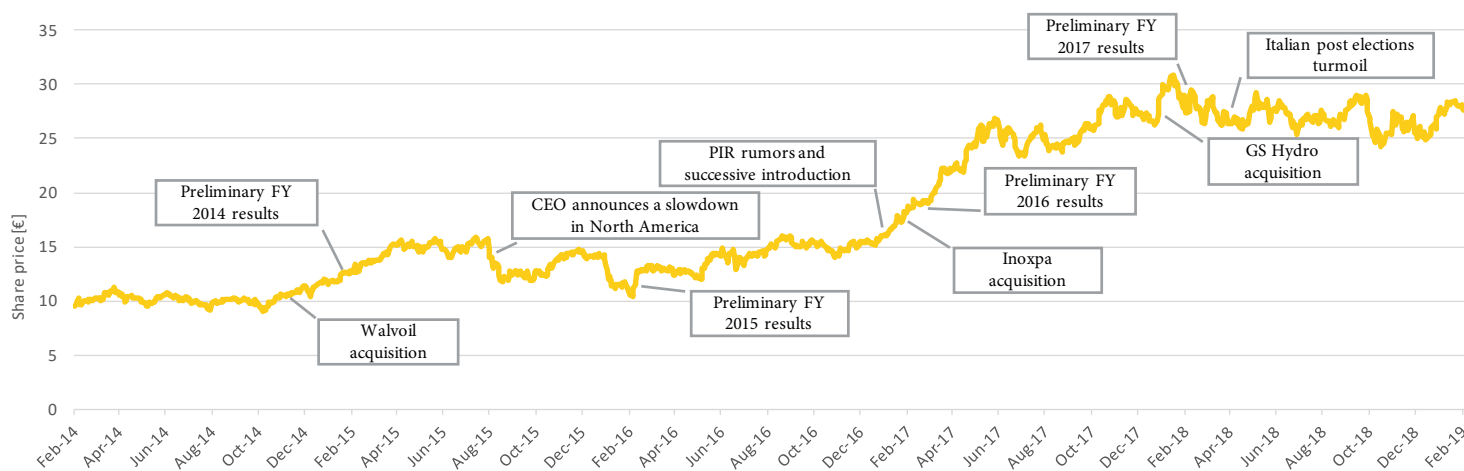
In the short term the most threatening risks seem to be at macro level, with (i) 2019E-2020E GDPs slowdown and (ii) Italian political instability that could negatively affect IP due to its cyclical and a still-high exposure to Italy. However, **we believe the main risks to be the strategic and competition-related ones whose impact is forecasted in the long run**: (i) as size increases the soft-integration policy may lead to a loss of control and efficiency, (ii) the extra-profitability and markets maturity could result in fierce competition and (iii) the poor level of investments in IoT, environmental-friendly and electric technologies is creating a technological hard-to-be-bridged gap with competitors that could negatively affect sales in the next 15-25 years.

### Bullish on near term, bearish on long run

**Bullish on the Group competitive advantages preservation in the near term, we are bearish on their long run sustainability**: confident the blemishes identified will not undermine IP next future, we believe they raise concerns in the long term. Firstly, while in 2019E-2023E IP organic revenues will be pulled by the cycle reaching a YoY 5.5% 2023E growth rate, we foresee them to converge to a 2% long term growth, slowed down by IP technological gap and markets maturation. Secondly, high margins and returns do not seem threaten in the near future but the extra-profitability is expected to fade over a broader time span considering increasing competition. Finally, considering (i) IP soft-integration strategy seems inadequate to manage a Group expected to double its size in the near term (2022E) and (ii) IP M&A price-paid-based value creation mechanism strongly depends on the availability of adequate targets, we forecast M&As at current pace (9% YoY inorganic growth rate) only until 2022E (i.e. 4 years).

### Valuation

**Our €30.3 year-end target price results from the valuation of organic business and future M&As contribution**. In particular, IP organic business valuation through a three-stages DCF with distinct business assumptions for the two divisions resulted in a €26.1 fair price. Further, as (i) acquisitions have been at the core of IP equity story, (ii) managers clearly stated they will pursue the current M&A strategy in the next years and (iii) we expect future inorganic growth, we added €4.2 from future M&As, modelling IP inorganic value creation through a time series of on-top DCFs. To support our year-end target price a SOTP relative valuation has been performed, resulting in a €30.4 price fully in line with our valuation.



Source: FactSet, Team Elaboration

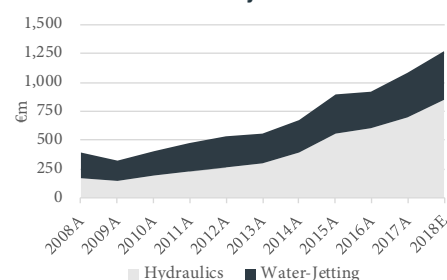
## Business description

### IP divisions, sub-divisions and operating segments - Exhibit 1

Group	Interpump Group S.p.A.				
Divisions	Hydraulics			Water-Jetting	
Sub-divisions	PTOs & cyl.	DCVs	Hoses	Water-Jetting	
Op. segments	HC			HPP & VHPP	FHS

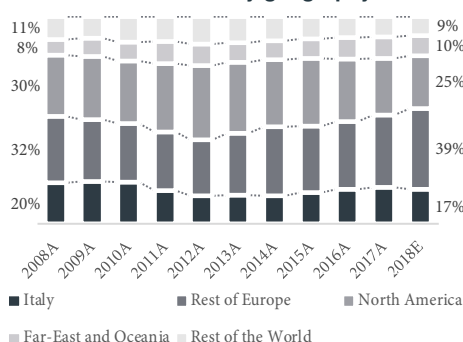
Source: Team Elaboration

### Revenues breakdown by division - Exhibit 2



Source: Company Data, Team Estimates

### Revenues breakdown by geography - Exhibit 3



Source: Company Data, Team Estimates

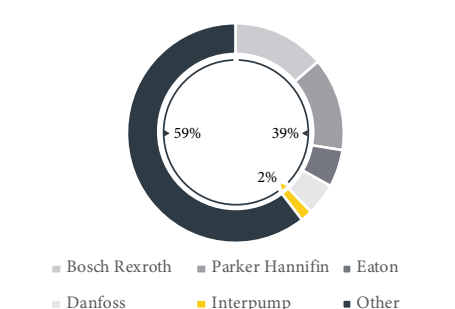
### IP M&A history - Exhibit 4

# M&A	90-94	95-99	00-04	05-09	10-14	15-18
Cleaning	5	6	Dismissed			
EM	1	Dismissed				
HPP		1				
VHPP	1			2		1
FHS						5
PTOs		3			1	1
Cylinders				5		
Valves					4	
Hoses					1	5
Other HC			1		1	2

■ Cleaning ■ Electric Motors ■ Water-Jetting ■ Hydraulics

Source: Team Elaboration

### HC: market structure - Exhibit 5



Source: Team Elaboration

With a €3.0bn Market Cap and more than €1.2bn in revenues in 2018E, Interpump (IP) is an Italy-based global group operating in the machinery industry. IP is the world leader in the High- and Very High-Pressure Piston Pumps (HPP & VHPP) niche market, a global player in the Hydraulic Components (HC) market and a small but growing actor in the Fluid Handling Systems for food, pharma and cosmetics (FHS) market. Listed in the Borsa Italiana Stock Exchange since 1996, the Group has been admitted in 2001 to the Borsa Italiana STAR segment, dedicated to high-performance mid-caps.

### Company presentation

Founded in 1977 as a manufacturer of high-pressure pumps, IP soon assumed a prominent role in the HPP & VHPP niche becoming the undisputable market leader in the late 90s. Starting from the 90s, the Group diversified its activity, through 40+ value-accretive acquisitions of companies operating in other machinery industry segments, mainly HC market (since 1997) and FHS market (since 2015). This pushed IP mainly-inorganic top-line growth (11.6% 2008-2018E CAGR) and redefined its structure, now organized into two reporting divisions (*Exhibit 1*): **Hydraulics** (66% of 2018E revenues), serving Original Equipment Manufacturers (OEMs, 63% of divisional revenues) and distributors (37%) in the HC market, and **Water-Jetting** (34% of 2018E revenues), serving OEMs (84%) and distributors (16%) in the HPP & VHPP and FHS markets. IP adopts a strongly decentralised approach and, hence, the HC, HPP & VHPP and FHS market segments merely include companies serving the same market rather than being closely coordinated operating segments.

### Hydraulics (HC) – a promising player in a vast market (€844m revenues, 20.2% 2018E EBITDA margin)

IP is one of the few global players in the vast and fragmented €40bn HC market. The Hydraulics division manufactures and distributes hydraulics component mainly deployed in the truck (23% of divisional revenues), construction (12%), earth moving (10%) and agriculture (7%) end-markets. Due to its large product range, the division has been recently (2017) reorganised into three product-based subdivisions (see *Appendix 1*).

### Water-Jetting (HPP & VHPP and FHS) – a true niche leader (€426m revenues, 26.6% 2018E EBITDA margin)

In the €0.8bn HPP & VHPP market (79% of 2018E divisional revenues) IP is the world largest player (ca. 50% market share) and manufactures and distributes professional piston pumps operating from 50 to 4,000 bar pressures used in an extremely vast range of end-markets and applications. Examples include industrial cleaning (17% of divisional revenues), contractors (13%), construction (7%) and automotive (6%). In the €8bn FHS market (21% of 2018E divisional revenues, 1% market share), a series of acquisitions started in 2015 made IP a small but growing player. Its products include several fluid-processing components which find their applications in the food, pharma and cosmetic end-markets.

### Corporate strategy

IP post-IPO corporate strategy has been based on an ambitious but well-balanced portfolio management which has been sustained by its leadership positioning in the HPP & VHPP market. Indeed, IP effectively invested its generous FCFs into a series of acquisitions that accelerated its growth and business diversification. This has been closely coordinated with the operating management of the Group, with both the organic and inorganic development of IP activity carefully crafted with the aim of maintaining its structural flexibility. IP corporate strategy is based on:

#### 1. Leadership positioning in the HPP & VHPP market

Starting in the 90s, thanks to technical improvements (e.g. the use of innovative ceramic pistons) and a best-in-class know-how, IP was able to manufacture highly-competitive products through which it soon reached a leadership positioning in the HPP & VHPP market. This, combined with the market niche size, gave IP the resources to invest in both organic and inorganic growth. Indeed, high entry barriers and a well-protected premium price ensure IP rich margins and generous FCFs which sustained IP investments with a little need of debt financing.

#### 2. Growth and diversification through M&A

Driven by the limited potential development in the HPP & VHPP market and by the willingness to diversify its activity, IP pursued growth beyond its original business finalizing 40+ acquisitions aimed at (i) reinforcing competitive positioning, (ii) enhancing distribution and (iii) enlarging product range (see *Appendix 4*). IP acquisition strategy has been based on distinctive target identification and integration policies. **Target identification and evaluation:** despite its focus on highly attractive targets (well-run, privately owned companies with no turnaround or restructuring stories) IP historically paid multiples ranging from 6x to 7x EV/EBITDA, far below the average transaction multiples of IP markets (ca. 10.2x and 12.9x EV/EBITDA for Hydraulics and Water-Jetting, respectively, see *Appendix 6*). **Integration and synergies:** IP implements a soft-integration where executive managers, processes and IT systems are not replaced, but interfaced with the Group ones. The limited cross-selling synergies (see *Appendix 5*) may suggest this approach to be ineffective. However, IP has always been able to bring lower-EBITDA-margin acquisitions to the Group ones in 2-3 years (management guidance).

#### 3. Structural flexibility

Given the importance of high responsiveness to demand fluctuations and of the aftersales market, it is essential for IP to keep a flexible organizational structure that allows for quick decision-making. On one hand, this is reflected in the organic development of IP business (e.g. flat organization, no investments in central structures). On the other, it drove IP M&A policy, with soft-integration being its most evident expression. As a result, IP has a completely decentralized organization with 30+ companies independently serving their customers with little coordination with sister companies.

## Industry overview and competitive positioning

**The Hydraulics Components (HC), High and Very High-Pressure Piston Pumps (HPP & VHPP) and Fluid Handling Systems (FHS) markets** are driven by similar dynamics, given their common belonging to the machinery industry. Indeed, even though competition is shaped by market-specific value drivers, market demand is mostly determined by macroeconomic factors (mainly GDP for HC and HPP & VHPP and population for FHS). Hence, these markets are exposed to similar trends:

**1. Slowing GDP growth in advanced markets.** The HC and HPP & VHPP markets are expected to suffer from advanced countries GDP slowdown in the next two years, with 1.6% 2018E-2020E GDP CAGR in the Eurozone and 2.1% in the US (vs 2.0% and 2.5% in 2013-2018E, respectively. OECD).

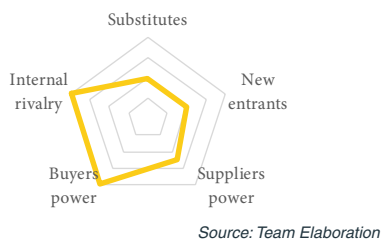
**2. Emerging markets maturation.** Sustained 2018E-2023E GDP growth in Emerging markets cheers up the machinery industry near-future outlook. Still, their decelerating expected growth (e.g. 5.9% 2018E-2020E GDP CAGR in China vs 9.4% in 2013-2018E), raises concerns about the long term underlying prospects, suggesting maturation is approaching. Still, this opens new doors for the FHS as increased pro-capita disposable income leads consumers toward processed food.

**3. International Trade Wars pressure.** Tariff-based commercial wars are putting pressure on the machinery industry. Metal duties escalation is the key cost-side threat, while the expected 1% Trade-Wars related World GDP drop in the next 3-5 years (World Bank) negatively contributes to the already-stagnant demand-side outlook.

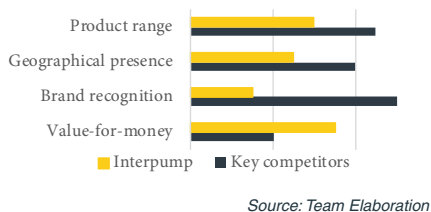
### Hydraulics Components (HC) (market size €40bn)

The €40bn HC market supplies hydraulic components to large OEMs and small manufacturer in 10+ mobile and industrial end-markets. Despite its technological maturity, the market is structurally evolving. Indeed, large OEMs requirements are

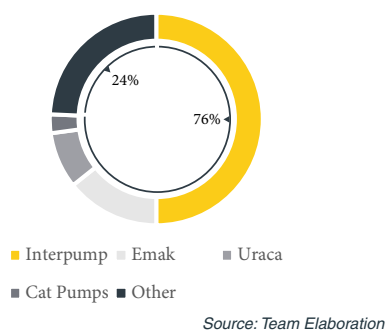
**HC: Porter's 5 forces analysis - Exhibit 6**



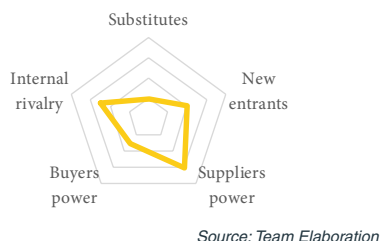
**HC: competitive positioning - Exhibit 7**



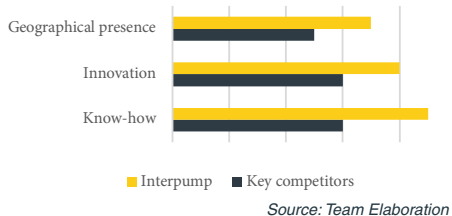
**HPP & VHPP: market structure - Exhibit 8**



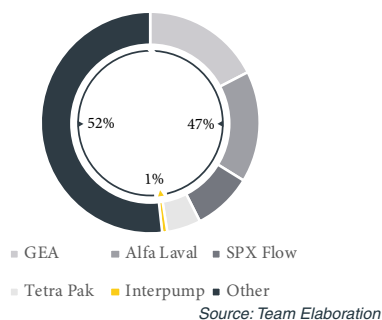
**HPP & VHPP: Porter's 5 forces analysis - Exhibit 9**



**HPP & VHPP: competitive positioning - Exhibit 10**



**FHS: market structure - Exhibit 11**



pushing toward an ever-wide gap between global and local players, creating two competitive arenas. The first is dominated by Bosch, Parker, Eaton and Danfoss (C4=39%), while a countless number of players populate the second one.

**Porter's 5 Forces Analysis: heavy OEMs bargaining power, fierce internal rivalry**

The HC landscape competition is mostly shaped by (i) **buyers power** and (ii) **internal rivalry** (see Exhibit 6 and Appendix 2). **Buyers power** is driven by large OEMs, which are the most attractive customers as their volumes sharply exceed distributors ones. Their (i) large size, (ii) high and increasing level of concentration and (iii) stringent aftersales service requests are forcing HC manufacturers to adapt to their requirements. Under these pressures, the HC landscape is polarizing toward global players and local players and niche specialists. **Internal rivalry** is driven by (i) the low industry growth (2% 2013-2018E CAGR) and (ii) the high market maturity which has progressively reduced HC global players product differentiation. Still, they do not suffer from local players and niche specialists competition: the former lacks the size-related requirements to serve large OEMs, the latter plays a complementary role (i.e. manufacturing and distributing specialised low-volumes products which are necessary but would be inconvenient to be produced by global players) resulting in mutual beneficial relationships with global players. Potential **new entrants** put little pressure over the HC market given the high capital-requirements and customer loyalty entry barriers which explain the historical prevalence of acquisition-based entries. The main potential substitute can be found in electrification: while electric components can leverage higher energy efficiency, their lower reliability and power density will postpone the (partial) substitution.

**A typical machinery industry**

OEMs willingness to create long-lasting relationship with a narrow set of global suppliers makes (i) **product range** and (ii) **geographical presence** the two key value drivers in the market. Furthermore, (iii) **brand recognition** and (iv) **value-for-money** are at the core of buyers choice. Indeed, hydraulic components often account for a small portion of OEMs COGS but play a critical role in their finished goods. Thus, while putting increasingly high pressure on prices, large OEMs first supplier-selection criterium is product reliability which strong-brands proved on their track record.

**IP positioning.** With a large product range and geographical presence in both advanced and emerging countries, IP is an HC global player. However, its competitiveness is determined by its decentralised approach, with: (i) an unproperly leveraged product range, given the limited cross-selling, (ii) a decentralized and not fully-exploited distribution network, (iii) a very low brand recognition, given the completely fragmented brand portfolio but (iv) a strong value-for-money.

**Key competitors positioning.** Apart from Bosch, due to its one-of-a-kind product range, IP is directly competing with the key HC global players: Parker, Eaton, Danfoss and Bucher. Their almost-complete product ranges are effectively brought to the market thanks to their strongly-centralized worldwide networks (e.g. Parker Store® distribution network, with 3000+ specialised and coordinated distributors) and strong brands which rely on centralizing procurement, distribution and marketing but keeping a divisional operational structure. Still, value-for-money is moderate (see Exhibit 7).

**HPP & VHPP (market size €0.8bn)**

The HPP & VHPP €0.8bn niche market supplies professional water piston pumps for 20+ mobile and industrial applications. While pressures coming from buyers (OEMs) are moderate due to market concentration, the low market growth (ca. 3% 2013-2018E CAGR) proved market players resilience over time, forcing them to compete on know-how, innovation and geographical presence. Thanks to its technological leadership positioning, IP rules the market (ca. 50% market share), with no other company standing out for having a comparable share.

**Porter's 5 Forces Analysis: a market for the few**

(i) **Internal rivalry** and (ii) **suppliers power** are the two main competitive pressures in the HPP & VHPP market (see Exhibit 9). **Internal rivalry** is fuelled by the historical low market growth (ca. 2% 2013-2018E CAGR) which forced incumbents to pursue product (incremental) innovation. This softened internal rivalry, with several small players becoming specific-application specialists. Metals bars **suppliers power** is determined by their (i) high concentration and (ii) low dependence on HPP & VHPP players, given their limited purchasing volumes. Know-how and capital requirements defend the market from potential **new entrants**, while HPP & VHPP new applications discoveries (e.g. steel bars descaling) and the lack of potential direct **substitutes** suggest HPP & VHPP will substitute rather than be substituted.

**Know-how, rather than scale**

The HPP & VHPP niche market value drivers are: (i) **know-how**, (ii) **innovation** and (iii) **geographical presence**. **Know-how** is at the core of competition for two main reasons: (i) piston pumps are technically advanced products, if compared to average machinery components, which require expertise to be produced, (ii) customization and client-specific solutions development are key competences which require expertise and design capabilities. **Innovation** is a key value and growth driver in the HPP & VHPP market: given the limited room for technological product improvements, application-innovations are the most common. Finally, **geographical presence** finds its strategic importance in both the increasingly central role of fast aftersales services and in the need for capturing customers new demand.

**IP positioning.** IP leadership positioning is rooted in its best-in-class know-how and innovation capabilities and supported by its well-crafted geographical presence. While IP will face little-to-no difficulties in organically maintaining its market share (despite its 15-20% premium prices), we believe future inorganic growth opportunities to be limited.

**IP competitors positioning.** Emak, Uraca, Cat Pumps and Karcher HPP & VHPP divisions are IP main direct competitors, despite (i) their small market share (IP market share is 4x-5x larger than its closer competitors Emak and Uraca) and (ii) the high product diversification among them (e.g. Emak focuses on O&G applications, Uraca on the highly sophisticated CO2 extraction). While having strong but application-specific know-how and innovation capabilities, these players seem not to be geographically structured to guarantee IP-level aftersales services with the exception of Karcher (see Exhibit 10).

**FHS (market size €8bn)**

The FHS €8bn market manufactures and distributes a wide set of fluids processing components for the food, pharmaceutical and cosmetics industries. Boosted by the 5% CAGR 2013-2018E growth (McKinsey & Company), the market recently enjoyed from reduced internal rivalry, while strong competitive pressures come from suppliers, buyers and new entrants. This forced market leaders, i.e. GEA, Alfa Laval, SPX Flow and Sulzer, to further reinforce their product ranges and geographical presence.

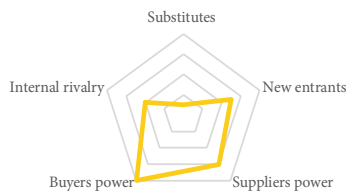
**Porter's 5 Forces Analysis: strong supply chain pressures**

The FHS market has been growing at 5% CAGR in 2013-2018E resulting in a strong reduction of the historically-high internal rivalry which made (i) **suppliers power**, (ii) **buyers power** and (iii) **the threat of new entrants** the main FHS competitive forces. **Suppliers power** is amplified with respect to other machinery industry markets by the strict food- and pharma-related metals requirements (e.g. stainless steel is legally required for most of food processing systems) which result in a higher suppliers concentration. Instead **buyers power** depends on (i) their relatively large size (customers include several food and pharma multi-billion-revenues companies) and (ii) low switching costs, given the limited customisation in the market. The threat of **new entrants** is moderate: given the capital-requirements and customer loyalty entry barriers, an acquisitions-based market entry is an opportunity for industrial groups willing to diversify their activity.

**Product range and aftersales services.**

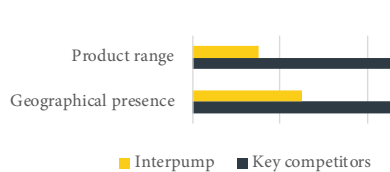
(i) **Product range** and (ii) **geographical presence** (see Exhibit 13) are FHS market key value drivers. The relevance of **product range** resides in the customers' willingness to reduce their supplier base, while **geographical presence** has a twofold importance, as it allows to: (i) follow different countries demand resulting in top-line growth and lower cyclicality

**FHS: Porter's 5 forces analysis - Exhibit 12**



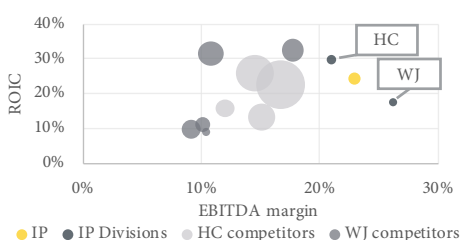
Source: Team Elaboration

**FHS: competitive positioning - Exhibit 13**



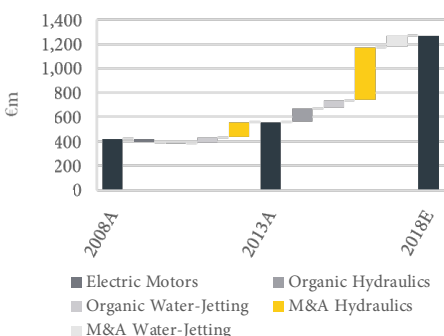
Source: Team Elaboration

**ROIC ex. gdw vs. EBITDA margin - Exhibit 14**



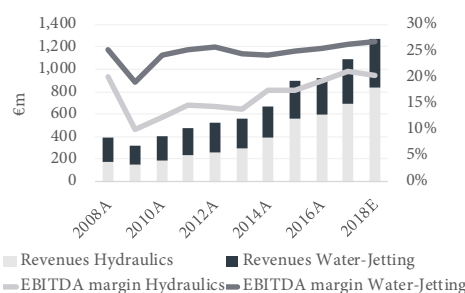
Source: Companies Data, Team Elaboration

**Revenues bridge analysis - Exhibit 15**



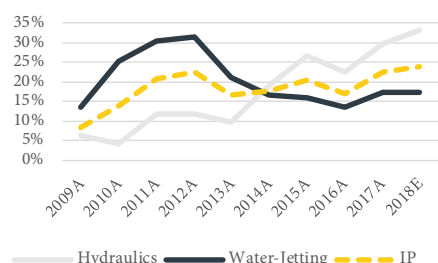
Source: Company Data, Team Estimates

**Revenues vs. EBITDA margin - Exhibit 16**



Source: Company Data, Team Estimates

**ROIC (ex. goodwill) - Exhibit 17**



Source: Company Data, Team Estimates

(ii) offer faster aftersales services which play a major role in the current scenario.

**IP positioning.** With a relatively narrow product range and European-focused geographical presence (ca. 76% of sub-divisional revenues in Italy and Rest of Europe in 2018E, only 2% in Far East & Oceania), IP has a weak positioning in the market. Still, we consider this as physiological, given IP recent (2015) entry in the market.

**IP competitors positioning.** GEA, Alfa Laval, SPX Flow and Sulzer are IP main competitors. While having their focus on different applications (e.g. SPX is specialised on sanitary components), all these players have broad product ranges which extend far beyond the FHS ones, opening cross selling opportunities. With strong and global networks, GEA and SPX Flow are stronger in terms of geographical presence than Alfa Laval and Sulzer (focused on advanced countries).

**Further potential game changers**

Macroeconomic dynamics and competitive pressures are not the sole factors impacting IP markets. Indeed, digitalization and environmental concerns impact such competitive scenarios, reshaping part of their dynamics.

**1. Digitalization.** The advent of Industry 4.0 is pushing the machinery industry toward the currently-slow but accelerating adoption of IoT and Cloud Computing which unlocks innovation opportunities. IP low investments in new technologies could lead to long term disadvantages toward competitors, not representing a threat in the short term.

**2. Environmental concerns.** The increasingly environmental concerns put pressure on the profitability of the machinery industry in the medium term. Indeed, reducing negative externalities requires products and processes to be redesigned, potentially opening new space for environmental-friendly technologies. From this perspective, IP is lagging behind competitors, some of which have already started developing electric solutions, especially in the HC market.

**Competitive financial analysis**

To better understand IP positioning and performances among its peers, a competitive analysis on 2017 key financial performances has been performed (see Appendix 3). IP is the most profitable player among its main competitors in terms of EBITDA margin both in Hydraulics and Water-Jetting divisions. The rationales behind are the superior dependence on higher-margin hydraulic components (e.g. valves and DCVs account for ca. 40% of Hydraulics sales) and its leadership-driven premium price in HPP & VHPP. Moreover, IP ROIC ex. gdw is among the best ones (22.6% in 2017), ranking 1st and 3rd in Hydraulics and Water-Jetting respectively. Nevertheless, IP ranks second-to-last in Cash to Cash with 158 days which represent a 61-days gap with competitors average (97 days). This is mainly driven by IP Days of Inventory Holding which are pushed by decentralized warehouse management approach (inventory is proportional to warehouses number) and IP hedging high-raw-materials-based strategy. Furthermore, IP shows a lower R&D on sales (ca. 2%) compared with its peers (ca. 3%). The gap is even higher considering the Hydraulics' competitors only, which have on average a ratio of 3.5%. Given the potential impact of digitalization (e.g. IoT) as well as electrification substitution threat and IP weak focus on such technologies witnessed by its portfolio of not-innovative products we deem this difference as critical, especially in the medium/long run. Indeed, we believe IP will face hard times in reducing the technological gap given the long time needed to develop the necessary know-how and the competitors time advantage. Finally, IP is well above the 2.3% average CAPEX/Sales of competitors showing a high level of investments to support organic growth (see Appendix 3).

**Financial Analysis**

**Organic business: historical analysis**

Perceived as a strong industrial Group which rests its success on 40+ value-accretive M&As underpinned by a sound balance sheet fed by generous FCFs, IP prims in front of the market with double-digit revenues and EPS growth (11.6% 2008-2018E revenues CAGR, 11.4% 2008-2018E EPS CAGR) and best-in-class margins (22.3% 2018E EBITDA margin). But the diamond is rough: (i) (few) synergies, (ii) operating (in)efficiencies and (iii) (dis)similarities among divisions (Hydraulics and Water-Jetting), characterized by different revenues growth modes and paces, margins and returns trends, deserve attention.

**Revenues: M&As as fuel of growth**

IP double-digit-growth (11.6% 2008-2018E CAGR) top line (€1.3bn 2018E revenues, 3x 2008 value) was boosted by ca. €0.7bn acquired sales from 25+ acquisitions and moderate organic growth (3.9% 2008-2018E CAGR<sup>1</sup>) in the last decade, moving up a gear and strongly accelerating since 2013 (18.0% vs. 5.6% CAGR in 2013-2018E and 2008-2013 respectively, €534m vs. €123m purchased revenues, 5.8% vs. 2.2% organic CAGR, see Exhibit 15).

While Hydraulics division (€844m 2018E revenues) accounted for the lion's share of acquired sales (€0.6bn 2008-2018E inorganic revenues), expanding the product range from PTOs only to 10+ product categories, Water-Jetting divisional revenues (€426m in 2018E) were mostly driven by a single-digit organic growth (4.2% 2008-2018E organic CAGR), supported only recently (2015-2018E) by M&As mainly in the FHS market (€99m purchased sales). For what concerns inter-divisional sales, transactions among divisions reduced their incidence on total external sales over the years (from 1.2% in 2008 to 0.2% in 2017), showing the low synergic relation between Hydraulics and Water-Jetting (see Appendix 9).

**Margins & Returns: light and shadow**

IP 22.3% EBITDA margin in 2018E, best-in-class among peers, was underpinned by the ability of the management to bring lower-EBITDA-margin acquisitions (17.2% 2008-2018E average) to IP values in short time periods (2-3 years, management guidance), avoiding knock-on effect. This margin has always swung around 20%, permanently establishing its value above it in 2016 (21.5%) and peaking at 22.9% the following year. However, in 2009 the global financial crisis dragged down revenues (-19.2% YoY) and EBITDA (-46.1% YoY due to operating leverage), resulting in a ten-years low 13.7% EBITDA margin. The overall positive trend and values resulted from different patterns of the two divisions: Hydraulics (20.2% 2018E EBITDA margin), mainly leveraging on SG&A expenses optimization (74% average relative growth compared to revenues in 2010-2018E) and on the redefinition of its product mix toward higher-margin components, improved significantly its 2009 EBITDA margin (10.0%) over the years, peaking at 21.0% in 2017; Water-Jetting (26.6% 2018E EBITDA margin), sustained by a 15-20% premium price in HPP & VHPP (management guidance), was characterized by a quite flat and high margin in the pre-FHS period (2008-2014), slightly increasing recently (from 24.8% in 2015 to 26.7% in 2018E, see Exhibit 16).

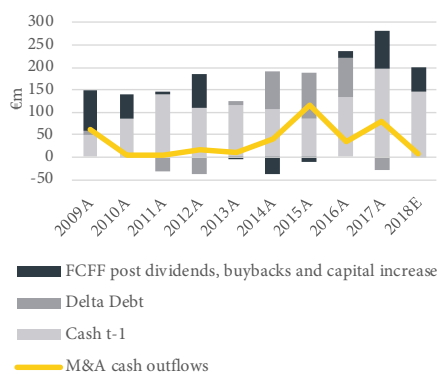
However, all that glitters is not gold: Water-Jetting ROIC ex. gdw<sup>2</sup> (17.3% in 2018E) peaked at 31.6% in 2012, showing a difficult-to-reverse negative trend in the following years especially due to the decline in capital turnover (from 1.9 in 2012 to 1.0 in 2016). The turnaround and the consequent 400bps increase in 2017 can be mainly attributed to the contribution of Inoxpa (IP main player in FHS market) and a more favorable taxation, making us assess as unlikely a Water-Jetting's comeback to the peaks of yore in the near term. On the other hand, Hydraulics showed a ROIC ex. gdw (33.2% in 2018E) 10-years positive trend, outperforming Water-Jetting since 2014 despite higher tax rates (39.3% vs 31.0% 2008-2018E average tax rate, exc. 2009). IP management focus on EBITDA margin does not properly consider all the previous findings: we argue instead investors should look at returns (ROIC) to assess how efficiently IP resources are used rather than at its profitability. For this, we believe the majority of further investments (1.1 2018E Capex/D&A for Hydraulics vs. 0.7 for Water-Jetting) to be expected in Hydraulics, justified by the high and increasing returns.

**Operating Working Capital: room for efficiency**

IP soft integration policy leads to a duplication of warehouses and its hedging strategy against raw material fluctuations

<sup>1</sup> Without considering Electric Motors (EM) division dismissed in 2011  
<sup>2</sup> Chosen to focus on IP's core operations. Similar results hold true for ROIC inc. gdw.

## Cash generation - Exhibit 18



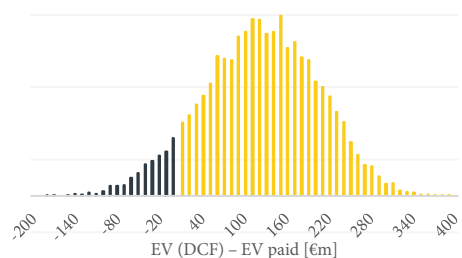
Source: Company Data, Team Estimates

## Comparable transaction analysis - Exhibit 19

2005-2018 Transactions	IP	Comp. Transactions
Mean Hydraulics	6.6x	10.2x
Median Hydraulics	5.3x	11.8x
Mean Water Jetting	7.0x	12.9x
Median Water Jetting	6.3x	12.7x
<b>Mean Total</b>	<b>6.8x</b>	<b>10.3x</b>
<b>Median Total</b>	<b>5.3x</b>	<b>11.8x</b>

Source: Zephyr, Orbis, FactSet, Team Elaboration

## Montecarlo simulation: extra-value from M&amp;A - Exhibit 20



Source: Company Data, Team Estimates

## IP financial highlights - Exhibit 21

	2009A	2010A	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
<b>Revenues [€m]</b>	<b>343</b>	<b>400</b>	<b>472</b>	<b>527</b>	<b>557</b>	<b>672</b>	<b>895</b>	<b>923</b>	<b>1,087</b>	<b>1,270</b>	<b>1,312</b>	<b>1,384</b>	<b>1,462</b>	<b>1,542</b>	<b>1,626</b>
of which HC	150	190	230	258	294	396	560	597	691	844	856	913	974	1,036	1,103
WJ	172	210	242	269	262	276	335	326	396	426	455	471	488	505	524
Growth	-19.2%	16.7%	18.0%	11.6%	5.6%	20.8%	33.2%	3.1%	17.7%	16.9%	3.2%	5.5%	5.7%	5.4%	5.5%
<b>Gross Profit [€m]</b>	<b>123</b>	<b>162</b>	<b>189</b>	<b>214</b>	<b>219</b>	<b>266</b>	<b>348</b>	<b>371</b>	<b>449</b>	<b>512</b>	<b>532</b>	<b>561</b>	<b>593</b>	<b>624</b>	<b>659</b>
Margin	36.0%	40.4%	40.1%	40.5%	39.4%	39.6%	38.9%	40.2%	41.3%	40.3%	40.6%	40.5%	40.5%	40.5%	40.5%
Selling % on Sales	10.2%	10.1%	9.7%	10.0%	10.3%	10.0%	9.3%	9.3%	9.4%	9.2%	9.3%	9.3%	9.2%	9.2%	9.2%
G&A % on Sales	13.9%	13.4%	11.6%	12.0%	11.5%	10.7%	10.6%	10.7%	10.4%	10.2%	10.2%	10.1%	10.0%	10.0%	9.9%
<b>EBITDA [€m]</b>	<b>47</b>	<b>74</b>	<b>95</b>	<b>106</b>	<b>105</b>	<b>136</b>	<b>180</b>	<b>199</b>	<b>249</b>	<b>284</b>	<b>295</b>	<b>312</b>	<b>331</b>	<b>350</b>	<b>370</b>
of which HC	15	23	33	37	41	69	97	116	145	170	172	185	199	213	227
WJ	33	51	61	69	64	67	83	83	104	114	122	127	132	137	143
Margin	13.7%	18.5%	20.0%	20.1%	18.9%	20.3%	20.1%	21.5%	22.9%	22.3%	22.5%	22.5%	22.6%	22.7%	22.8%
from HC	10.0%	12.3%	14.5%	14.3%	13.9%	17.5%	17.3%	19.4%	21.0%	20.2%	20.1%	20.3%	20.4%	20.5%	20.6%
WJ	19.1%	24.1%	25.3%	25.6%	24.5%	24.2%	24.8%	25.4%	26.2%	26.6%	26.8%	26.9%	27.0%	27.1%	27.2%
<b>EBIT [€m]</b>	<b>29</b>	<b>55</b>	<b>76</b>	<b>84</b>	<b>79</b>	<b>104</b>	<b>137</b>	<b>154</b>	<b>199</b>	<b>231</b>	<b>241</b>	<b>258</b>	<b>275</b>	<b>293</b>	<b>312</b>
Margin	8.5%	13.7%	16.0%	15.9%	14.3%	15.5%	15.3%	16.6%	18.3%	18.2%	18.4%	18.6%	18.8%	19.0%	19.2%
<b>Pre Tax Income [€m]</b>	<b>20</b>	<b>46</b>	<b>67</b>	<b>76</b>	<b>71</b>	<b>93</b>	<b>163</b>	<b>148</b>	<b>192</b>	<b>222</b>	<b>233</b>	<b>251</b>	<b>271</b>	<b>290</b>	<b>309</b>
Tax Rate	30.5%	39.6%	34.5%	30.0%	38.0%	38.0%	27.6%	36.4%	29.4%	27.9%	27.9%	27.9%	27.9%	27.9%	27.9%
<b>Net Income [€m]</b>	<b>14</b>	<b>27</b>	<b>41</b>	<b>52</b>	<b>43</b>	<b>57</b>	<b>118</b>	<b>94</b>	<b>134</b>	<b>171</b>	<b>167</b>	<b>180</b>	<b>194</b>	<b>207</b>	<b>221</b>
Growth	-64.6%	90.7%	55.5%	26.9%	-17.4%	31.8%	106.6%	-20.2%	43.3%	26.9%	-2.4%	7.8%	7.8%	6.9%	6.8%
<b>FCFF [€m]</b>	<b>48</b>	<b>54</b>	<b>36</b>	<b>46</b>	<b>35</b>	<b>19</b>	<b>44</b>	<b>81</b>	<b>107</b>	<b>107</b>	<b>160</b>	<b>158</b>	<b>170</b>	<b>178</b>	<b>188</b>
of which HC	18	22	13	14	15	19	4	53	51	51	90	83	92	95	99
WJ	29	31	24	32	18	-1	38	28	56	56	70	75	79	82	89
<b>Net Debt [€m]</b>	<b>202</b>	<b>148</b>	<b>146</b>	<b>103</b>	<b>121</b>	<b>226</b>	<b>278</b>	<b>300</b>	<b>324</b>	<b>273</b>	<b>161</b>	<b>47</b>	<b>-85</b>	<b>-222</b>	<b>-368</b>
Net Debt/EBITDA	4.3x	2.0x	1.5x	1.0x	1.2x	1.7x	1.5x	1.5x	1.3x	1.0x	0.5x	0.1x	-0.3x	-0.6x	-1.0x
<b>Capital Empl. (ex. gdw) [€m]</b>	<b>249</b>	<b>230</b>	<b>248</b>	<b>274</b>	<b>320</b>	<b>413</b>	<b>553</b>	<b>587</b>	<b>659</b>	<b>728</b>	<b>760</b>	<b>801</b>	<b>838</b>	<b>882</b>	<b>930</b>
ROIC ex. gdw	8.5%	13.9%	20.8%	22.6%	16.6%	17.7%	20.5%	17.1%	22.6%	24.0%	23.4%	23.8%	24.2%	24.6%	24.8%
from HC	6.4%	4.3%	11.8%	11.8%	9.6%	18.9%	26.5%	22.4%	29.8%	33.2%	30.6%	31.8%	32.9%	33.6%	34.3%
WJ	13.4%	25.2%	30.5%	31.6%	21.3%	16.5%	16.1%	13.5%	17.5%	17.3%	17.9%	17.7%	17.6%	17.6%	17.4%
Capex % on Sales	2.6%	2.2%	2.6%	3.0%	5.3%	5.1%	3.2%	4.0%	4.4%	3.9%	4.1%	4.2%	4.1%	4.1%	4.2%
NWC % on Sales	35.7%	27.9%	28.0%	28.7%	29.1%	30.5%	30.8%	32.5%	30.9%	31.3%	31.4%	31.5%	31.5%	31.6%	31.7%
<b>Cash to cash [Days]</b>	<b>190</b>	<b>156</b>	<b>139</b>	<b>146</b>	<b>152</b>	<b>148</b>	<b>146</b>	<b>172</b>	<b>158</b>	<b>155</b>	<b>168</b>	<b>166</b>	<b>166</b>	<b>167</b>	<b>167</b>

Source: Company Data, Team Estimates

requires a high stock level: **warehouses management seems to be inefficient** (157 Days of Inventory Holding in 2017 vs. 106 competitors' average). However, despite inefficiencies in operating cycle, the financial one seems to run perfectly.

**Cash Flows & Financial Structure: reasonable leverage in the kingdom of cash**

**If cash is king, IP is its kingdom:** with an on-average-9.1% FCFF on sales in 2009-2018E and plenty of liquidity (19.4% avg. 2008-2018E cash and equivalents on revenues), cash generation seems not to be a problem. The generous free cash flows sustained business (inorganic) growth ambitions (M&As required outflows for ca. €0.5bn in 2008-2017) as well as investors' remuneration via dividend distribution (0.22€ 2018E DPS, always increasing since 2010) and buy-backs (always made, except for 2010 and 2017).

Although the higher margins of Water-Jetting resulted in a higher FCFF on sales than the Hydraulics one (10.7% vs. 6.2% on average in the period 2009-2018E), the contribution of the two divisions to the sound cash generation has been quite balanced over the years (54% Water-Jetting, 46% Hydraulics in 2009-2018E of FCFF), resulting in a little need of debt financing: Net Debt/EBITDA (0.96x in 2018E) was always below 2x (IP management target upper bound), D/E below 75% and interest cover ratio above 6x in 2011-2018E. Although additional leverage would boost shareholders' ROE (20.9% in 2018E), we think **IP level of indebtedness to be appropriate** considering the cyclical nature of the business and the risk of breaking covenants (that we expect to be 3-3.5x Net Debt/EBITDA). Moreover, **current capital structure roughly corresponds to the optimal cost of capital** (see Appendix 11).

**M&A: historical analysis**

With 40+ acquisitions since 1996 IPO (25+ since 2005), **M&As are at the core of IP equity story**. Confident in IP ability to deliver synergies, the market has always trusted the Group M&A value creation ability. Indeed, despite acquisitions at multiples lower than IP one (6.8x avg. 2005-2018E acquired EV/EBITDA vs. 9.9x IP avg.), no critical fall in stock price after press releases has been registered over the years. Nevertheless, digging in IP M&A value creation mechanism, the synergies generation and the perceived industrial soundness seem to fade.

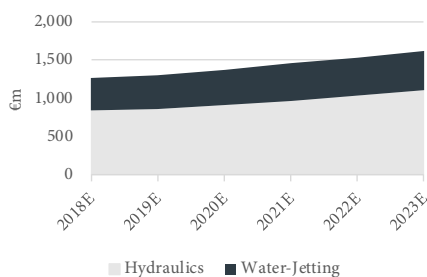
**Synergies: few for revenues, soft for costs**

Through soft cost synergies and optimization of acquired company processes, IP management brings lower-EBITDA-margin acquisitions (17.2% 2008-2018E average) to IP values in 2-3 years (management guidance). However, **synergies release is extremely limited:** the current soft-integration strategy implies no distribution and procurement centralized management. Moreover, there is **weak evidence of cross-selling effectiveness**. Indeed, making acquired company revenues grow according to their division organic CAGR for the first 3 years after the acquisition and then comparing them with the actual ones, we found out no extra revenues were created (see Appendix 5). Aware that in some cases this still means an improvement in acquired company sales growth, we argue that through an effective cross-selling strategy the boost in acquired company sales should be far larger once become part of a well-known and international Group. Thus, we believe the absence of a unique brand and a centralized commercial strategy (no unified catalogue available despite HC are all part of the same hydraulic circuit) to be significant limits that could be overcome only through an effective change in integration strategy.

**M&A value creation mechanism: not industrial synergies but negotiation skills**

If industrial synergies are peanuts, where does IP generate value from M&A? Through our in-depth historical M&As analysis reported in Appendix 5, we demonstrated **IP M&A main value-creation driver to be its capability to set convenient deal prices:** in 2005-2018E IP acquired 25+ companies at a 6.8x avg. EV/EBITDA vs. 10.3x of examined comparable transactions, generating at least €678m of value from acquisitions at the deal signing moment without the need to carry out any industrial synergy (and this may explain the low effort of IP toward synergies generation among its subsidiaries). Indeed, simulating a 10-years DCF to evaluate each IP acquisition at the deal moment with bearish assumptions (see Appendix 5), the fair Enterprise Value (obtained from DCF) turned out to be always much higher than the EV paid. Running a Montecarlo simulation with 10,000 even-more-bearish scenarios, we found out that **in 93% of cases IP was sure to generate extra-value from an acquisition without delivering any synergy but simply leveraging on the low price paid** (see Exhibit 20). Indeed, (i) targeting well-run and medium-small size companies (not interesting for private equities) and (ii) having a cost of capital often lower than the acquired company's one (especially true with small size companies), IP succeeded in paying convenient prices. Moreover, using treasury stocks as a mean of payment, it shared with the seller part of the future gain caused by this value creation mechanism. Finally, the compounded without-synergy value over the years accounts for ca. 1/3 of current EV, highlighting how much IP value depends on it.

**Forecasted organic revenues - Exhibit 22**



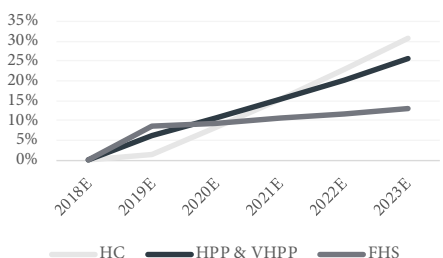
Source: Team Estimates

**Organic revenues growth vs. geo-based GDP/Urbanization growth - Exhibit 23**

2018E-2023E CAGR [%]		IT	RoE	NA	FEO	RoW
HC	Sales	9.1	4.9	1.4	3.0	6.5
	GDP	2.4	3.5	3.4	7.2	8.4
HPP & VHPP	Sales	6.9	5.8	3.6	3.0	5.0
	GDP	2.4	3.7	3.4	7.0	6.5
FHS	Sales	-0.2	-0.4	5.8	0.7	2.1
	Urb.	0.3	0.4	1.0	2.0	2.4

Source: Team Estimates

**Segment revenues growth trends - Exhibit 24**



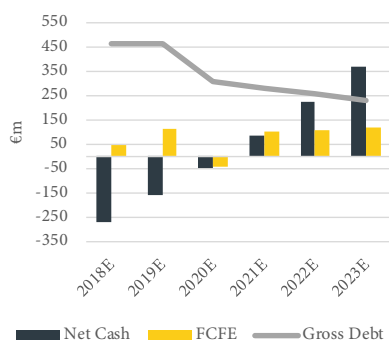
Source: Team Estimates

**Income statement - Exhibit 25**

Amount s in €m	IP		Hydraulics		Water Jetting	
	2018E	2023E	2018E	2023E	2018E	2023E
Revenues	1270	1626	844	1103	426	524
Gross Profit	512	658	308	403	204	256
% on Sales	40.3%	40.5%	36.5%	36.5%	47.8%	48.8%
SG&A	246	311	150	190	96	120
% on Sales	19.4%	19.1%	17.7%	17.3%	22.6%	23.0%
Other	18	22	12	15	6	7
% on Sales	1.4%	1.4%	1.4%	1.3%	1.4%	1.4%
EBITDA	284	370	170	227	114	143
% on Sales	22.3%	22.8%	20.2%	20.6%	26.6%	27.2%
D&A	53	58	36	39	17	20
% on Sales	4.2%	3.6%	4.2%	3.5%	4.1%	3.7%
EBIT	231	312	135	188	96	123
% on Sales	18.2%	19.2%	16.0%	17.1%	22.6%	23.5%

Source: Team Estimates

**Cash flow and financial structure - Exhibit 26**



Source: Company Data, Team Estimates

**Organic business: future analysis**

IP next future will be bittersweet: (i) without inorganic impetus and missing emerging-markets tempting opportunities, **IP sales will be gripped by the roller-coaster of cycle**, reaching €1.6bn in 2023E (5.1% 2018E-2023E CAGR), (ii) the **sweetness of rich margins** (22.8% EBITDA margin in 2023E) will be contrasted by the **bitterness of their improvement slowdown** (41bps 2018E-2023E EBITDA margin improvement vs. 345bps in 2013-2018E), (iii) the **high returns of Hydraulics** (34.3% 2023E ROIC ex. gdw) will be clouded by **Water-Jetting eye-catching margins** (27.2% EBITDA margin in 2023E) and (iv) the **shadow of operating inefficiency** in cash conversion cycle (167 days in 2023E) will be overwhelmed by the **bright cash generation ability** (net cash position starting from 2021E).

**Revenues: different divisions, different geographies, different stories**

Future revenues have been forecasted exploiting IP sales link with economic (for HC and HPP & VHPP) and urbanization (for FHS) cycles. Indeed, after a backward reconstruction of 2017 Group perimeter historical revenues, we estimated sales for every division-geographical area combination through a linear-regression-based forecasting process (see Appendix 8). Organic sales will be dragged by the unruly cycle along its fluctuations. However, **IP ability to amplify cycle growths will be not homogeneous in the several division-geography combinations**, resulting in quite various patterns (see Exhibit 24). Indeed, while we are confident IP will continue to strongly outperform the cycle in Europe, concerns remain about performances in emerging market (Far-East & Oceania and Rest of the World), where sales growth will only partially reflect economic and urbanization cycles positive momentums.

Overall, following a slowdown in 2018E-2020E (4.4% CAGR<sup>3</sup>), revenues growth is projected to recover to 5.5% 2020E-2023E CAGR, resulting in an avg. 5.1% CAGR in 2018E-2023E (€1.6bn sales in 2023E), ca. 70bps lower than the 5.8% 2013-2018E organic CAGR.

In **Hydraulics** (€1,103m 2023E revenues, 2/3 of total sales), the Group revenues discontinuous pattern will be amplified: the 4.0% 2018E-2020E CAGR, mainly due to North America (NA) and Far-East & Oceania (FEO) sales decrease (-0.8% and -0.4% 2018E-2020E CAGR respectively), will be followed by a strong acceleration (6.5% 2020E-2023E CAGR). Differently, **Water-Jetting** (€524m 2023E revenues, 1/3 of total sales) will follow an opposite trend (5.0% 2018E-2020E CAGR followed by 3.6% 2020E-2023E CAGR) which hides an extremely flat organic<sup>4</sup> performance (3.7% 2018E-2023E organic CAGR), lower than its historical one (4.6% 2013-2018E organic CAGR). While **HPP & VHPP** sales (ca. 80% of WJ revenues) will grow pretty stable in each geography, resulting in a 4.6% 2018E-2023E CAGR, **FHS** (ca. 20%) ones will be negatively impacted by the flattish urbanization in Europe (2.5% 2018E-2023E CAGR).

**Margins & Returns: light and shadow again**  
Group EBITDA is expected to grow at 5.4% 2018E-2023E CAGR, resulting in a **slight improvement in EBITDA margin** over the years (from 22.3% in 2018E to 22.8% in 2023E) and confirming world-class values for an industrial machinery Group (14.1% industry average in 2018 according to FactSet). Nevertheless, the other side of the coin is represented by the **severe slowdown in EBITDA margin improvement** (41bps in 2018E-2023E vs. 345bps in 2013-2018E) which suggests the proximity to IP EBITDA margin full potential, given its current structure and soft-centralisation strategy. Indeed, despite hard-to-be-unleashed, we believe the **synergies potential** to be quite large, in particular in Hydraulics: the positive example of Walvoil centralisation process (merge of Galtech, MTC and Hydrocontrol into Walvoil followed by a rationalization of production plants) showed a significant release of cost and revenue synergies (see Appendix 5) which boosted margins (from 14% 2014 EBITDA margin to ca. 25% in 2018E). However, considering management guidance, we do not foresee a change in IP centralisation strategy in the near future. Therefore, we believe **Hydraulics** EBITDA margin to remain almost flat (from 20.2% in 2018E to 20.6% in 2023E thanks to operating leverage of SG&A expenses), assuming IP lean structure and product mix will keep justifying the spread with market average also in the next years (DCVs are among the highest margin products and they account for ca. 40% of Hydraulics sales).

Instead, **Water-Jetting** is forecasted to reach **27.2% EBITDA margin** in 2023E thanks to (i) the 15-20% premium price (management guidance) in HPP & VHPP niche and (ii) the improvements in FHS (Inoxpa EBITDA margin from 19% in 2017 to more than 26% in 2018E). However, in line with recent trends, the higher margins of Water-Jetting with respect to Hydraulics will not turn into higher remuneration of invested capital: ROIC ex. gdw will be stable around 17.6% in Water-Jetting compared to the avg. 32.7% of Hydraulics in 2018E-2023E, confirming the “hidden” attractiveness of Hydraulics business. Consistently, we expect the Group to keep investing more in Hydraulics than in Water-Jetting (Capex/D&A between 1.1 and 1.5 in Hydraulics and ca. 0.7 in Water-Jetting in 2018E-2023E), benefiting from higher returns for each euro invested.

**Operating Working Capital: even further from efficiency**  
Broadening the size of the business (revenues from €1,271m in 2018E to €1,627m in 2023E) and keeping the current soft-integration policy, inefficiencies in OWC management will widen as well, resulting in **almost-half year** (167 days in 2023E) of **cash-to-cash cycle**. In particular, the decentralized warehouses management strategy will lead to other 9 additional days of inventory holding in 2023E compared to 2018E (162 vs. 153 days, respectively).

**Cash Flows & Financial Structure: from net debt to net cash**  
IP ability to produce generous FCFs will further accelerate in 2018E-2023E: FCFE will grow at 11.9% 2018E-2023E CAGR (reaching €188m in 2023E) feeding IP copious liquidity (25.0% avg. 2018E-2023E cash and cash equivalents on sales) and gifting extreme flexibility to an already-quite-flexible balance sheet. Indeed, assuming (i) the refinancing of the 2017 €175m current debt, (ii) no buy-back (expect for the already-made in 2019) and (iii) a DPS growth equal to 0.01€ per year (in line with 2013-2017 pattern), the resulting FCFE will turn the 2018E €273m net debt into a **net cash position** in 2021E, reaching €368m in 2023E (see Exhibit 26). However, considering the M&As history of the Group and the express wish of the management to pursue the current strategy, we believe part of FCFE will be reinvested in inorganic growth. Being conservative in setting a 1.0x Net Debt/EBITDA, we estimated a **€881m potential firepower for acquisitions** in 2019E-2023E.

**M&A: future analysis**  
Considering (i) IP management express wish to pursue current M&As strategy, (ii) the M&A value creation capability of the Company, (iii) the extreme flexibility of IP balance sheet (€881m estimated fire-power in 2019E-2023E) and (iv) the quite large pool of purchasable players, we believe the **Group will continue to enlarge its size through acquisitions at a pace in line with historical one** (9% YoY inorganic growth) in the short term. Consistently with historical data, we believe future acquisitions sales will grow according to their divisional growth rate and acquired companies EBITDA margin will be aligned to the Group one in no more than 3 years. We do not foresee any M&A in the HPP & VHPP niche, considering (i) the already-achieved leadership position, (ii) the long time since the last acquisition and (iii) the unwillingness of the few other relevant players to be bought (management guidance). However, the recent entry as well as IP still small market share in FHS and the high fragmentation of the vast HC market leave room for further inorganic growth. In line with historical trends and our strategical assessment (see Appendix 13), we assumed 70% of acquired revenues to be in HC and the remaining 30% in FHS. Finally, bearing in mind IP M&A value-creation strategy strongly depends on the acquisition price as shown in M&A Historical Analysis, we assumed acquisition multiples in line with historical average (6.6x EV/EBITDA for HC acquisitions, 6.0x for FHS).

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**M&A: future analysis**

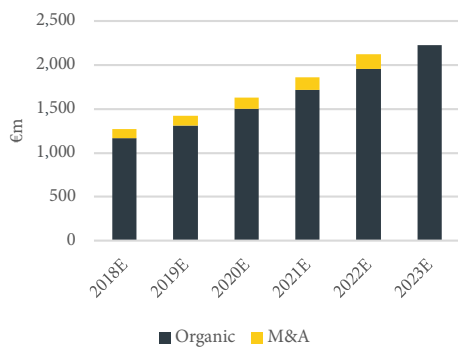
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<sup>3</sup>3.5% 2018E-2020E CAGR at 31/12/2018 perimeter  
<sup>4</sup>Without Ricci Engineering and Fluinox contributions



**Forecasted organic and inorganic revenues**

- Exhibit 27



Source: Company Data, Team Estimates

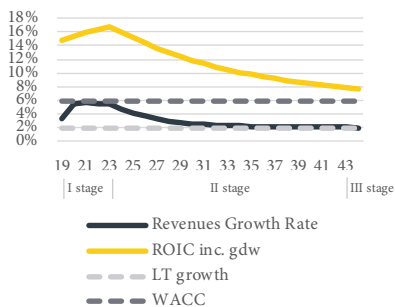
**DCF: first stage - Exhibit 28**

Amounts in €m	2019E	2020E	2021E	2022E	2023E
Revenues	1,312	1,383	1,462	1,541	1,626
Growth		5.5%	5.7%	5.4%	5.5%
EBIT	241	258	275	293	312
D&A	53	54	55	57	58
NWC	-14	-25	-24	-26	-28
Capex	-54	-58	-60	-64	-68
Taxes	-67	-72	-77	-82	-87
FCFF	160	158	170	178	188
WACC	5.87%	5.87%	5.87%	5.87%	5.87%
Discount Factor	1.00	0.94	0.89	0.84	0.80
Present Values	160	149	152	150	149

Source: Team Estimates

**DCF assumptions: revenues growth & ROIC**

- Exhibit 29



Source: Team Estimates

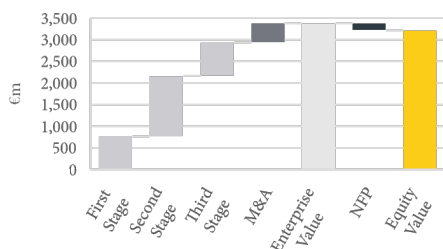
**WACC assumptions - Exhibit 30**

WACC = 5.87%

Risk Free Rate (Rf)	0.26%	Current 10-year German Government bond yield, given its lower country spread compared to other European countries and the significant IP Eurozone exposition (FactSet).
Market Premium (MP)	5.96%	Implied European market risk premium (Damodaran).
Beta (β)	1.07	Linear Regression of IP historical returns against STOXX Europe 600 index (SXXP) considering five years weekly data.
Cost of Equity (Ke)	6.62%	Capital Asset Pricing Model: $Ke = Rf + \beta * MP$ .
Cost of Debt (kd)	2.01%	Risk Free rate + spread, estimated deriving the Spread Curve of the machinery industry through an analysis of corporate bonds treasury spread (T-spread) of a sample of companies in the industry (FactSet) and then positioning IP on the curve according to its implied rating (Baa3). Such rating has been obtained comparing IP interest coverage ratio (EBIT/financial expenses) to the ones of rated industrial machinery and/or Italian similar-size companies. The resulting Baa3 rating class corresponds to a spread of 175bps.
Tax Rate	27.90%	Sum of Italian corporate (IRES) and regional production (IRAP) tax rates (FactSet).
Leverage (D/E)	16.87%	Current and target leverage (target hit in 2017, no potential upside from leverage optimization).

Source: Damodaran, FactSet, Team Estimates

**DCF bridge analysis - Exhibit 31**



Source: Team Estimates

Analyzing more centralized players (e.g. Parker) we identified in ca. €2bn of sales the point at which they opted for a more centralized structure in order to more effectively manage the organizational complexity. Considering that according to our forecasts IP will reach €2.1bn of sales in 2022E (i.e. in 4 years), we deem realistic the Group will then consider a change in its centralisation strategy, reducing or not performing M&As for a while. Moreover, the management confirmed this prevision to be reasonable, stating the current soft-centralisation strategy will be effective till 2-2.5x the current size. Furthermore, although we do not have evidence for doubting about IP management scouting and negotiation capabilities to be effective also in the future, it seems a hazard to extend the future M&A time period over 4 years due to (i) the limited and YoY decreasing number of potential targets complying with IP strict requirements (convenient prices for well-run with-no-restructuring-stories companies), (ii) the lack of visibility over a too broad time span and (iii) the threat of expected polarization in HC market.

Finally, we believe synergies-driven value creation to be at risk as well in the long run: IP is forced to purchase more and more revenues every year to sustain a 9% inorganic growth as its size keeps increasing and this implies to (i) acquire a number of SMEs or (ii) target progressively larger companies. Despite being more prone to accept lower prices due to their generally lower cost of capital, SMEs do not significantly reinforce IP in terms of brand recognition, geographical presence and innovation capabilities, essential to strengthen its status of global industrial machinery player. On the other hand, besides being traded at higher multiples (also due to the competition coming from private equities and other international industrial groups), (soft) integrating and optimizing big companies means an extra-effort and extra-complexity for IP, accustomed to incorporate small/medium players in its network.

**Valuation**

**We foresee a target year-end price of €30.3, leaving a limited 8.7% upside on 11th February 2019 closing price resulting in a HOLD recommendation on IP stock.**

First, IP organic business valuation through a three-stage DCF resulted in a €26.1 fair price. Further, as (i) acquisitions have been at the core of IP equity story, (ii) managers clearly stated they will pursue the current M&A strategy in the next years and (iii) we expect future inorganic growth, additional €4.2 come from future M&As contribution, modelled through a time series of on-top DCFs (see Appendix 12).

To sustain and assess the soundness of our assumptions (i) a sensitivity analysis and (ii) a Montecarlo simulation have been performed. Moreover, due to the lack of comparable companies to IP as a Group a SOTP relative valuation has been used as check, resulting in a €30.4 price fully in line with our year-end target price.

**Organic business DCF: €26.1 year-end price**

Expecting returns to peak in 2023E and considering the company not to be in a steady state at that moment, we decided to implement a three-stage DCF to avoid the risk of overvaluing the Group, resulting in a €26.1 IP organic business fair price.

**First stage: 2019-2023**

According to the detailed forecasts presented in Organic Future Analysis, we foresee a 5.5% revenues growth rate and a 16.8% ROIC inc. gdw at the end of the first stage (2023E), which represents an all-time-high value for the Group. Therefore, not to overestimate the terminal value, we introduced a “fade out” stage.

**Second stage: 2024-2043**

We expect IP extra-profitability to fade in the long-run due to the increasing competition, as suggested by the micro-economic theory. Therefore, we set returns (ROIC inc. gdw) to converge towards cost of capital (WACC) according to an exponential decay. Similarly, revenues growth rate will progressively slow down toward expected long term inflation (2%, OECD) considering that (i) a higher-than-inflation long term growth rate implies an unlimited increase in volumes, projecting company’s size to infinite in the long run, (ii) IP is operating in mature industries where significant market share changes are unlikely, (iii) the extension in product life-cycle over years will slow products replacement pace and (iv) the poor level of investments in IoT, environmental-friendly and electric technologies is creating a hard-to-be-bridged technological gap with competitors that are expected to negatively impact sales in the next 15-25 years.

Being IP industries in a “comfort zone” (mature and with low competition), we believe this process will be slow and, taking this into account, we set a 20-years-long “fade out” stage (see Exhibit 29).

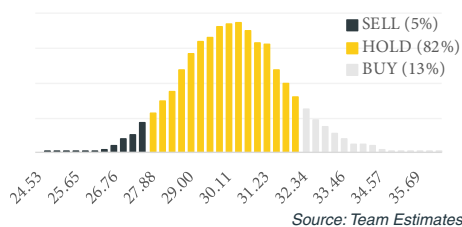
**Third stage: Terminal Value**

We computed the terminal value according to the perpetuity formula, setting a 2% FCFF terminal growth rate in line with revenues one.

**Inorganic business DCFs: additional €4.2**

Should the market price IP organic business according to our valuation, almost €2 of current stock price (€27.9) can be attributed to M&A value-creation expectations. Keeping the historical inorganic growth pace (ca. 9% YoY), they correspond to approximately 2 years of future M&As. Nevertheless, as clearly explained in M&A: Future Analysis, although we are bearish on the sustainability of IP M&A value creation mechanism in the long run, we foresee other 4 years of acquisitions in HC and FHS (see Appendix 13), resulting in additional €4.2 on our organic target price according to our time series of on-top DCFs (see Appendix 12), with the most (approximately 2/3) of future value generated at deal signing moment, thanks to the convenient price paid even in the case of not delivering any industrial synergy (see Appendix 13).

Montecarlo simulation - Exhibit 32



SOTP relative valuation - Exhibit 33

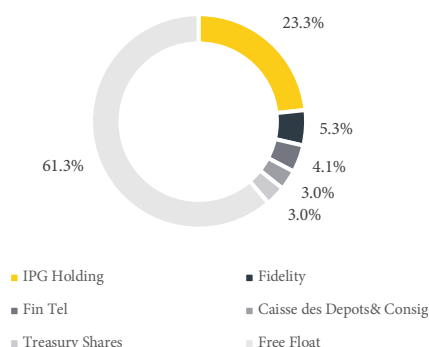
Company	2019 1YF EV/EBITDA	2020 EBITDA%	2019 1YF EV/CE	2020 ROIC inc. gdw
Bucher	7.5x	12.5%	2.2x	16.4%
Eaton	8.6x	18.7%	1.6x	12.6%
Parker	9.0x	18.6%	2.6x	18.8%
Rotork	12.6x	24.5%	5.3x	29.9%
Best-fit line	$y = 42.089x + 1.618$		$y = 21.993x - 1.350$	
IP Hydraulics	10.2x	20.3%	2.8x	19.0%
Emak	5.8x	12.4%	1.0x	10.3%
KSB	2.6x	8.6%	0.5x	7.5%
Spirax Sarco	15.1x	26.7%	5.0x	21.7%
Sulzer	7.1x	12.6%	1.9x	10.9%
Best-fit line	$y = 65.762x - 2.288$		$y = 31.940x - 1.8948$	
IP Water Jetting	15.4x	26.9%	2.0x	12.1%

IP	2019 EV [€m]	2019 NFP [m]	2019 #shares [m]	2019 TP
Hydraulics	1,750	161	106	30.4 €
Water Jetting	1,631			

Source: FactSet, Team Estimates

Shareholders' structure - Exhibit 34



Risks - Exhibit 35

Risk	Category	#
Degradation of IP positioning in HPP & VHPP	Strategy	1.
Reduction in M&A value creation	Strategy	2.
Flexibility pursue side-effect	Strategy	3.
Market stagnation	Macro	4.
Trade wars	Macro	5.
Italian political instability	Macro	6.
Foreign countries instability	Macro	7.
ST competition	Competition	8.
LT competition	Competition	9.
Forex	Financial	10.
Interest rate	Financial	11.
Credit	Financial	12.
Liquidity	Financial	13.
Raw material price fluctuations	Financial	14.
Top management (over) control	CG	15.
Lack of management succession plan	CG	16.
Stock overvaluation due to PIR	Further	17.

Source: Team Elaboration

Risk matrix - Exhibit 36

		LIKELIHOOD			
		Unlikely	Possible	Likely	Almost certain
IMPACT	Disruptive				
	High		8.	2. 6.	4. 9.
	Moderate	1. 17.		3. 7. 11.	5.
	Marginal	13. 15.	12. 14.	10.	16.

Source: Team Elaboration

Sensitivity analysis and Montecarlo simulation

To assess the soundness of our assumptions, we performed a sensitivity analysis on terminal growth rate and WACC (see Appendix 12). Furthermore, we run a 10,000 scenarios Montecarlo simulation varying the most important parameters of our model such as expected GDP growth, Forex effect on IP sales, COGS, long term growth rate and IP inorganic growth rate in the next years (see Appendix 15). As Exhibit 32 clearly shows, our HOLD recommendation seems to be well-supported in the vast majority of cases (82%).

Relative valuation: €30.3 year-end price

No player has a portfolio mix similar to IP (64% HC, 30% HPP & VHPP, 6% FHS in 2017). For this reason, we decided to resort to a SOTP relative valuation to account for the market perspective, selecting samples of peers according to their M&A activity (assuming their stock price factors in future inorganic growth expectations) and the previously-discussed main value drivers of IP two divisions (Hydraulics: product range and geographical presence, Water-Jetting: level of know-how, geographical presence and product range). Moreover, proxies of risk, growth, profitability and cash generation have been considered in comparables selection (see Appendix 14). Running ordinary-least-squared (OLS) linear regressions for the two selected multiples (2019 1YF EV/EBITDA and 2019 1YF EV/CE) and averaging the obtained EVs, we derived a 2019 1-year-forward Enterprise Value of €1,750m for Hydraulics and €1,631m for Water-Jetting, resulting in an overall €3,381m EV, which implies a 10.8x 2019 1YF EV/EBITDA and a 2.7x 2019 1YF EV/CE. This resulted in a €30.4 year-end price which supports once again our HOLD recommendation.

Corporate Governance

IP seems to adopt appropriate CG practices to align shareholders, Group and managers interests (see Appendix 16). The potential over-control of Fulvio Montipò, current CEO (since 1997) and Chairman (since 2013) as well as main shareholder (16.3% indirectly-owned Group equity through IPG Holding), appears mitigated by a series of counterbalancing measures, in line with "Codice di Autodisciplina" principles (CG recommendations for Italian listed companies).

In particular, (i) independent directors for 2/3 of BoD, (ii) one director elected from the minority list, (iii) the presence of a Lead Independent Director and (iv) Montipò's membership in no Committee are reassuring factors for investors. Furthermore, other positive signals are provided to the market: (i) the 2014 and 2017 BoD renewals which reduced the average tenure, (ii) the presence of institutional investors (37.2%, FactSet), (iii) the large free float (61.3%), (iv) the absence of dual-class shares and (v) the recent (2017) introduction of 4 General Product Managers (a first step toward a stronger integration?) to align sub-divisional strategies to the corporate one. Finally, the remuneration scheme further aligns managers, company and investors' interests by establishing a fixed and variable compensation linked to short term managerial objectives (MBO) and medium-long term stock-option plans for CEO, Chairman and executive directors and to committees participation for non-executive directors, although full disclosure to the market of MBOs and stock options assignment related goals is lacking.

However, (i) none of the BoD members with previous experience in IP same or related industries, (ii) no international director in the Board despite IP global business and (iii) a still high tenure (15 years on average) have been identified as potential CG improvement areas.

Despite the increasing environmental and social concerns, IP does not have a formal Group CSR policy. This, combined with (i) the weak involvement in social initiatives, (ii) non-recurrence of environmental and social topics in BoD agendas and (iii) weak disclosure (the first non-financial report has been published in 2017, only when it became compulsory), shows what IP is (not) doing in terms of social responsibility.

Investment Risks

Besides the main Valuation risks, assessed through our Montecarlo and sensitivity analyses and intentionally excluded from this section (see Valuation and Appendix 15 for further details), several factors could pose risks to IP and to our investment thesis. Starting from a critical analysis of IP corporate strategy pillars, from which a potential Reduction in M&A value creation emerged as the most critical risk due to IP not-easily replicable value creation mechanism, we dug deeper into uncertainties related to industry and competition questioning macro-economic trends and IP competitive positioning. If in the short term Market stagnation combined with Trade wars emerged as key threats to IP growth and profitability due to their sensitivity to macroeconomic cycles, in the long term (LT) competition raises concerns, given IP technological underdevelopment (e.g. in terms of IoT) and potential substitutions (e.g. electrification). From a financial perspective, no risk emerged as critical with Forex being the one to pose the attention on, while Top management (over) control is the main but well-mitigated Corporate Governance-related risk. Finally, we posed our focus on the risk of Stock overvaluation due to PIR.

Corporate strategy risks

**1. Degradation of IP (leadership) positioning in HPP & VHPP.** A weakening of IP (leadership) positioning in the HPP & VHPP market in terms of premium prices (currently 15-20%) and market share (currently, 50%) would undermine one of the pillars the Group based its corporate strategy on. While in the early 2000s, this would have been disruptive due to IP dependence on pumps, nowadays, the impact would be partial thanks to IP portfolio diversification (27% of 2018E revenues came from HPP & VHPP). Furthermore, IP HPP & VHPP best-in-class know-how and innovation capabilities represent a defensible advantage against the few and small competitors (IP market share is 4-5 times bigger than the other main players in the market).

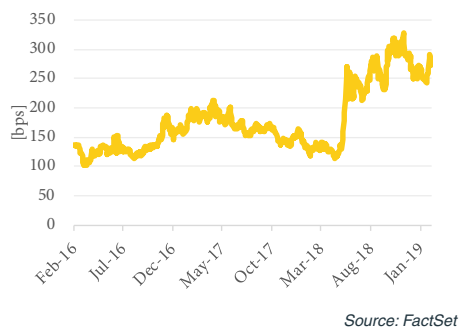
**2. Reduction in M&A value creation.** IP management wishes to continue its series of acquisitions with no change in strategy. However, both low-price-paid and synergies driven value creations mechanisms (accounting respectively for ca. 2/3 and 1/3 of our forecasted €4.2 M&A contribution) are at risk. On one hand, the set of potential targets complying with IP strict price and performance requirements will shrink as time goes by. On the other, to sustain its 9% inorganic growth, IP would be forced to acquire a large number of SMEs or larger and larger companies. While SMEs would not significantly reinforce IP in terms of geographical presence and innovation (essential to strengthen its status of global industrial machinery player), acquiring big companies would require extra-effort for IP both in terms of target identification (large companies are traded at more than 12x EV/EBITDA, see Appendix 6) and integration in the Group.

**3. Flexibility pursue side-effects.** Flexibility is at the core of IP strategy. Still, its pursue hides some risks. Indeed, to preserve it, IP adopted a fully decentralized approach which could lead to operating inefficiencies, especially considering that complexity increases with size (growing at 2013-2018E pace IP would reach €2bn size in 2022E) as competitors histories witnesses (see Appendix 18).

Macro economical-political risks

**4. Market stagnation.** Advanced countries GDP slowdown to 1.6% 2018E-2020E CAGR in the Eurozone and 2.1% in the US (vs. 2.0% and 2.5% in 2013-2018E, respectively, OECD) raises concerns about IP near-future demand outlook which

**Italian political instability: spread BTP-BUND 10y** - Exhibit 37

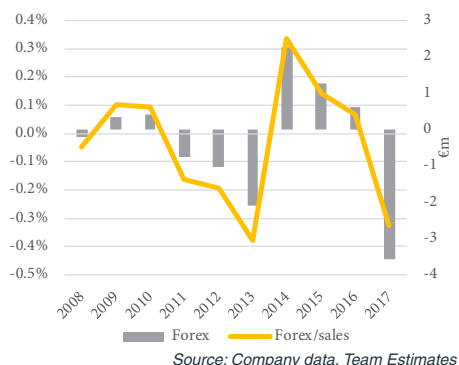


**Sensitivity analysis: HC EBITDA margin** - Exhibit 38

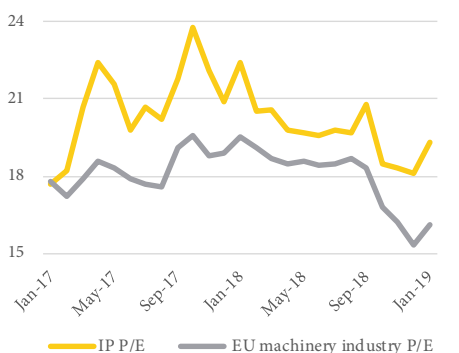
HC EBITDA %	TP	Potential upside
20.5 %	€30.8	+10.4%
<b>20.3 %</b>	<b>€30.3</b>	<b>+8.7%</b>
19.5 %	€29.6	+6.0%
19.0 %	€29.0	+3.9%
18.5 %	€28.3	+1.4%
18.0 %	€27.9	+0.0%

Source: Team Elaboration

**Gains (losses) due to Forex** - Exhibit 39



**P/E trend since PIR introduction** - Exhibit 40



is only partially cheered up by emerging countries sustained (but decelerating) GDP growth. While IP has diversified its demand drivers entering into the FHS market (more sensitive to urbanization), IP dependence on advanced economies (ca. 90% of 2018E FHS revenues) and their almost-null urbanization growth (0.3-0.6% Urbanization GDP 2018E-2020E CAGR, UN) suggest benefits from its diversification will be limited.

**5. Trade wars.** Tariff-based commercial wars are putting pressure on IP, with related metal duties escalation and the forecasted 1% World GDP drop (data source: World Bank) being the key costs- and revenues-side threats, respectively. Inter-area trade is significant for the Group, with ca. 25% of products manufactured in Europe exported to other geographical areas. Still, IP low exposure to highly trade-war impacted countries (e.g. China, 4% of 2018E revenues) and routes (e.g. China-US) mitigates the impact of trade war on its activities.

**6. Italian political instability.** The current unstable Italian political scenario negatively affects the general economic context in which Italian companies compete as well as their financial performances and ratings. Despite IP internationalization strategy, Italy is still the first and second most relevant country in terms of costs (50% of 2018E costs) and revenues (18% of 2018E revenues) generation, respectively. This combined with the recent (2018) Italian credit downgrade could negatively impact IP creditworthiness.

**7. Foreign countries instability.** While offering tempting opportunities, emerging countries (e.g. Latin America, ca. 10% of 2018E revenues) expose IP to their political, social and economic instability potentially leading to a worsening in terms of costs (e.g. supply chain related problems) and revenues (e.g. negative Forex impact due to local currencies depreciation). IP limited direct presence in risky emerging countries (less than 10% of 2018E production) may hinder the Group from capturing demand in these fast growing areas but reduces its exposition to their instability and hence to this risk.

**Competition risks**

**8. ST competition.** Deeming IP HPP & VHPP competitive advantages not to be at risk in the short term and considering that in the FHS market no particular trends are expected to affect competition, the sole HC markets exposes the Group to possible market share and margins erosion. In the HC market, the highest risk comes from the OEM-driven market polarization that could amplify IP decentralized approach problems given the increasing requirements in terms of product range and geographical presence. However, given that IP higher-than-average HC margins are mainly related to the 40% incidence of the highly-profitable valves and DCV on its product mix rather than on its ability to serve large OEMs, we believe IP will maintain the spread with market average also in the next years. To test our assumption, we performed a sensitivity analysis on the sole HC division. Results show that even with an (unlikely) 200 bps drop in EBITDA margin from ca. 20.3% to market-average margins in next 5 years we would keep a HOLD recommendation.

**9. LT competition.** Technological advancements or breakthroughs have not been at the core of competition in IP markets (except for application-innovation in HPP & VHPP). This explains why IP limited innovativeness has not undermined its margins or market share. However, digitalization and electrification, could lead to significant competitive disadvantages for IP. Not investing in them, IP is severely exposed to the risk of increased competition from more innovative players (expected main effect in 5-10 years) and of passive substitution (15-25 years). Indeed, while not currently determining competition these technologies are already on the market thanks to the high investments and research efforts of players (e.g. Bosch Rexroth: 2017 R&D/Revenues 9% vs IP 2%) which are expected to drive market dynamics in the long run. Deeming these risks as highly-probable, we factored them in in our fade out stage and long term growth rate (see *Valuation*).

**Financial risks**

**10. Forex risk.** With approximately 45% of its revenues outside EU and production facilities in 5+ non-EU countries, IP is exposed to the Forex fluctuation risk. Despite it emerged as one of the most impactful factors from our Montecarlo analysis which considered its impact only at a revenues-level, the historical low impact of Forex on IP profitability suggests the Group partial local production act as a natural hedge against this risk (see *Exhibit 39*).

**11. Interest rate risk.** Despite IP low level of indebtedness, the interest rate risk is moderate, given the high exposition to floating rates (Euribor) and the 2019E end of QE monetary policies.

**12. Credit risk.** This risk potential impact is limited given that no IP customer accounts for more than 1% of sales and its low exposition to instable emerging countries. Long-lasting relationships with customers and large OEMs financial stability further mitigate the risk.

**13. Liquidity risk.** IP is not exposed to the liquidity risk due to (i) its markets maturity and stableness and (ii) its strong cash generation. Moreover, the company has the possibility to expand its Net Debt/EBITDA ratio from its current 1x to a maximum of 3-3.5x (credit lines covenants).

**14. Raw material price fluctuation risk.** Metals represent a key cost item for IP accounting on average for 10% of sales in 2008-2018E. This exposes IP to the risk of their prices volatility which is particularly high for the metals used by the Water-Jetting division (aluminum, copper, steel and brass). This risk is partially mitigated by (i) the high-stock inventory policy adopted by IP (ca. 157 of Days of Inventory Holding in 2017) and (ii) IP ability to allocate part of the stock to suppliers. Furthermore, leveraging on its strong positioning IP is often able to increase prices toward its customers when metal prices increase significantly.

**Corporate governance risks**

**15. Top management (over) control.** According to our analyses, the dual-chairs role held by IP CEO and Chairman, Fulvio Montipò, hides risks as it could lead to conflict of interest between his own and the Group objective. However, his 16.3% indirect stake in the Group and adequate Corporate Governance practices mitigate this risk (see *Corporate Governance* and *Appendix 16*).

**16. Lack of management succession plan.** In case the current CEO (74 years old) suddenly decided to give up his position, the lack of a management succession plan could lead to potential problems in the definition and implementation of the Group strategy. To mitigate this risk, in 2017 IP established a committee made up by the CEO, the vice-Chairman, the IR and the 4 General Product Managers to discuss the succession plan. Nevertheless, there is not a defined succession plan yet.

**Further risks**

**17. Stock overvaluation due to PIR.** In 2017-2018 Italian mid-caps outperformed comparable EU mid-caps due to 2017 PIR introduction. Besides being supported by outstanding performances, IP multiples benefited from PIR as well (+50% 2017 YoY P/E variation). However, considering investors are required to go on with their initial investment up to 2021 to benefit from PIR tax exemption, a short term deflation in IP stock value does not seem to be a significant risk (see *Appendix 17*).

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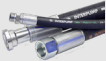



















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## 1. Product Description

Op. Segments	Products	Image	Function/role	Material	Order winners	Level of innovation*	IP positioning**	Main Brands
HC	PTO		Transfer mechanical power from a gearbox to a hydraulic circuit.	Caston iron Steel	Reliability Width of models Customization Noisiness	L Mainly in terms of PTO adaptability to new electric gearboxes/engines	1	  
	Hoses		Link all the components in the hydraulic circuit letting the fluid flow.	Natural rubber Synthetic rubber Nylon Polyethylene Stainless steel	Reliability/resistance Customization Sustainability	L Mainly in terms of material used)	3	 
	Fittings		Connect/fix hoses and hydraulic components or hoses with other hoses.	Stainless steel	Reliability Width of models Customization	L Mainly in terms of adaptability improvement	3	 
	Valves & DCV		Control and modify the fluid flow rate and pressure in order to keep the system at the right working conditions.	Caston iron Steel Aluminium Nickel	Reliability Customization Width of models	M Mainly in terms of the addition of electronic sensor to these devices	2	  
	Cylinders		Transform hydraulic power into mechanical one.	Steel Chrome	Reliability Customization After-sale service	L Mainly in terms of resistance	3	 
HPP & VHPP	High- and Very high-pressure piston pumps		Pump the water at high (150-500 bar) and very high pressure (>500 bar until 4000 bar).	Aluminium Steel Stainless steel	Reliability After sale service Pressure Flow rate Sustainability	H In terms of application field	1	 
FHS	Homogenizer		Transform a heterogeneous mixture into a homogeneous one.	Stainless steel	Reliability Energy saving Maintenance needed	L Mainly in terms of energy saving	3	
	Agitators and blenders		Transform a heterogeneous mixture into a homogeneous one.	Stainless steel	Reliability Energy saving Easiness of cleaning Velocity Flexibility	L Mainly in terms of energy saving	3	

\*Level of innovation: H-high; M-medium; L-low

\*\*IP positioning: 1-leader; 2-follower with relevant position; 3-follower

Source: Team Estimates

## 2. Porter's Five Forces

5 Porter's Forces	HC	HPP & VHPP	FHS	
Internal Rivalry	Concentration	<b>Concentration is globally moderate</b> (HHI=600, C4=39%). Large OEMs requirements are polarizing the competitive landscape into global players and local (or specialist) players.	<b>Concentration is high</b> (HHI=2850, C4=76%) mainly due to the presence of IP (ca. 50% of market share).	<b>Concentration is moderate</b> (HHI=800, C4=48%). GEA controls almost 20% of the market.
	Size of competitors	<b>The market is dominated by Bosch Rexroth</b> (ca. 14% of market share), <b>Parker</b> (14%), <b>Eaton</b> (6%) and <b>Danfoss</b> (5%). IP market share is 3-7 times smaller than theirs.	IP is the largest player in the market. IP market share (ca. 50%) is approximately 4-5 times larger than its closest competitors (Emak Group and Uraca).	<b>The market is dominated by GEA</b> (ca. 20% of market share), <b>Alfa Laval</b> (16%) and <b>SPX Flow</b> (9%). IP is a small player mainly focused on the European market (76% of 2018E segment revenues).
	Industry growth	<b>The HC market is expected to have a global low growth, aligned with its 2% 2013-2018E CAGR.</b> Growth pace is different depending on the considered geographical area, with emerging and recently-matured countries expected to have the highest growth where IP is (slowly) increasing its limited presence.	<b>The market is expected to have an extremely low growth</b> (ca. 2.5% CAGR in 2018E-2023E, team estimates) mainly driven by new applications.	<b>The market is expected to have low-moderate growth of 5% CAGR 2018E-2021E</b> (data source: McKinsey & Company) mainly driven by the increase in urbanization and customer increased wealth (emerging countries).
	Fixed costs	<b>The machinery industry is characterized by high fixed costs.</b> Especially when the considered market is cyclical, companies are increasing their outsourcing level putting tension on EBITDA margin, but positively impacting EBIT margin.		
	Product differentiation	Market maturity and the extremely low innovation level make <b>product differentiation difficult to be achieved in the HC market</b> with differences among competitive products mainly based on client-specific customization (especially for DCV and hoses) and on the ability to create Smart Hydraulics solutions.	Being products often customized for specific applications, <b>product differentiation is moderate-high.</b> IP ceramic piston pumps are unique increasing reliability and performances in terms of pressure and flow. Among IP brands, Hammelmann is the most recognized.	IP recent entry in the FHS market and consequent limited product range put an upper boundary to its product differentiation. <b>In the market, differentiation is low-moderate</b> and mainly based on customization and IoT rather than standardized technological improvements.
	Diversity of competitors	<b>Geographical and product differences are extremely low among the main players in the market.</b> Differentiation can be achieved through heavy R&D investments (e.g. Bosch Rexroth, ca. 9% 2017A R&D/Revenues) or through the development of strong and global distribution networks (e.g. Parker Store). Brand recognition is another key element where there is ample room for IP to improve.	<b>Players are well diversified in terms of geography and product specialization.</b> IP is the sole global player serving a wide array of industries thanks to its distribution network and know-how based on 40+ years of experience.	Diversification among competitors is moderate and based on diversity in applications. Focusing on a limited product range (i.e. homogenizers, mixers and blenders) and on the European market, <b>IP is not clearly differentiated from the market.</b>
	Exit barriers	<b>High fixed costs and moderate-high specialized assets are the main exit barriers characterizing the machinery industry.</b> IP could benefit from its decentralized approach in the potential dismissal of existing businesses.		
Buyers power	Buyer concentration	<b>Buyer concentration is high</b> (and expected to increase) for large OEMs, while the distributors market is fragmented. As competition for global players is mainly focused on OEMs, buyer concentration is perceived as extremely high by companies like IP.	Buyers concentration varies a lot depending on the end-market and product application. If compared to the HC market concentration, <b>buyer concentration is low.</b>	<b>Buyer concentration is moderate.</b> Buyers are divided in food, pharmaceutical and cosmetics products manufacturers and in fluid handling line producers.
	Product differentiation	As suggested by the extremely high number of applications and end-markets, <b>product differentiation among buyers is high.</b>	<b>Product differentiation among buyers is high and expected to increase</b> since the number of applications is still growing (e.g. in the mining industry).	<b>In the market, differentiation is moderate-low.</b> Differences are mainly based on the type of fluid to be processed which influences materials.
	Buyers profit margins	<b>Overall, IP has higher EBITDA and profit margins than most of its buyers.</b> According to the Group's management, buyers will have a hard time trying to reduce them leveraging on price reductions as IP competitors have lower margins as well.		
	Use of multiple sources	Low product and geographical differences among competitors make <b>the use of multiple sources for buyers relatively easy.</b> However, due to transaction costs and co-design relationships OEMs are trying to reduce their supply base and to create long lasting relationships.	Given IP large market share and expertise in this niche market, <b>buyers have a hard time finding a different source for HPP and VHPP.</b>	<b>Currently, buyers have little-to-no dependency on IP product,</b> as the FHS segment still has limited and not clearly differentiated products. However, FHS components are critical for buyers.
	Backward integration	<b>Backward integration is unlikely</b> for four main reasons: (i) OEMs are increasingly relying on outsourcing to reduce fixed costs and become more flexible, (ii) IP HC products are not critical and can be quite easily found on the market, (iii) OEMs focus on the aggregation of high-quality parts rather than producing those parts by themselves, (iv) IP HC volumes would be inefficiently high for a single OEM.	Backward integration is not a concrete possibility on the market given the importance of specialisation and know-how for HPP & VHPP manufactures.	The relevant presence of backward integrated groups (e.g. GEA, Alfa Laval and Tetra Pak) is mainly driven by the criticality of FHS components for players aiming at offering the entire production line. However, <b>we expect backward integration not to be a relevant competitive pressure, given the current outsourcing trends in the machinery industry.</b>
Importance to buyers	<b>IP components are non-critical.</b> However, when strong relationships with customers are formed, their importance to buyers increase dramatically. The customization makes the component difficult to be replaced in the short term.	At a market level, <b>the low-substitutability level of HPP and VHPP makes them important to buyers.</b> This is especially true for IP whose products are often difficult to replace with competitors' products (especially those operating at very-high pressure)	<b>FHS market players' components are critical for production lines manufacturers and for food, pharmaceutical and cosmetics manufacturers</b> as they directly affect the quality of final products. This is confirmed by the fact that backward integration in the market is significant. Still, IP limited product range and expertise reduce its importance to buyers.	
Buyers volume	<b>Buyers' volume is extremely variable.</b> It depends on: (1) the type of buyer (OEM vs distributor) and (2) the level of cross-selling the supplier is able to reach. In the case of IP, no single customer above 1% of total revenues in 2017.	<b>Volumes are typically lower than the HC market due to the higher level of application specialization.</b> IP products are perceived as relatively high volume-low customization in the HPP & VHPP market. Still, their level of customization if compared to the average machinery industry product is high.	<b>Buyers' volume is moderate-high in the market.</b> However, IP limited product range and small size relatively to competitors imply low cross-selling level and volumes. Thus, IP buyers' volume is low.	

Suppliers power	Supplier concentration	Supplier concentration is high for raw materials and semi-finished products and moderate for production treatments suppliers.		
	Product differentiation	Product differentiation is extremely low for raw materials as copper, iron and inox (which account for an extremely low share of IP procurement costs), low for semi-finished products (which represent the main procurement cost for IP) and moderate-high for production treatments.		
	Suppliers relative size	Raw materials and semi-finished products suppliers are comparable in terms of size to the market global players	Raw materials and semi-finished products suppliers are larger than IP segment and average market players	
	Dependence on the industry	Raw materials and semi-finished products suppliers does not depend on any specific market. The higher the size of the market the higher their dependency on it (thus, suppliers dependence on the industry is higher in HC). Production treatments suppliers dependency on the industry is moderate. IP has a well diversified suppliers base.		
	Forward integration	Most of IP suppliers are pure players and have no desire to acquire any of IP segments as it would lead to higher complexity and to little synergies. Furthermore, suppliers' customers serve a wide range of industries and markets.		
Threats of new entrants	Scale economies	Mass production and scale-related cost reduction are one of the main profitability drivers in the market as low product differentiation leads to low price differences among competitors. Scale economies are in a trade-off relationship with complexity and/or central costs.	Scale economies are not critical. Products differ in quality rather than in price and ramping up production would create only partial beneficial outcome to HPP & VHPP producers.	Mass production is limited by the legal and technical requirements linked to the fluid to be processed (e.g. inox for the food end-market) which reduce the possibility for companies to entirely standardize production. Still mass production is a key margin driver.
	Switching costs	The main switching cost customers are exposed to is represented by the customer-specific expertise developed by IP or other players in the HC market. This is critical for highly customized circuits as the replacement of a single component could require the re-design of the entire circuit.	The main switching cost customers are exposed to is represented by the customer-specific expertise developed by IP or other players in the HPP & VHPP and FHS markets.	
	Capital requirements	Heavy investments are necessary for effectively entering in the machinery industry.		
	Expertise requirement	Expertise requirements varies for different hydraulic components: among IP product range, DCV and pumps are the most technologically advanced components. Overall, expertise requirements are low-moderate, given the low level of technological innovation.	Incremental innovation and the level of technical know-how (increasing with the required pressures) make expertise and know-how critical in the HPP & VHPP market.	The level of expertise requirement is moderate-to-low and linked to the strict requirements of the food, pharmaceutical and cosmetics end-markets.
	Distribution channels	Access to distribution channels can be seen as an entry barrier. However, existing relationships with customers and market proximity are more valuable to incumbents.		
	Cost advantage	Incumbents can have several types of cost advantages difficult to be replicated for new entrants. Examples include proximity to customers, scale economies, preferential access to distribution channels and existing partnership with distributors.		
	Legal and regulatory barriers	No particular legal or regulatory barriers defend the machinery industry.		
	Defence of market share	Market share defence is mainly based on the importance of brand recognition in the market. Considering HPP & VHPP market, IP and Hammelmann are perceived as high-quality and reliability brands. Conversely, in the HC and FHS markets IP lacks strong brands and recognition if compared to the key market players.		
Threat of substitutes	Number of substitutes	Electric components are the main potential substitutes for hydraulic ones. No other technology can put serious threat to the HC market.	High - and very high pressure piston pumps are used for a wide and potentially increasing set of applications, substituting a number of mechanical technologies (e.g. water cutting for metals and other materials). Substitutes are mainly represented by high pressure air pumps.	Currently, no clear substitute products have been identified in the competitive landscape.
	Relative price	Hydraulic components are currently cheaper than electric one, especially if the entire product life is considered as less maintenance and spare parts are required.	Prices depends on the level of customization and the technical requirements of the product. Costs and prices are comparable to those of air pumps.	-
	Relative quality	Electric circuits are expected to offer better performance in terms of sustainability and energy efficiency. Hydraulic circuits have higher power density, reliability and life duration which are key for the HC market buyer.	Several HPP applications requires water for chemical or other reasons related to the treated materials.	-

Source: Team Elaboration

### 3. Competitive Financial Analysis

2017A	Revenues [€m]	Growth	EBITDA%	NET DEBT/EBITDA	D/E	ROIC ex. gdw	ROE	CAPEX/Sales [%]	CAPEX/D&A	Quick Ratio	Cash to cash [days]	R&D/Revenues [%]
IP	1,086	18.0%	22.9%	1.1	0.55	23%	19%	4.4%	1.0	1.8	158	2.0%
IP Hydraulics	690	16.0%	21.0%	n.a.	n.a.	30%	n.a.	5.8%	1.3	n.a.	n.a.	n.a.
Eaton	18,160	3.0%	16.7%	2.0	0.45	23%	19%	2.5%	1.2	1.6	82	3.0%
Parker	10,706	6.0%	14.5%	2.8	1.11	26%	20%	1.3%	1.3	1.4	61	3.0%
Danfoss	5,826	10.0%	15.1%	1.2	0.43	13%	17%	1.3%	0.8	1.2	47	4.0%
Bucher	2,647	11.0%	12.0%	-0.6	0.23	16%	13%	3.3%	0.8	2.0	115	4.0%
Mean Competitors HC		7.5%	14.6%	1.3	0.56	19%	17%	2.1%	1.0	1.6	76	3.5%
Median Competitors HC		8.0%	14.8%	1.6	0.44	19%	18%	1.9%	1.0	1.5	72	3.5%
IP Water Jetting	396	21.0%	26.2%	n.a.	n.a.	18%	n.a.	2.0%	0.5	n.a.	n.a.	n.a.
Emak Group	422	8.0%	10.4%	3.0	0.93	9%	9%	4.0%	1.1	1.7	175	n.a.
GEA	4,605	3.0%	10.8%	0.0	0.09	32%	7%	2.0%	1.0	1.2	105	1.0%
Alfalaval	3,665	-1.0%	17.7%	1.4	0.62	33%	15%	1.7%	0.4	1.3	100	2.0%
SPX Flow	1,737	-2.0%	10.1%	3.2	0.94	11%	6%	2.2%	0.3	1.6	103	1.0%
Sulzer	2,746	6.0%	9.1%	0.8	0.42	10%	5%	2.6%	0.6	1.4	88	3.0%
Mean Competitors WJ		2.8%	11.6%	1.7	0.6	19%	8%	2.5%	0.7	1.4	114	1.8%
Median Competitors WJ		3.0%	10.4%	1.4	0.6	11%	7%	2.2%	0.6	1.4	103	1.5%
Mean Total		4.9%	12.9%	1.5	0.6	19%	12%	2.3%	0.8	1.5	97	3%
Median Total		6.0%	12.0%	1.4	0.5	16%	13%	2.2%	0.8	1.4	100	3%

Source: Team Elaboration on Companies Data

## 4. M&A Track Record & Description (1996-2018)

### IP M&A history phases

Phase	Years	Strategic rationale
Entering in the vast HC market (while reinforcing the Cleaning Segment)	1997 – 2003	Being a solid HPP & VHPP manufacturer but given the limited market size, in 1997 IP started a strong acquisition campaign with a two-fold strategic rationale. (i) <b>Entering into the HC market.</b> IP entered into the vast HC market to expand its potential market while diversifying its business. In particular, IP acquired Italy and US based PTOs manufacturers and distributors (PZB, Hydrocar, Muncie and Hydroven). (ii) <b>Strengthening IP Cleaning segment.</b> IP reinforced its Cleaning segment acquiring 7 companies operating in the market which collectively accounted for 65%+ of Group revenues in 2003.
Becoming HPP & VHPP market leader	2004 – 2007	In 2004, reduced margins and increased competition pushed IP to dismiss the €290m+ revenues Cleaning segment. The proceeds have been reinvested in the more profitable and defendable HPP & VHPP market with the acquisitions of Hammelman (2005) and NLB (2007). These acquisitions reinforced IP positioning making it the undisputable market leader (ca. 45% of market share in 2007, Team Estimates)
Expanding and reinforcing the HC segment	2008 – 2014	Following up 1997-2003 PTOs-related acquisitions, IP started a product diversification campaign in the HC market acquiring 10+ companies producing and distributing cylinders, valves, and DCVs. Among them Walvoil has been a key acquisition due to its size (€100m+ revenues in 2015) and its technological leadership in DCVs.
Broadening the Water-Jetting division horizons	2015 – 2018	While continuing its HC segment expansion with a 5+ acquisitions in the hoses market, IP broadened its WJ division horizons. Indeed, the Group decided to enter into the growing FHS market with Bertoli (2015) acquisition exploiting the tied product affinity between homogenizers (Bertoli core products) and high-pressure pumps. Following up this investments, IP acquired Inoxpa (2017), Mariotti & Pecini (2017), Ricci Engineering (2017) and Fluinox (2018) creating its FHS segment.

Source: Team Elaboration

### IP M&A track record

Target Company	Acquisition date	Current stake	Main products	HQ Location	Acquisition rationale		
					Reinforcing competitive positioning	Enhancing distribution	Enlarging product range
<b>Hydraulics</b>							
PZB	1997-05	100%	PTOs	IT			×
Hydrocar	1998-07	100%	PTOs	IT	×		
Muncie	1999-11	100%	PTOs	US	×	×	
Hydroven	2001-07	100%	PTOs	IT			×
Contarini	2008-10	100%	Cylinders	IT			×
Modenflex	2008-10	100%	Cylinders	IT			×
Cover	2008-10	100%	Cylinders	IT			×
Oleodinamica Panni	2008-10	100%	Cylinders	IT			×
HS Penta	2008-12	100%	Cylinders	IT		×	×
American Mobile Power	2011-04	100%	Tanks	US		×	
Galtech	2011-07	100%	Valves	IT		×	×
MTC	2011-11	100%	Valves	IT	×		
Takarada	2011-12	100%	PTOs	BR	×		
Hydrocontrol	2013-05	100%	Valves and DCVs	IT	×		
IMM Group	2013-08	100%	Hoses	IT		×	×
Walvoil	2014-12	100%	Valves and DCVs	IT	×	×	
Osper	2015-05	100%	PTOs and cylinders	BR	×		
Endeavour	2016-01	100%	Crimping machines	GB			×
Tubiflex	2016-05	80%	Hoses	IT	×		
TeknoTubi	2016-07	100%	Hoses	IT	×		
Mega Pacific	2016-07	65%	Distributor	AU		×	
Bristol Hose	2017-01	100%	Hoses	GB		×	
Fluid System 80	2017-10	100%	Hydraulic power packs	IT	×		
GS Hydro	2017-12	n.a.	Hoses (O&G)	FI		×	×
<b>Water Jetting</b>							
Pratissoli Pompe	1990-n.a.	100%	HPP	IT	×		
General Pump	1998-10	100%	Distributor	US	×	×	
Hammelman	2005-04	100%	VHPP	DE	×	×	
NLB Corporation	2007-01	100%	VHPP	US		×	
Inoxihp	2015-03	53%	VHPP	IT			×
Bertoli	2015-05	100%	Homogenizers	IT			×
Inoxpa	2017-02	100%	Mixers	ES		×	×
Mariotti & Pecini	2017-06	60%	Mixers	IT	×		
Ricci Engineering	2018-08	100%	Breweries	IT			×
Fluinox	2018-12	100%	Mixers	ES	×		
<b>Cleaning (Dismissed)</b>							
Prototecnica	1990-n.a.	0%	Cleaning equipment	IT	×		×
Sirio	1990-n.a.	0%	Cleaning equipment	IT	×		
Soteco	1990-n.a.	0%	Cleaning equipment	IT	×		×
Officine Mecc. Faip	1992-n.a.	0%	Cleaning equipment	IT	×		
Teknova	1992-n.a.	0%	Cleaning equipment	IT	×		×
General technology	1996-n.a.	0%	Cleaning equipment	IT	×		×
Euromop	1999-12	0%	Cleaning equipment	IT	×		×
IP Floor	1999-12	0%	Cleaning equipment	IT	×		×
Ready Systems	2000-09	0%	Cleaning equipment	IT	×		×
Pulex	2000-12	100%	Cleaning equipment	IT		×	×
Gansow	2000-06	60%	Cleaning equipment	DE	×	×	
<b>Electric Motors (Dismissed)</b>							
Unielectric	1994-n.a.	0%	Electric motors	IT			×

Source: Team Elaboration on Company Data

## 5. Historical M&A Analysis

### Financial track record

Target Company	Stake	Acq. Year	Target's Country	EV [€m]	Revenues [€m]	EBITDA [€m]	EBITDA %	EV/Revenues	EV/EBITDA
<b>Hydraulics</b>									
Contarini	100%	2008	IT	26	32	5	16%	0.8x	5.1x
Modenflex	100%	2008	IT	4	7	1	18%	0.5x	3.0x
Cover	100%	2008	IT	19	15	3	23%	1.3x	5.7x
Oleodinamica Panni	100%	2008	IT	39	26	6	23%	1.5x	6.5x
HS Penta	100%	2008	IT	47	43	7	15%	1.1x	7.1x
American Mobile Power	100%	2011	US	6	8	1	19%	0.8x	4.3x
Galtech	100%	2011	IT	11	15	1	3%	0.7x	21.0x
MTC	100%	2011	IT	7	6	1	25%	1.2x	5.0x
Takarada	100%	2011	BR	13	8	2	19%	1.7x	8.8x
Hydrocontrol	100%	2013	IT	26	53	6	11%	0.5x	4.3x
IMM Group	100%	2013	IT	87	57	9	16%	1.5x	9.7x
Walvoil	100%	2014	IT	149	140	19	14%	1.1x	7.8x
Osper	100%	2015	BR	4	4	1	16%	0.9x	5.8x
Endeavour	100%	2016	GB	1	2	0	16%	0.7x	4.2x
Tubiflex	80%	2016	IT	23	18	4	23%	1.3x	5.4x
TeknoTubi	100%	2016	IT	13	11	1	13%	1.2x	9.4x
Mega Pacific	65%	2016	AU	8	9	2	18%	0.9x	5.2x
Bristol Hose	100%	2017	GB	1	3	0	13%	0.5x	3.7x
Fluid System 80	100%	2017	IT	1	6	1	10%	0.1x	1.2x
GS Hydro	n.a.	2017	FI	6	60	4	7%	0.1x	1.5x
<b>Mean Hydraulics</b>							<b>16%</b>	<b>0.9x</b>	<b>6.6x</b>
<b>Median Hydraulics</b>							<b>16%</b>	<b>0.9x</b>	<b>5.3x</b>
<b>Water Jetting</b>									
Hammelmann	100%	2005	DE	89	49	11	22%	1.8x	8.3x
NLB Corporation	100%	2007	US	61	45	7	16%	1.4x	8.7x
Inoxihp	53%	2015	IT	6	6	2	30%	1.1x	3.5x
Bertoli	100%	2015	IT	6	11	2	21%	0.6x	2.8x
Inoxpa	100%	2017	ES	79	59	12	19%	1.3x	6.9x
Mariotti & Pecini	60%	2017	IT	7	5	2	33%	1.4x	4.3x
Ricci Engineering	100%	2018	IT	1	2	0	8%	0.4x	5.0x
Fluinox	100%	2018	ES	9	9	2	17%	1.1x	6.3x
<b>Mean Water Jetting</b>							<b>20%</b>	<b>1.4x</b>	<b>7.0x</b>
<b>Median Water Jetting</b>							<b>19%</b>	<b>1.1x</b>	<b>6.3x</b>
<b>Mean Total</b>							<b>17%</b>	<b>1.1x</b>	<b>6.8x</b>
<b>Median Total</b>							<b>17%</b>	<b>1.1x</b>	<b>5.3x</b>

Source: Team Elaboration on Company Data

### Synergies

Analysing acquired companies revenues trends during the first years following each acquisition, we assessed IP revenues synergies creation capability. Interestingly, analysing IP 17 acquisitions in 2005-2015, we found out that acquired companies revenues improvements rarely outperformed IP average organic growth during the first three years after the acquisition. This shows how, overall, little-to-no revenues synergies have been created except Walvoil (11.0% revenues CAGR in 2014-2017) and Hammelmann (12.3% revenues CAGR in 2004-2007) which clearly outperformed the Group organic growth performances.

Company	Ref. Year	Ref. Year Revenues [€m]	Ref. Y+3 Revenues [€m]	Revenues CAGR 3Y [%]	IP organic CAGR3Y [%]	Ref. Year + 3 Exp. Revenues [€m]
<b>Hydraulics</b>						
Contarini	2008	32	19	-15.8%	-1.0%	31
Modenflex	2008	7	6	-4.6%	-1.0%	7
Cover	2008	15	10	-12.7%	-1.0%	14
Oleodinamica Panni	2008	26	19	-9.9%	-1.0%	25
HS Penta	2008	43	22	-20.0%	-1.0%	42
American Mobile Power	2010	8	8	2.0%	7.2%	9
Galtech	2010	15	16	1.0%	7.2%	19
MTC	2011	6	5	-5.3%	4.3%	7
Takarada	2011	8	4	-23.3%	4.3%	9
Hydrocontrol	2012	53	56	1.8%	4.4%	61
IMM Group	2012	57	52	-3.0%	4.4%	65
Walvoil	2014	140	192	11.0%	2.8%	153
Osper	2014	4	4	-6.1%	2.8%	5
<b>Water Jetting</b>						
Hammelmann	2004	49	69	12.3%	7.0%	60
NLB Corporation	2006	45	36	-6.8%	-6.4%	37
Inoxihp	2014	6	5	-1.9%	4.0%	6
Bertoli	2014	11	9	-7.6%	4.0%	13

Source: Team Elaboration



**Value generated by the convenient price paid**

The fair acquired EV (fair EV) at the deal moment of each of IP 2005-2018E acquisitions has been evaluated through a 2-stage 10-years DCF based on bearish assumptions. This allowed us to assess the fair EV acquired by IP throughout its last 28 acquisitions which, if compared with the EV actually paid (EV paid), revealed that in the face of €750.5m of EV paid, IP acquired €1,414.2m of fair EV resulting in a “discount” of €663.6m. These results have been confirmed and reinforced by a 10,000 simulations Montecarlo analysis: adopting even-more-bearish assumptions in 93% of cases the fair EV was higher than the EV paid.

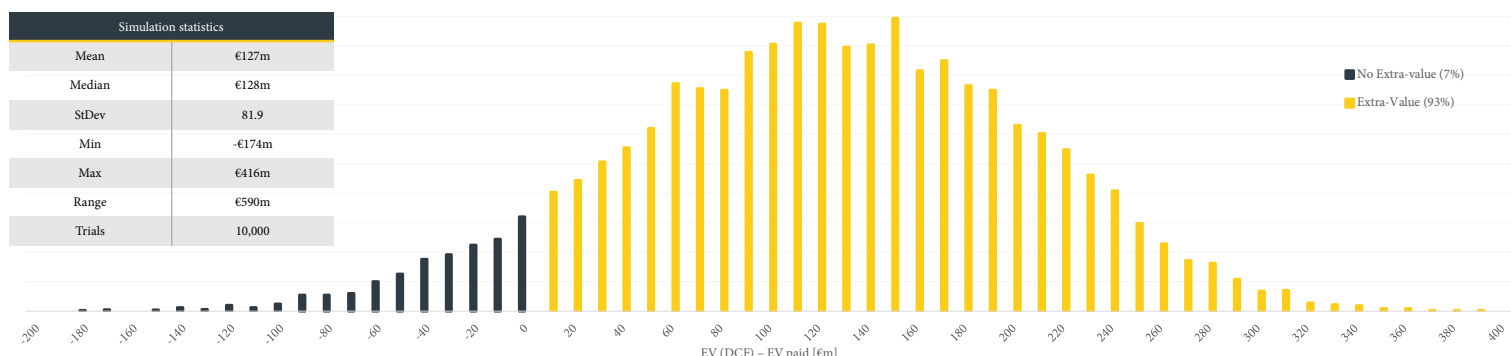
DCF & Montecarlo assumptions		DCF assumptions	Montecarlo simulation assumptions	
YoY rev. growth		2%	Always below 2%, normally distributed	Min(2%; N(2%, 0.6%))
LT growth		2%	Always below 2%, normally distributed	Min(2%; N(2%, 0.6%))
EBITDA margin		Flat in case it is lower than IP one at the deal moment, otherwise decreasing towards IP one	Reduced with respect to the DCF case by ca. 3% every year	EBITDA% <sub>DCF</sub> – N(3%; 0.4%)
Capex and D&A		3.8% of revenues	3.8% of revenues	3.8% of revenues
Tax rate		Statutory tax rate of the acquired company country	Statutory tax rate of the acquired company country	Statutory tax rate of the acquired company country
ΔNWC		30% of revenues YoY variation	30% of revenues YoY variation	30% of revenues YoY variation
WACC	Risk Free Rate	10Y German Government Bond yield, at the deal closing moment	Always about IP WACC at the deal moment, normally distributed	Max(WACC; N(WACC; 1.75%))
	Market Premium	Implied European Market Risk Premium, at the deal closing moment (Damodaran)		
	Beta	Linear regression of IP historical returns against the STOXX Europe 600 index (SXXP) for 5 years starting from the deal closing moment (weekly data)		
	Cost of Debt	Euribor + spread of the deal closing year		
	Tax rate	Statutory Italian tax rate at the deal closing moment		
	Capital Structure	Target capital structure: 15% Debt, 85% Equity		

Source: FactSet, Damodaran, Team Estimates

Company	Ref. Year	EV Paid [€m]	Fair EV [€m]	Delta EV [€m]	EBTIDA [€m]	EV Paid/EBITDA	Fair EV/EBITDA
<b>Hydraulics</b>							
Contarini	2008	26	64	38	5	5.1x	12.5x
Modenflex	2008	4	16	13	1	3.0x	13.4x
Cover	2008	20	42	22	3	5.7x	12.2x
Oleodinamica Panni	2008	39	73	35	6	6.5x	12.2x
HS Penta	2008	47	83	37	7	7.1x	12.6x
American Mobile Power	2010	6	10	4	1	4.3x	7.3x
Galtech	2010	11	n.a.	n.a.	1	21.0x	n.a.
MTC	2011	7	12	5	1	5.0x	8.3x
Takarada	2011	13	15	2	2	8.8x	9.9x
Hydrocontrol	2012	26	67	40	6	4.3x	10.9x
IMM Group	2012	87	102	15	9	9.7x	11.4x
Walvoil	2014	149	301	152	19	7.8x	15.7x
Osper	2014	4	11	7	1	5.8x	16.4x
Endeavour	2016	1	4	3	0	4.2x	15.0x
Tubiflex	2015	23	44	21	4	5.4x	10.4x
TeknoTubi	2015	13	16	3	1	9.4x	11.6x
Mega Pacific	2016	8	26	18	2	5.2x	16.2x
Bristol Hose	2016	1	5	4	0	3.7x	15.7x
Fluid System 80	2017	1	8	7	1	1.2x	12.6x
GS Hydro	2017	6	29	23	4	1.5x	7.4x
<b>Water Jetting</b>							
Hammelmann	2004	89	91	1	11	8.3x	8.4x
NLB Corporation	2006	61	77	16	7	8.7x	11.0x
Inoxihp	2014	6	27	21	2	3.5x	15.7x
Bertoli	2014	7	42	36	2	2.8x	18.3x
Inoxpa	2016	79	201	122	12	6.9x	17.4x
Mariotti & Pecini	2016	7	22	15	2	4.3x	13.3x
Ricci Engineering	2017	1	2	1	0	5.0x	9.9x
Fluinox	2018	10	29	20	2	6.3x	19.4x
<b>Total</b>		<b>751</b>	<b>1418</b>	<b>678</b>	<b>95</b>	<b>8x</b>	<b>14.9x</b>

Source: Company Data, Team Estimates

**Montecarlo simulation: extra-value from M&A**



Source: Company Data, Team Elaboration

## 6. Historical comparable transactions multiples

Target Company	Acquirer	Acq. Year	Target's Country	EV [€m]	Revenues [€m]	EBITDA [€m]	EBITDA %	EV/Revenues	EV/EBITDA
<b>Hydraulics</b>									
Oil Control Group Spa	Bosch Rexroth AG	2005	IT	185	41	7	18%	4.5x	25.0x
Sterling Hydraulics	Parker-Hannifin Corp.	2005	GB	49	26	4	15%	1.9x	6.5x
Hyva Holding Bv	NWS Holdings Ltd	2010	NL	746	490	65	13%	1.5x	11.5x
Taiyo Ltd	Parker-Hannifin Corp.	2012	JP	77	169	15	9%	0.5x	11.6x
Remosa SpA	IMI Plc	2012	IT	100	34	9	27%	0.5x	10.9x
G.T. Attuatori Srl	Rotork Plc	2013	IT	10	7	1	16%	1.6x	9.7x
Danfoss A/S	Sauer-Danfoss Inc.	2013	US	1962	1461	305	21%	1.3x	6.4x
FTL Seals Technology	IDEX Corp.	2013	GB	24	16	4	26%	1.5x	5.6x
Faster S.p.a	Capvis Equity Partners AG	2014	IT	164	81	21	26%	2.0x	7.8x
Tieffe Spa	Mandarin Capital Partners	2014	IT	36	25	6	24%	1.4x	6.0x
Bifold Group Ltd.	Rotork Plc	2015	GB	184	45	8	19%	4.1x	21.7x
Brevini Group SpA	Dana, Inc.	2016	IT	325	388	26	7%	0.8x	12.4x
Sace SRL	Floodraulic Group, Inc.	2017	IT	9	6	1	13%	1.4x	10.9x
Circor International	Colfax Fluid Handling Solution	2017	US	716	392	54	14%	1.8x	7.2x
Duplomatic Oleodinamica	Alcedo IV	2017	IT	40	33	6	19%	1.2x	6.3x
Wuxi Deli Fluid Technology Co. Ltd.	Bucher Hydraulics GmbH	2018	CN	23	15	1	8%	1.5x	19.8x
Faster S.p.a	Sun Hydraulics Corp.	2018	IT	432	105	29	28%	4.1x	14.9x
Custom Fluidpower Pty Ltd.	Sun Hydraulics Corp.	2018	AU	21	35	2	6%	0.6x	9.6x
<b>Mean Hydraulics</b>				<b>347</b>	<b>192</b>	<b>34</b>	<b>18%</b>	<b>1.8x</b>	<b>10.2x</b>
<b>Median Hydraulics</b>				<b>100</b>	<b>41</b>	<b>8</b>	<b>18%</b>	<b>2.4x</b>	<b>11.8x</b>
<b>Water Jetting</b>									
OBL SRL	IDEX Corp.	2010	IT	10	8	1	15%	1.2x	8.4x
Comet Spa, Tecomec Srl, Sabart Spa, Raico Srl	Emac Group	2011	IT	117	127	12	10%	0.9x	9.7x
Robuschi SpA	Gardner Denver, Inc.	2011	IT	195	48	11	22%	4.1x	18.1x
Finder Pompe Spa	Dover Corp.	2013	IT	137	56	9	16%	2.5x	15.0x
Lemosia Industria de Bombas de alta pressao	Comet Spa	2015	BR	32	12	5	39%	2.6x	6.7x
<b>Mean Water Jetting</b>				<b>98</b>	<b>50</b>	<b>8</b>	<b>20%</b>	<b>2.0x</b>	<b>12.9x</b>
<b>Median Water Jetting</b>				<b>130</b>	<b>52</b>	<b>10</b>	<b>19%</b>	<b>2.4x</b>	<b>12.7x</b>
<b>Mean Total</b>				<b>283</b>	<b>156</b>	<b>27</b>	<b>18%</b>	<b>1.8x</b>	<b>10.3x</b>
<b>Median Total</b>				<b>100</b>	<b>41</b>	<b>8</b>	<b>16%</b>	<b>2.4x</b>	<b>11.8x</b>

Source: FactSet, Zephyr, Orbis, Team Elaboration

## 7. Revenues Growth

Amount of €m	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenues IP	389.1	322.1	400.1	472.3	527.2	556.5	672.0	894.9	922.8	1,086.5	1,270.5
Growth	2%	-17%	24%	18%	12%	6%	21%	33%	3%	18%	17%
of which Organic	-4%	-23%	24%	16%	7%	1%	9%	7%	-1%	11%	8%
of which Inorganic	6%	6%	0%	2%	5%	5%	12%	26%	4%	7%	9%
Revenues Hydraulics	172.7	149.7	190.3	229.9	257.7	294.1	396.2	560.3	596.8	690.9	844.0
Growth	2%	-13%	27%	21%	12%	14%	35%	41%	7%	16%	22%
of which Organic	-12%	-27%	27%	17%	1%	5%	11%	3%	0%	15%	12%
of which Inorganic	14%	14%	0%	4%	11%	24%	38%	7%	1%	10%	10%
Revenues Water Jetting	216.4	172.4	209.8	242.4	269.4	262.4	275.8	334.7	326.0	395.6	426.4
Growth	2%	-20%	22%	16%	11%	-3%	5%	21%	-3%	21%	8%
of which Organic	2%	-20%	22%	16%	11%	-3%	5%	14%	-3%	1%	5%
of which Inorganic	0%	0%	0%	0%	0%	0%	0%	7%	0%	20%	3%

Source: Team Elaboration on Company Data

The tables below summarize IP 2008-2018E organic revenues growth by division. Each cell of the tables indicates the organic revenues CAGR from the year in row to the one in column (e.g. the IP organic revenues CAGR 2013-2018E is 6%).

### IP

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2008	-23%	-4%	2%	3%	2%	3%	4%	4%	3%	4%
2009		24%	20%	15%	11%	10%	10%	8%	7%	8%
2010			16%	11%	8%	7%	8%	6%	5%	6%
2011				7%	4%	4%	6%	4%	4%	5%
2012					1%	3%	5%	3%	2%	3%
2013						9%	9%	5%	5%	6%
2014							7%	3%	3%	5%
2015								-1%	3%	5%
2016									11%	10%
2017										8%
2018										

### Hydraulics Division

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2008	-27%	-8%	-1%	-1%	0%	1%	1%	2%	3%	3%
2009		27%	21%	14%	12%	10%	9%	7%	7%	8%
2010			17%	8%	7%	7%	6%	5%	5%	6%
2011				1%	4%	4%	5%	3%	3%	5%
2012					5%	5%	4%	3%	2%	4%
2013						11%	9%	5%	6%	7%
2014							3%	0%	3%	5%
2015								0%	6%	8%
2016									15%	14%
2017										12%
2018										

### Water-Jetting Division

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2008	-20%	-2%	4%	6%	4%	4%	6%	5%	4%	4%
2009		22%	19%	16%	11%	10%	11%	9%	8%	7%
2010			16%	13%	8%	7%	8%	7%	6%	6%
2011				11%	4%	4%	7%	5%	4%	4%
2012					-3%	1%	5%	4%	3%	3%
2013						5%	10%	6%	4%	5%
2014							14%	6%	4%	4%
2015								-3%	-1%	1%
2016									1%	3%
2017										5%
2018										

Source: Team Elaboration

## 8. Revenues Forecast

Considering IP history, with 25+ acquisitions in the last 10 years, we forecasted its 2018E-2023E revenues, separating its organic and inorganic components and adopting a two-fold approach for short and medium-long term:

**2018E** revenues forecasts reflect the positive trend of the first 9M (9% YoY organic growth net of -3.5% YoY Forex contribution) as IP Q4 showed no historical seasonality or peculiar trend (avg. 24% of yearly revenues generated in Q4 in the last 10 years). 2018 acquisitions have been consolidated considering 12M and 5M respectively for GS-Hydro (acquired in 2018-01) and for Ricci Engineering (2018-07) in 2018, and 12M for Fluinox (2018-12) in 2019.

**2019E-2023E** 2019E-2023E organic revenues forecasts reflect their sensitivity to macroeconomic cycles (i.e. economic and population trends) through a regression-based forecasting process.

### Assessing sensitivity to macroeconomic cycles

Given IP strong M&A track record and considering the historical little-to-no revenues synergies creation with and among acquired companies, we will refer, now on, to a constant perimeter as 31/12/2017 to better reflect IP current structure without introducing synergies-related distortions.

#### 1. Revenues by division and geography.

Given their different drivers as represented in the Industry overview, we analysed separately the HC, HPP & VHPP and FHS divisions<sup>1</sup>, further disaggregating at a geographical area<sup>2</sup> level to factor in the differences in terms of business cycle phase among advanced and emerging countries. Thus, IP 2008-2017 revenues have been split by division and by geographical area through a detailed analysis of controlled companies revenues streams and business models.

#### 2. Macroeconomic drivers.

Our strategic analysis suggests that, despite IP diversification strategy, its top-line is sensitive to macroeconomic cycles due to (i) its markets maturity and (ii) the high share of revenues coming from cyclical end-markets as truck (16% of 2018E revenues), construction (10%) and earth moving (6%). In particular, the HC and HPP & VHPP divisions demand is mainly driven by the economic cycle (i.e. GDP), while the FHS one is highly-sensitive to population trends (i.e. Urbanization), as they drive processed food, drugs and cosmetics products demand.

**3. Revenues by division and geography and Macroeconomic drivers: the relation.** Thus, to precisely assess which the main driver of IP divisional revenues in each geographical area was, we checked for their relationship with macroeconomic indexes (e.g. Nominal GDP (€bn), Net Investments (€bn) and Urbanization (m), data sources: IMF, FactSet, IMF), which, for the purpose, were weighted considering the share of each country revenues in its geographical area.

OLS regressions results confirm our strategic suggestions, with HC and HPP & VHPP divisional revenues mostly sensitive to Nominal GDP trends and FHS to Urbanization, with the only exception being the FHS-Italy combination where no key revenues driver have been identified.

### IP Revenues Forecasts

While strategy gave us hints on macro drivers, the quantitative relationships identified allowed us to forecast future revenues. Indeed, applying the estimates of the selected macroeconomic indexes (sources: IMF, UN), we obtained organic 2019E-2023E revenues for each division and geographical area.

For the FHS-Italy combination (i) the FHS market maturity, (ii) the null urbanization growth (0% 2018E-2023E urbanization CAGR) and (iii) IP extremely weak competitive positioning (ca. €7m of revenues in 2017) suggest its sluggish trend (0.1% 2013-2018E revenues CAGR) will continue in 2019E-2023E.

OLS regressions	Key driver	OLS Results	Italy	Rest of Europe	North America	Far East & Oceania	Rest of the World
HC	Nominal GDP	Best-fit line	$y = 0.53x - 708.71$	$y = 0.42x - 251.23$	$y = 0.01 - 2.98$	$y = 0.01 + 23.71$	$y = 0.06x - 7.94$
		R <sup>2</sup> – adj	0.76	0.62	0.80	0.85	0.84
HPP & VHPP	Nominal GDP	Best-fit line	$y = 0.07x - 87.56$	$y = 0.09x - 66.11$	$y = 0.01x - 6.99$	$y = 0.01x - 35.57$	$y = 0.03x - 2.22$
		R <sup>2</sup> – adj	0.79	0.93	0.83	0.82	0.79
FHS	Urbanization	Best-fit line	n.a.	$y = 3.65x - 99.74$	$y = 0.12x - 25.42$	$y = 0.01 + 0.39$	$y = 0.07x - 2.41$
		R <sup>2</sup> – adj	0.13	0.85	0.92	0.90	0.92

Source: IMF, Team Elaboration

Amount in €m	2018E	2019E	2020E	2021E	2022E	2023E	2018E	2019E	2020E	2021E	2022E	2023E
	IP						Hydraulics					
Italy	210	230	251	272	294	317	171	187	206	224	244	264
YoY growth, gross of FX (%)	10.7%	9.1%	9.1%	8.5%	8.2%	7.7%	11.9%	9.7%	9.8%	9.1%	8.7%	8.1%
FX contribution (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rest of Europe	423	427	450	474	498	524	268	269	285	303	321	340
YoY growth, gross of FX (%)	9.6%	0.9%	5.2%	5.3%	5.2%	5.2%	11.9%	0.3%	6.0%	6.1%	6.0%	6.0%
FX contribution (%)	-4.0%	-1.0%	-1.5%	-1.7%	-2.0%	-2.2%	-3.8%	-1.3%	-1.8%	-2.1%	-2.5%	-2.7%
North America	321	325	332	342	351	361	183	176	180	185	190	196
YoY growth, gross of FX (%)	9.2%	1.1%	2.4%	3.0%	2.5%	2.9%	11.9%	-3.9%	2.4%	3.1%	2.5%	2.9%
FX contribution (%)	-4.0%	1.3%	-1.4%	-0.6%	-0.9%	-0.4%	-3.8%	1.3%	-1.4%	-0.6%	-0.9%	-0.5%
Far East & Oceania (€m)	125	122	127	133	139	145	71	67	70	74	78	82
YoY growth, gross of FX (%)	9.1%	-2.6%	4.3%	4.5%	4.3%	4.6%	11.9%	-5.6%	5.2%	5.4%	5.1%	5.5%
FX contribution (%)	-4.0%	-0.9%	-0.6%	-0.2%	-0.5%	-0.3%	-3.8%	-1.1%	-0.7%	-0.3%	-0.6%	-0.3%
Rest of the World (€m)	113	112	120	129	139	149	78	76	83	90	98	107
YoY growth, gross of FX (%)	9.9%	-1.0%	7.0%	7.7%	7.4%	7.8%	11.9%	-1.9%	8.3%	9.1%	8.6%	9.0%
FX contribution (%)	-3.9%	-1.6%	-3.6%	-2.6%	-2.8%	-2.3%	-3.8%	-1.4%	-3.7%	-2.7%	-2.9%	-2.4%
<b>Total organic (€m)</b>	<b>1,196</b>	<b>1,218</b>	<b>1,282</b>	<b>1,352</b>	<b>1,423</b>	<b>1,499</b>	<b>770</b>	<b>775</b>	<b>824</b>	<b>877</b>	<b>931</b>	<b>988</b>
YoY growth, gross of FX (%)	9.7%	1.8%	5.3%	5.5%	5.2%	5.3%	11.9%	0.6%	6.3%	6.4%	6.2%	6.2%
FX contribution (%)	-3.5%	-0.3%	-1.3%	-1.0%	-1.3%	-1.2%	-3.3%	-0.4%	-1.4%	-1.2%	-1.4%	-1.3%
<b>Total inc. M&amp;A (€m)</b>	<b>1,270</b>	<b>1,311</b>	<b>1,383</b>	<b>1,461</b>	<b>1,541</b>	<b>1,626</b>	<b>844</b>	<b>856</b>	<b>913</b>	<b>974</b>	<b>1,036</b>	<b>1,103</b>

Source: Team Estimates

<sup>1</sup>For valuation (DCF) purposes the Water-Jetting division revenues resulted from the sum of the HPP & VHPP and FHS divisions forecasts.

<sup>2</sup>Geographical areas: Italy, Rest of Europe, North America, Far East & Oceania and Rest of the World.

Amounts in €m	HPP & VHPP						Fluid Handling System					
Italy	33	36	39	41	44	47	7	7	7	7	7	7
YoY growth, gross of FX (%)	5.7%	7.6%	7.2%	6.8%	6.6%	6.3%	5.7%	0.0%	-0.2%	-0.2%	-0.2%	-0.1%
FX contribution (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rest of Europe	94	100	105	111	117	124	62	59	60	60	60	61
YoY growth, gross of FX (%)	5.7%	6.5%	5.7%	5.7%	5.6%	5.5%	5.7%	-4.6%	0.7%	0.7%	0.7%	0.6%
FX contribution (%)	-4.3%	-0.5%	-0.7%	-0.8%	-1.0%	-1.1%	-4.2%	-0.9%	-1.2%	-1.4%	-1.7%	-1.9%
North America	133	144	147	151	155	159	5	6	6	6	7	7
YoY growth, gross of FX (%)	5.7%	7.6%	2.3%	2.9%	2.4%	2.8%	5.7%	12.2%	4.4%	4.3%	4.2%	4.1%
FX contribution (%)	-4.3%	1.4%	-1.3%	-0.6%	-0.8%	-0.4%	-4.2%	1.3%	-1.4%	-0.6%	-0.9%	-0.4%
Far East & Oceania (€m)	54	54	56	58	60	62	2	1	2	2	2	2
YoY growth, gross of FX (%)	5.7%	1.3%	3.2%	3.5%	3.4%	3.6%	5.7%	-1.9%	1.4%	1.4%	1.3%	1.2%
FX contribution (%)	-4.3%	-0.7%	-0.4%	-0.2%	-0.4%	-0.2%	-4.2%	-0.9%	-0.6%	-0.2%	-0.5%	-0.3%
Rest of the World (€m)	21	21	22	24	25	27	15	15	15	16	16	16
YoY growth, gross of FX (%)	5.7%	1.2%	5.4%	6.1%	5.9%	6.4%	5.7%	0.5%	2.5%	2.5%	2.5%	2.5%
FX contribution (%)	-4.3%	-2.2%	-3.1%	-2.3%	-2.5%	-2.1%	-4.2%	-1.8%	-3.4%	-2.5%	-2.7%	-2.3%
<b>Total organic (€m)</b>	<b>335</b>	<b>355</b>	<b>369</b>	<b>385</b>	<b>401</b>	<b>418</b>	<b>90</b>	<b>88</b>	<b>89</b>	<b>90</b>	<b>91</b>	<b>93</b>
YoY growth, gross of FX (%)	5.7%	5.9%	4.1%	4.4%	4.1%	4.3%	5.7%	-2.4%	1.2%	1.2%	1.2%	1.2%
FX contribution (%)	-3.9%	0.1%	-1.0%	-0.7%	-0.9%	-0.7%	-3.9%	-0.8%	-1.5%	-1.4%	-1.7%	-1.7%
<b>Total inc. M&amp;A (€m)</b>	<b>336</b>	<b>357</b>	<b>372</b>	<b>388</b>	<b>404</b>	<b>421</b>	<b>90</b>	<b>98</b>	<b>99</b>	<b>100</b>	<b>101</b>	<b>102</b>

Source: Team Estimates

## 9. Divisional Income Statements

Exploiting Company data ("Interpump Group business sector information"), we split the consolidated income statement into two divisional-ones (allocating "Other" and "Elimination entries" to divisions according to their sales). In this way, we exploited their (dis)similarities to obtain more precise forecasts of IP value creation.

For each division, COGS and SG&A expenses have been estimated through linear regressions against revenues adjusted to take into consideration both our expectations and Group guidance (e.g. adjustments to align 2018E results with 2018 9M data), considering in our forecasts (i) historical trends, (ii) operating leverage and (iii) competitive dynamics. Metal prices fluctuations have not been considered in our model since Group hedging strategies showed to be effective over the years. However, their impact has been simulated in our Montecarlo simulation presented in *Appendix 15*.

### Hydraulics

Amounts in €m	2009A	2010A	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
<b>Revenues</b>	<b>150</b>	<b>190</b>	<b>230</b>	<b>258</b>	<b>294</b>	<b>396</b>	<b>560</b>	<b>597</b>	<b>691</b>	<b>844</b>	<b>856</b>	<b>913</b>	<b>974</b>	<b>1,036</b>	<b>1,103</b>
Growth [%]		27.1%	20.8%	12.1%	14.1%	34.7%	41.4%	6.5%	15.8%	22.2%	1.4%	6.6%	6.7%	6.4%	6.4%
COGS	-96	-121	-148	-164	-191	-254	-363	-377	-433	-536	-543	-579	-618	-658	-700
% on Sales	64.5%	63.7%	64.3%	63.7%	64.8%	64.0%	64.8%	63.2%	62.7%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%
<b>Gross Profit</b>	<b>53</b>	<b>69</b>	<b>82</b>	<b>94</b>	<b>103</b>	<b>142</b>	<b>197</b>	<b>220</b>	<b>258</b>	<b>308</b>	<b>313</b>	<b>333</b>	<b>356</b>	<b>379</b>	<b>403</b>
% on Sales	35.5%	36.3%	35.7%	36.3%	35.2%	36.0%	35.2%	36.8%	37.3%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%
Selling	-16	-19	-22	-26	-29	-38	-48	-49	-55	-68	-69	-73	-78	-83	-87
% on Sales	10.9%	9.9%	9.5%	9.9%	10.0%	9.5%	8.5%	8.2%	8.0%	8.1%	8.1%	8.0%	8.0%	8.0%	7.9%
G&A	-25	-30	-30	-35	-37	-44	-60	-63	-66	-82	-83	-87	-92	-97	-103
% on Sales	16.7%	15.6%	13.1%	13.7%	12.5%	11.0%	10.7%	10.5%	9.6%	9.7%	9.6%	9.6%	9.5%	9.4%	9.3%
Other	3	3	3	4	4	8	7	8	9	12	11	12	13	14	15
% on Sales	2.1%	1.5%	1.5%	1.6%	1.2%	2.1%	1.3%	1.3%	1.3%	1.4%	1.3%	1.3%	1.4%	1.3%	1.3%
<b>EBITDA</b>	<b>15</b>	<b>23</b>	<b>33</b>	<b>37</b>	<b>41</b>	<b>69</b>	<b>97</b>	<b>116</b>	<b>145</b>	<b>170</b>	<b>172</b>	<b>185</b>	<b>199</b>	<b>213</b>	<b>227</b>
% on Sales	10.0%	12.3%	14.5%	14.3%	13.9%	17.5%	17.3%	19.4%	21.0%	20.2%	20.1%	20.3%	20.4%	20.5%	20.6%
D&A	-10	-11	-11	-13	-16	-20	-30	-31	-32	-36	-35	-36	-37	-38	-39
% on Sales	6.4%	5.7%	4.6%	4.9%	5.4%	5.0%	5.3%	5.1%	4.7%	4.2%	4.1%	3.9%	3.8%	3.7%	3.5%
<b>EBIT</b>	<b>5</b>	<b>12</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>49</b>	<b>68</b>	<b>85</b>	<b>113</b>	<b>135</b>	<b>137</b>	<b>149</b>	<b>162</b>	<b>175</b>	<b>188</b>
% on Sales	3.6%	6.6%	9.9%	9.4%	8.5%	12.5%	12.1%	14.3%	16.3%	16.0%	16.0%	16.3%	16.6%	16.9%	17.1%

Source: Team Elaboration on Company Data

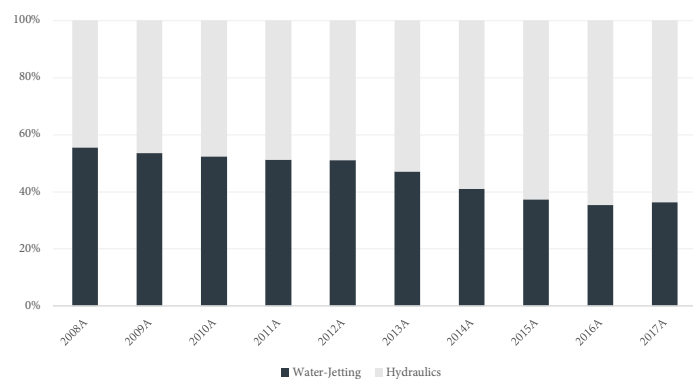
### Water-Jetting

Amounts in €m	2009A	2010A	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
<b>Revenues</b>	<b>172</b>	<b>210</b>	<b>242</b>	<b>269</b>	<b>262</b>	<b>276</b>	<b>335</b>	<b>326</b>	<b>396</b>	<b>426</b>	<b>455</b>	<b>471</b>	<b>488</b>	<b>505</b>	<b>524</b>
Growth [%]		21.7%	15.5%	11.2%	-2.6%	5.1%	21.3%	-2.6%	21.4%	7.8%	6.8%	3.4%	3.7%	3.5%	3.7%
COGS	-103	-117	-135	-149	-147	-152	-184	-175	-204	-222	-236	-243	-252	-260	-268
% on Sales	59.8%	55.9%	55.8%	55.4%	55.9%	55.1%	54.9%	53.7%	51.6%	52.2%	51.8%	51.7%	51.5%	51.4%	51.2%
<b>Gross Profit</b>	<b>69</b>	<b>93</b>	<b>107</b>	<b>120</b>	<b>116</b>	<b>124</b>	<b>151</b>	<b>151</b>	<b>191</b>	<b>204</b>	<b>219</b>	<b>228</b>	<b>237</b>	<b>246</b>	<b>256</b>
% on Sales	40.2%	44.1%	44.2%	44.6%	44.1%	44.9%	45.1%	46.3%	48.4%	47.8%	48.2%	48.3%	48.5%	48.6%	48.8%
Selling	-18	-21	-24	-27	-28	-30	-36	-37	-46	-49	-53	-55	-57	-59	-62
% on Sales	10.4%	10.2%	9.8%	10.1%	10.8%	10.7%	10.7%	11.3%	11.7%	11.5%	11.6%	11.6%	11.7%	11.7%	11.8%
G&A	-21	-24	-25	-28	-27	-29	-35	-36	-47	-47	-51	-53	-55	-57	-59
% on Sales	12.3%	11.4%	10.1%	10.4%	10.3%	10.4%	10.6%	11.0%	11.9%	11.1%	11.1%	11.2%	11.2%	11.2%	11.2%
Other	3	3	3	4	4	1	4	5	5	6	6	7	7	7	7
% on Sales	1.6%	1.5%	1.0%	1.5%	1.4%	0.4%	1.1%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
<b>EBITDA</b>	<b>33</b>	<b>51</b>	<b>61</b>	<b>69</b>	<b>64</b>	<b>67</b>	<b>83</b>	<b>83</b>	<b>104</b>	<b>114</b>	<b>122</b>	<b>127</b>	<b>132</b>	<b>137</b>	<b>143</b>
% on Sales	19.1%	24.1%	25.3%	25.6%	24.5%	24.2%	24.8%	25.4%	26.2%	26.6%	26.8%	26.9%	27.0%	27.1%	27.2%
D&A	-8	-8	-8	-9	-10	-12	-14	-14	-17	-17	-18	-18	-18	-19	-20
% on Sales	4.4%	3.9%	3.4%	3.4%	3.8%	4.3%	4.1%	4.4%	4.4%	4.1%	3.9%	3.9%	3.8%	3.7%	3.7%
<b>EBIT</b>	<b>25</b>	<b>42</b>	<b>53</b>	<b>60</b>	<b>54</b>	<b>55</b>	<b>69</b>	<b>68</b>	<b>86</b>	<b>96</b>	<b>104</b>	<b>109</b>	<b>114</b>	<b>118</b>	<b>123</b>
% on Sales	14.7%	20.2%	21.8%	22.2%	20.7%	19.9%	20.7%	21.0%	21.8%	22.6%	22.9%	23.1%	23.3%	23.4%	23.5%

Source: Team Elaboration on Company Data

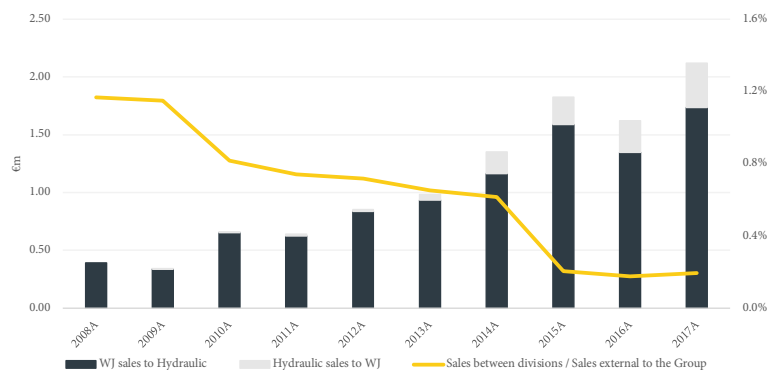
## Divisional &amp; Inter-Divisional Sales

Revenues Breakdown by Divisions



Source: Company Data

Inter-Divisional Sales



Source: Team Elaboration on Company Data

## 10. Financial analysis

## Income Statement

Amounts in €m	2009A	2010A	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
<b>Revenues</b>	<b>343</b>	<b>400</b>	<b>472</b>	<b>527</b>	<b>557</b>	<b>672</b>	<b>895</b>	<b>923</b>	<b>1,087</b>	<b>1,270</b>	<b>1,312</b>	<b>1,384</b>	<b>1,462</b>	<b>1,542</b>	<b>1,626</b>
Growth [%]		16.7%	18.0%	11.6%	5.6%	20.8%	33.2%	3.1%	17.7%	16.9%	3.2%	5.5%	5.7%	5.4%	5.5%
COGS	-219	-238	-283	-313	-337	-406	-547	-552	-637	-758	-780	-823	-870	-917	-968
% on Sales	64.0%	59.6%	59.9%	59.5%	60.6%	60.4%	61.1%	59.8%	58.7%	59.7%	59.4%	59.5%	59.5%	59.5%	59.5%
<b>Gross Profit</b>	<b>123</b>	<b>162</b>	<b>189</b>	<b>214</b>	<b>219</b>	<b>266</b>	<b>348</b>	<b>371</b>	<b>449</b>	<b>512</b>	<b>532</b>	<b>561</b>	<b>593</b>	<b>624</b>	<b>659</b>
% on Sales	36.0%	40.4%	40.1%	40.5%	39.4%	39.6%	38.9%	40.2%	41.3%	40.3%	40.6%	40.5%	40.5%	40.5%	40.5%
Selling	-35	-40	-46	-53	-58	-67	-84	-86	-102	-117	-122	-128	-135	-142	-149
% on Sales	10.2%	10.1%	9.7%	10.0%	10.3%	10.0%	9.3%	9.3%	9.4%	9.2%	9.3%	9.3%	9.2%	9.2%	9.2%
G&A	-48	-54	-55	-63	-64	-72	-95	-99	-113	-129	-133	-140	-147	-154	-162
% on Sales	13.9%	13.4%	11.6%	12.0%	11.5%	10.7%	10.6%	10.7%	10.4%	10.2%	10.2%	10.1%	10.0%	10.0%	9.9%
Other	6	6	6	8	7	9	11	12	14	18	18	19	20	21	22
% on Sales	1.7%	1.5%	1.2%	1.5%	1.3%	1.4%	1.2%	1.3%	1.3%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
<b>EBITDA</b>	<b>47</b>	<b>74</b>	<b>95</b>	<b>106</b>	<b>105</b>	<b>136</b>	<b>180</b>	<b>199</b>	<b>249</b>	<b>284</b>	<b>295</b>	<b>312</b>	<b>331</b>	<b>350</b>	<b>370</b>
% on Sales	13.7%	18.5%	20.0%	20.1%	18.9%	20.3%	20.1%	21.5%	22.9%	22.3%	22.5%	22.5%	22.6%	22.7%	22.8%
D&A	-18	-19	-19	-22	-26	-32	-43	-45	-50	-53	-53	-54	-55	-57	-58
% on Sales	5.2%	4.8%	4.0%	4.1%	4.6%	4.7%	4.8%	4.9%	4.6%	4.2%	4.1%	3.9%	3.8%	3.7%	3.6%
<b>EBIT</b>	<b>29</b>	<b>55</b>	<b>76</b>	<b>84</b>	<b>79</b>	<b>104</b>	<b>137</b>	<b>154</b>	<b>199</b>	<b>231</b>	<b>241</b>	<b>258</b>	<b>275</b>	<b>293</b>	<b>312</b>
% on Sales	8.5%	13.7%	16.0%	15.9%	14.3%	15.5%	15.3%	16.6%	18.3%	18.2%	18.4%	18.6%	18.8%	19.0%	19.2%
Net Interests	-9	-9	-9	-8	-8	-11	26	-5	-7	-8	-8	-6	-4	-3	-2
Pre Tax Income	20	46	67	76	71	93	163	148	192	222	233	251	271	290	309
% on Sales	5.9%	11.5%	14.1%	14.4%	12.8%	13.9%	18.3%	16.1%	17.7%	17.5%	17.8%	18.2%	18.5%	18.8%	19.0%
Income taxes	-6	-18	-23	-23	-27	-35	-45	-54	-56	-62	-65	-70	-76	-81	-86
Tax rate %	30.5%	39.6%	34.5%	30.0%	38.0%	38.0%	27.6%	36.4%	29.4%	27.9%	27.9%	27.9%	27.9%	27.9%	27.9%
Net extraordinary gain/losses	0	0	-1	0	0	0	0	0	0	12	0	0	0	0	0
Minority interests	0	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2
<b>Net income</b>	<b>14</b>	<b>27</b>	<b>41</b>	<b>52</b>	<b>43</b>	<b>57</b>	<b>118</b>	<b>94</b>	<b>134</b>	<b>171</b>	<b>167</b>	<b>180</b>	<b>194</b>	<b>207</b>	<b>221</b>

Source: Company Data, Team Estimates

## Balance Sheet

Amounts in €m	2009A	2010A	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
<b>Tangible Assets</b>	<b>107</b>	<b>103</b>	<b>103</b>	<b>113</b>	<b>151</b>	<b>209</b>	<b>286</b>	<b>301</b>	<b>322</b>	<b>324</b>	<b>331</b>	<b>340</b>	<b>349</b>	<b>361</b>	<b>375</b>
Financial Assets	3	3	3	2	2	1	1	1	1	1	1	1	1	1	1
Intangibles	222	234	237	248	259	304	381	421	468	464	460	456	453	451	448
of which Goodwill	196	210	213	226	235	279	347	391	429	429	429	429	429	429	429
Other Non Current Assets/Liabilities	-9	-13	-14	-14	-19	-27	-42	-45	-37	-30	-14	-4	3	11	20
<b>Operating Working Capital</b>	<b>136</b>	<b>135</b>	<b>155</b>	<b>174</b>	<b>190</b>	<b>238</b>	<b>323</b>	<b>349</b>	<b>385</b>	<b>462</b>	<b>477</b>	<b>504</b>	<b>533</b>	<b>563</b>	<b>595</b>
% on Sales	39.7%	33.7%	32.8%	33.1%	34.1%	35.4%	36.1%	37.8%	35.5%	36.4%	36.4%	36.4%	36.5%	36.5%	36.6%
Receivables	77	89	96	96	114	136	178	200	237	269	278	294	311	328	346
Inventories	101	108	117	132	146	182	239	258	292	345	355	375	396	418	442
Payables	41	62	58	54	70	80	94	109	143	152	156	164	174	183	193
<b>Net Working Capital</b>	<b>122</b>	<b>112</b>	<b>132</b>	<b>151</b>	<b>162</b>	<b>205</b>	<b>275</b>	<b>300</b>	<b>335</b>	<b>398</b>	<b>412</b>	<b>437</b>	<b>461</b>	<b>487</b>	<b>515</b>
% on Sales	35.7%	27.9%	28.0%	28.7%	29.1%	30.5%	30.8%	32.5%	30.9%	31.3%	31.4%	31.5%	31.5%	31.6%	31.7%
<b>Capital Employed</b>	<b>445</b>	<b>439</b>	<b>461</b>	<b>499</b>	<b>554</b>	<b>693</b>	<b>901</b>	<b>978</b>	<b>1,089</b>	<b>1,157</b>	<b>1,189</b>	<b>1,230</b>	<b>1,267</b>	<b>1,311</b>	<b>1,359</b>
of which Capital Employed (ex. gdw)	249	230	248	274	320	413	553	587	659	728	760	801	838	882	930
Net Debt	202	148	146	103	121	226	278	300	324	273	161	47	-85	-222	-368
Total Equity	243	291	315	397	433	467	623	678	765	884	1028	1183	1352	1533	1727
of which Shareholders Equity	237	284	310	391	427	461	617	674	759	877	1020	1174	1341	1520	1712
<b>Capital Employed</b>	<b>445</b>	<b>439</b>	<b>461</b>	<b>499</b>	<b>554</b>	<b>693</b>	<b>901</b>	<b>978</b>	<b>1,089</b>	<b>1,157</b>	<b>1,189</b>	<b>1,230</b>	<b>1,267</b>	<b>1,311</b>	<b>1,359</b>

Source: Company Data, Team Estimates

**Cash Flow Statement**

Amounts in €m	2009A	2010A	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
<b>Net income</b>	<b>14</b>	<b>27</b>	<b>41</b>	<b>52</b>	<b>43</b>	<b>57</b>	<b>118</b>	<b>94</b>	<b>134</b>	<b>171</b>	<b>167</b>	<b>180</b>	<b>194</b>	<b>207</b>	<b>221</b>
D&A	18	19	19	22	26	32	43	45	50	53	53	54	55	57	58
Change in NWC	19	11	-21	-19	-11	-43	-70	-25	-35	-63	-14	-25	-24	-26	-28
Other Non Cash	19	8	-1	-2	5	27	23	12	-7	-3	1	-3	-2	-1	-2
<b>Cash Flow from Operations</b>	<b>70</b>	<b>65</b>	<b>39</b>	<b>53</b>	<b>64</b>	<b>72</b>	<b>114</b>	<b>126</b>	<b>142</b>	<b>158</b>	<b>207</b>	<b>206</b>	<b>223</b>	<b>236</b>	<b>250</b>
Capex	-9	-9	-12	-16	-30	-34	-29	-37	-48	-50	-54	-58	-60	-64	-68
% on Sales	2.6%	2.2%	2.6%	3.0%	5.3%	5.1%	3.2%	4.0%	4.4%	3.9%	4.1%	4.2%	4.1%	4.1%	4.2%
Capex/Depreciation	0.5	0.5	0.6	0.7	1.2	1.1	0.7	0.8	1.0	0.9	1.0	1.1	1.1	1.1	1.2
Acquisitions	-62	-4	-5	-18	-11	-41	-115	-36	-78	-6	-8	0	0	0	0
Other	-12	-2	0	5	6	2	2	4	3	3	3	3	3	3	3
<b>Cash Flow from Investing Activities</b>	<b>-83</b>	<b>-15</b>	<b>-17</b>	<b>-29</b>	<b>-35</b>	<b>-73</b>	<b>-142</b>	<b>-69</b>	<b>-123</b>	<b>-53</b>	<b>-58</b>	<b>-55</b>	<b>-56</b>	<b>-61</b>	<b>-64</b>
Buy-back	-7	0	-16	-16	-21	-38	-33	-43	0	-29	0	0	0	0	0
Dividends	0	0	-11	-12	-19	-18	-20	-21	-22	-23	-24	-25	-27	-28	-29
Capital increase	50	0	0	57	0	0	0	0	0	0	0	0	0	0	0
Other	-4	4	7	-11	-7	-48	30	-15	-20	-2	-12	-11	-8	-11	-10
Change in NFP	-26	-54	-2	-43	19	105	52	22	24	-51	-112	-115	-132	-137	-146
<b>Net Debt</b>	<b>202</b>	<b>148</b>	<b>146</b>	<b>103</b>	<b>121</b>	<b>226</b>	<b>278</b>	<b>300</b>	<b>324</b>	<b>273</b>	<b>161</b>	<b>47</b>	<b>-85</b>	<b>-222</b>	<b>-368</b>
EBIT	29	55	76	84	79	104	137	154	199	231	241	258	275	293	312
Taxes on EBIT	-9	-22	-26	-25	-30	-40	-38	-56	-58	-64	-67	-72	-77	-82	-87
NOPAT	20	33	50	59	49	65	99	98	140	167	174	186	199	211	225
<b>FCFF</b>	<b>48</b>	<b>54</b>	<b>36</b>	<b>46</b>	<b>35</b>	<b>19</b>	<b>44</b>	<b>81</b>	<b>107</b>	<b>107</b>	<b>160</b>	<b>158</b>	<b>170</b>	<b>178</b>	<b>188</b>
<b>FCFE</b>	<b>36</b>	<b>53</b>	<b>-30</b>	<b>6</b>	<b>-10</b>	<b>-18</b>	<b>48</b>	<b>63</b>	<b>-53</b>	<b>48</b>	<b>112</b>	<b>-42</b>	<b>104</b>	<b>110</b>	<b>119</b>

Source: Company Data, Team Estimates

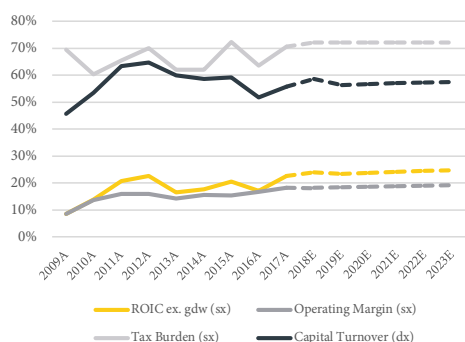
**Financial Ratios**

Financial Ratios	2009A	2010A	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
ROIC (inc. gdw)	4.8%	7.5%	11.0%	12.2%	9.3%	10.4%	12.4%	10.4%	13.6%	14.8%	14.8%	15.4%	15.9%	16.4%	16.8%
ROIC (ex. gdw)	8.5%	13.9%	20.8%	22.6%	16.6%	17.7%	20.5%	17.1%	22.6%	24.0%	23.4%	23.8%	24.2%	24.6%	24.8%
Cap. Turnover (Rev/Avg. CE ex. gdw)	1.4x	1.7x	2.0x	2.0x	1.9x	1.8x	1.9x	1.6x	1.7x	1.8x	1.8x	1.8x	1.8x	1.8x	1.8x
Operating margin (EBIT/Rev)	8.5%	13.7%	16.0%	15.9%	14.3%	15.5%	15.3%	16.6%	18.3%	18.2%	18.4%	18.6%	18.8%	19.0%	19.2%
Tax Burden (NOPAT/EBIT)	69.5%	60.4%	65.5%	70.0%	62.0%	62.0%	72.4%	63.6%	70.6%	72.1%	72.1%	72.1%	72.1%	72.1%	72.1%
ROE	6.8%	10.2%	13.9%	14.9%	10.6%	12.8%	21.8%	14.5%	18.8%	20.9%	17.6%	16.4%	15.4%	14.5%	13.7%
Goodwill/CE	44.1%	47.7%	46.3%	45.2%	42.4%	40.3%	38.6%	40.0%	39.5%	37.1%	36.1%	34.9%	33.9%	32.8%	31.6%
Tax Rate	30.5%	39.6%	34.5%	30.0%	38.0%	38.0%	27.6%	36.4%	29.4%	27.9%	27.9%	27.9%	27.9%	27.9%	27.9%
Avg. Interest Rate	3.7%	4.3%	4.6%	4.3%	3.8%	3.9%	1.9%	1.1%	0.9%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest Coverage Ratio	2.8x	4.4x	6.0x	8.3x	9.3x	10.0x	19.5x	30.3x	47.8x	24.6x	25.8x	33.0x	46.2x	54.2x	64.1x
Capex/D&A	0.5x	0.5x	0.6x	0.7x	1.2x	1.1x	0.7x	0.8x	1.0x	0.9x	1.0x	1.1x	1.1x	1.1x	1.2x
Quick Ratio	1.1x	1.5x	1.5x	1.9x	2.0x	1.9x	2.3x	2.2x	1.8x	3.4x	2.4x	3.3x	3.6x	3.9x	2.9x
Net Debt/Equity	85.3%	52.0%	47.1%	26.2%	28.4%	49.1%	45.1%	44.5%	42.7%	31.1%	15.8%	4.0%	-6.3%	-14.6%	-21.5%
Net Debt/EBITDA	4.3x	2.0x	1.5x	1.0x	1.2x	1.7x	1.5x	1.5x	1.3x	1.0x	0.5x	0.1x	-0.3x	-0.6x	-1.0x
Payout Ratio	1.4%	0.6%	26.1%	22.4%	42.9%	31.9%	17.3%	22.5%	16.6%	13.7%	14.7%	14.2%	13.7%	13.3%	13.0%

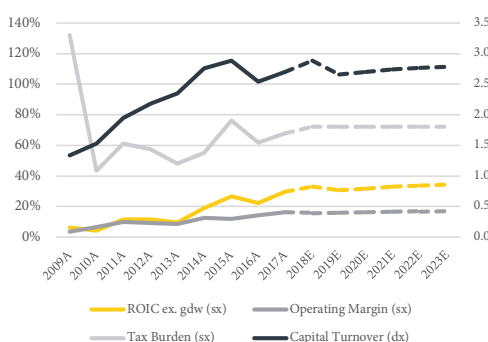
Source: Team Elaboration

**DuPont Analysis**

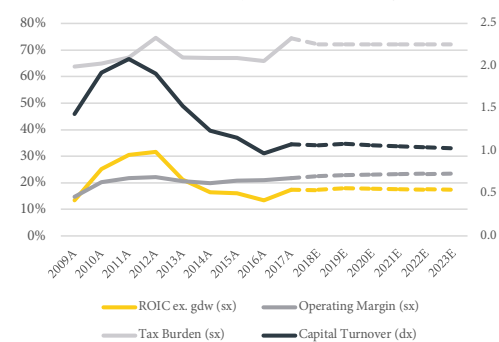
**IP**



**Hydraulics Division**



**Water-Jetting Division**



Source: Team Elaboration

**Multiples**

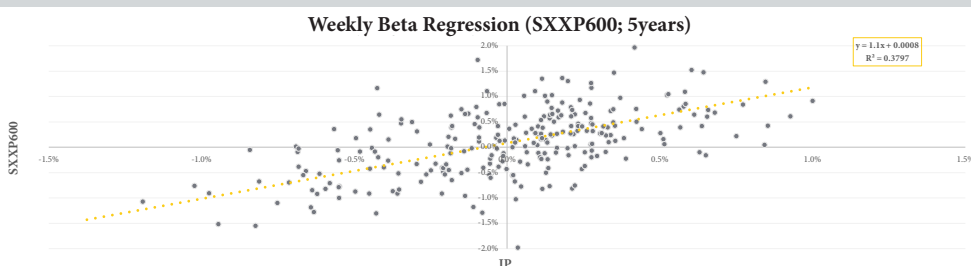
Multiples	2009A	2010A	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
Price [€]	3.7	5.7	5.2	5.8	8.7	11.7	14.3	15.6	26.2	26.0	27.9	27.9	27.9	27.9	27.9
Number of shares outstanding [m]	93	95	92	102	106	104	108	107	107	106	106	106	106	106	106
Market Cap [€m]	345	539	479	588	922	1,207	1,543	1,658	2,814	2,761	2,961	2,961	2,961	2,961	2,961
Gross Debt [€m]	287	286	255	218	227	313	413	498	469	466	466	310	282	255	228
Net Debt [€m]	202	148	146	103	121	226	278	300	324	273	161	46	-85	-222	-368
EV [€m]	547	687	625	691	1,044	1,433	1,821	1,958	3,138	3,034	3,122	3,007	2,876	2,739	2,593
EPS [€]	0.15	0.28	0.45	0.52	0.41	0.55	1.09	0.88	1.25	1.61	1.57	1.69	1.82	1.95	2.08
EPS (diluted) [€]	0.15	0.28	0.44	0.51	0.40	0.54	1.08	0.87	1.24	1.59	1.55	1.67	1.80	1.93	2.06
EV/CE	1.2x	1.6x	1.4x	1.4x	1.9x	2.1x	2.0x	2.0x	2.9x	2.6x	2.6x	2.4x	2.3x	2.1x	1.9x
EV/Sales	1.6x	1.7x	1.3x	1.3x	1.9x	2.1x	2.0x	2.1x	2.9x	2.4x	2.4x	2.2x	2.0x	1.8x	1.6x
EV/EBITDA	11.7x	9.3x	6.6x	6.5x	9.9x	10.5x	10.1x	9.9x	12.6x	10.7x	10.6x	9.6x	8.7x	7.8x	7.0x
EV/EBIT	18.7x	12.5x	8.3x	8.2x	13.2x	13.7x	13.3x	12.8x	15.8x	13.1x	12.9x	11.7x	10.4x	9.4x	8.3x
EV/NOPAT	27.0x	20.7x	12.6x	11.7x	21.2x	22.1x	18.4x	20.0x	22.3x	18.2x	17.9x	16.2x	14.5x	13.0x	11.5x
P/E	24.8x	20.3x	11.6x	11.2x	21.4x	21.2x	13.1x	17.7x	20.9x	16.2x	17.8x	16.5x	15.3x	14.3x	13.4x
DPS [€]	0.00	0.00	0.12	0.12	0.18	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27
DPS (diluted) [€]	0.00	0.00	0.12	0.11	0.17	0.17	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27
Dividend Yield [%]	0.0%	0.0%	2.2%	2.0%	2.0%	1.5%	1.3%	1.3%	0.8%	0.8%	0.8%	0.9%	0.9%	0.9%	1.0%
PB	1.5x	1.9x	1.5x	1.5x	2.2x	2.6x	2.5x	2.5x	3.7x	3.1x	2.9x	2.5x	2.2x	1.9x	1.7x
Equity FCF Yield [%]	10.3%	9.9%	-6.2%	1.0%	-1.1%	-1.5%	3.1%	3.8%	-1.9%	1.7%	3.8%	-1.4%	3.5%	3.7%	4.0%

Source: Team Elaboration

## 11. WACC Computation

### Beta

Being IP highly exposed (56% of 2018E revenues) to Eurozone, the Beta was computed by regressing IP returns against STOXX 600 market index (SXXP 600). We used as historical time period five years with weekly intervals in order to factor in enough data and to avoid any possibility of daily analysis biases. Furthermore, we adjusted the result (Regression Beta\*0.67+1\*0.33), taking into consideration the potential LT return to the mean, resulting in a Beta of 1.07.



Source: FactSet, Team Elaboration

### Cost of Debt

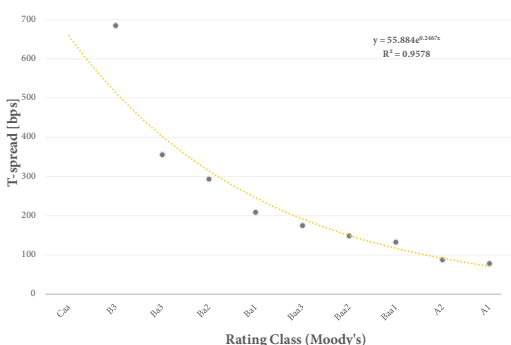
The Cost of Debt (2.01%) was computed as the sum of risk free<sup>10</sup> (0.26%) and the Group spread (175bps). Regarding the latter, we decided not to use Damodaran spread curve (it relates an interest coverage ratio (ICR) implied rating to a default spread), since it does not fairly reflect the machinery industry dynamics (e.g. most of the companies, given their high ICR, would result in the Aaa Moody rating class).

Indeed, after having verified the Group does not hold publicly traded debt, we computed the Cost of Debt spread: (i) deriving the machinery industry Spread Curve through an analysis of corporate bonds (maturity 2024) treasury spread (T-spread) of a sample of companies in the industry (see *Machinery Industry T-spread*) (ii) positioning IP on such curve through its implied rating, obtained comparing IP interest coverage ratio to the ones of rated industrial machinery, (iii) adjusting the previous obtained implied rating, considering Italy Moody's credit rating (Baa3) and Italian similar-size companies.

Looking at the ICR of a sample of rated machinery industry companies, we identified for each rating class the ICR lower and upper bounds. As expected, we noticed an upward shifted Rating-ICR curve (see *Rating-ICR*) compared to the Damodaran's one. Some differences are clearly evident: there is no machinery industry company with a Moody's rating higher than A1 (FactSet) and, for a given ICR, a company is perceived to be riskier if it operates in the machinery industry. We believe the rationale behind is linked to the cyclical nature of this sector: for a given level of ICR, a higher EBIT volatility, caused by macroeconomic factors, may enhance the companies probability of not fulfilling their interest commitment in the future, resulting therefore in a lower credit rating.

Finally, matching the derived machinery industry T-spread curve to the Rating-ICR one, a Rating Table (see *The Rating Table*) has been obtained. We would implicitly have positioned IP on the A2 rating class (24.5 2018E ICR). Nevertheless, considering (i) Italy credit rating (Baa3), (ii) other similar-size rated Italian companies and (iii) the Group not ample size, we deem the Group would not receive a rating higher than the Italian one, resulting consequently in the Baa3 rating class which corresponds to a spread of 175bps.

Machinery Industry - T-spread



Source: FactSet, Team Elaboration

Rating - ICR



Source: FactSet, Team Elaboration

The Rating Table

ICR	Estimated Rating (Moody's)	Spread [bps]
>30	A1	78.3
[18.5 - 30]	A2	87.7
[14.9 - 18.5]	A3	109.9
[10.5 - 14.9]	Baa1	132.2
[8.7 - 10.5]	Baa2	148.7
[6.4 - 8.7]	Baa3	175.2
[5.5 - 6.4]	Ba1	208.7
[3.6 - 5.5]	Ba2	293.7
[2.7 - 3.6]	Ba3	355.1
[2.1 - 2.7]	B1	437.4
[1.5 - 2.1]	B2	560.9
<1.5	B3	684.4

Source: Team Elaboration

<sup>10</sup>10Y German Government Bond yield as of 31st December 2018





## 13. M&A: future assessment

### Acquisition firepower estimation

Acquisition firepower estimation [Cm]	2019E	2020E	2021E	2022E	2023E
EBITDA post M&A	316	361	415	477	513
Net Debt post M&A	268	154	24	-113	-440
Maximum Net Debt/EBITDA	1.0	1.0	1.0	1.0	1.0
EV Paid	116	130	149	171	0.0
Yearly Firepower	155	159	186	199	182
<b>Cumulative Firepower</b>	<b>155</b>	<b>314</b>	<b>500</b>	<b>699</b>	<b>881</b>
FCFF generated by acquired companies	9	22	40	61	71
Net Debt/EBITDA post M&A	0.9	0.5	0.1	-0.3	-1.2

Source: Team Elaboration

### Strategical assessment

Reinforcing competitive positioning		Enhancing distribution		Completing product range	
<b>Hydraulics</b>					
<b>HC division reinforcing M&amp;A are high priority for IP</b>	<b>5</b>	<b>Potential value-accretive M&amp;As, targets difficult to be find on the market</b>	<b>4</b>	<b>IP to continue to enrich its HC product range through M&amp;A</b>	<b>4</b>
<ol style="list-style-type: none"> <li>Several size-related competitive pressures.</li> <li>Low brand recognition on the market, leading target should be acquired.</li> <li>Risks from the polarization of the market, if no investment will be made.</li> </ol>		<ol style="list-style-type: none"> <li>Reinforcement of IP distribution network (especially if combined with a network centralisation organic-effort).</li> <li>Increase geographical presence in emerging countries (targets difficult to be found on the market, given the potential problems in integrating culturally different acquisitions, management guidance)</li> </ol>		<ol style="list-style-type: none"> <li>Enlargement of product range, through traditional products (e.g. pumps and hydraulic motors).</li> <li>Enlargement of product range through innovative products (e.g. IoT) potentially beneficial for the whole Group</li> </ol>	
<b>Water Jetting</b>					
<b>IP's investment not be focused on HPP &amp; VHPP division inorganic reinforcement</b>	<b>0</b>	<b>HPP &amp; VHPP division distribution to be improved organically</b>	<b>1</b>	<b>HPP &amp; VHPP division product range to grow organically</b>	<b>0</b>
<ol style="list-style-type: none"> <li>No expected benefits, due to IP undisputable leadership in the market.</li> </ol>		<ol style="list-style-type: none"> <li>Increase geographical presence in emerging countries (targets difficult to be found on the market, given the technological level of HPP &amp; VHPP and the importance of aftersales services).</li> </ol>		<ol style="list-style-type: none"> <li>Enlargement of product range through innovative products (e.g. IoT) potentially beneficial for the whole Group.</li> </ol>	
<b>Fluid Handling System</b>					
<b>IP to reinforce FHS division bargaining power</b>	<b>3</b>	<b>FHS division commercial network to be expanded in emerging countries</b>	<b>4</b>	<b>IP to repeat the HC product diversification strategy in the FHS market</b>	<b>5</b>
<ol style="list-style-type: none"> <li>Low product differentiation.</li> <li>Low brand recognition on the market.</li> <li>Extremely limited market share (&lt;1%), despite the market limited size (€8bn).</li> </ol>		<ol style="list-style-type: none"> <li>Critical expansion in emerging countries, given IP FHS segment current focus on Europe and Urbanization trends.</li> <li>Reinforcement of IP distribution network (especially if combined with a network centralisation organic-effort).</li> </ol>		<ol style="list-style-type: none"> <li>Enlargement of product range, through traditional products (e.g. powder stocking systems, evaporators and circumferential piston pumps).</li> <li>Enlargement of product range through innovative products (e.g. IoT) potentially beneficial for the whole Group.</li> </ol>	
<b>0</b>		<b>Priority for IP</b>		<b>5</b>	

Source: Team Elaboration

### M&A: potential upside

Future M&A valuation	HC segment DCF assumptions	FHS segment DCF assumptions
EV/Revenues	0.94x (historical multiple paid)	1.19x (historical multiple paid)
EV/EBITDA	Depending on EBITDA margin	Depending on EBITDA margin
YoY revenues growth	Equal to the segment growth, given that no revenues synergies have historically been created	Equal to the segment growth, given that no revenues synergies have historically been created
LT growth	2%	2%
EBITDA margin (acquisition year)	15.8% in 2019 (historical EBITDA margin of acquired companies), exponentially reducing in the following years due to reduced average margins in the market	19.0% in 2019 (historical EBITDA margin of acquired companies), exponentially reducing in the following years due to reduced average margins in the market
EBITDA margin (following years)	Linearly aligning to the segment EBITDA margin in 3 years, following the segment trends successively	Linearly aligning to the segment EBITDA margin in 3 years, following the segment trends successively
D&A/Revenues and Capex/Revenues	4.1% (segment historical and forecasted average)	3.1% (segment historical and forecasted average)
Tax rate	27.9%, the Statutory Italian tax rate	27.9%, the Statutory Italian tax rate
ΔNWC/Revenues	Equal to the segment	Equal to the segment
WACC	5.87% (IP 2019E WACC)	5.87% (IP 2019E WACC)

Source: Team Elaboration

YoY inorganic revenues growth	HC Segment incidence on inorganic growth [%]										
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1%	0.3 €	0.4 €	0.4 €	0.4 €	0.4 €	0.4 €	0.4 €	0.4 €	0.4 €	0.4 €	0.5 €
2%	0.7 €	0.7 €	0.7 €	0.8 €	0.8 €	0.8 €	0.8 €	0.9 €	0.9 €	0.9 €	0.9 €
3%	1.0 €	1.1 €	1.1 €	1.2 €	1.2 €	1.2 €	1.3 €	1.3 €	1.3 €	1.4 €	1.4 €
4%	1.4 €	1.5 €	1.5 €	1.6 €	1.6 €	1.7 €	1.7 €	1.8 €	1.8 €	1.8 €	1.9 €
5%	1.8 €	1.8 €	1.9 €	2.0 €	2.0 €	2.1 €	2.2 €	2.2 €	2.3 €	2.3 €	2.4 €
6%	2.2 €	2.2 €	2.3 €	2.4 €	2.5 €	2.5 €	2.6 €	2.7 €	2.8 €	2.8 €	2.9 €
7%	2.6 €	2.6 €	2.7 €	2.8 €	2.9 €	3.0 €	3.1 €	3.2 €	3.3 €	3.4 €	3.4 €
8%	3.0 €	3.1 €	3.2 €	3.3 €	3.4 €	3.5 €	3.6 €	3.7 €	3.8 €	3.9 €	4.0 €
9%	3.4 €	3.5 €	3.6 €	3.7 €	3.8 €	4.0 €	4.1 €	4.2 €	4.3 €	4.4 €	4.5 €
10%	3.8 €	3.9 €	4.1 €	4.2 €	4.3 €	4.5 €	4.6 €	4.7 €	4.8 €	5.0 €	5.1 €
11%	4.2 €	4.4 €	4.5 €	4.7 €	4.8 €	5.0 €	5.1 €	5.3 €	5.4 €	5.5 €	5.7 €
12%	4.7 €	4.8 €	5.0 €	5.1 €	5.3 €	5.5 €	5.6 €	5.8 €	6.0 €	6.1 €	6.3 €
13%	5.1 €	5.3 €	5.5 €	5.6 €	5.8 €	6.0 €	6.2 €	6.4 €	6.5 €	6.7 €	6.9 €
14%	5.6 €	5.8 €	6.0 €	6.2 €	6.3 €	6.5 €	6.7 €	6.9 €	7.1 €	7.3 €	7.5 €
15%	6.0 €	6.2 €	6.5 €	6.7 €	6.9 €	7.1 €	7.3 €	7.5 €	7.7 €	8.0 €	8.2 €
YoY inorganic revenues growth	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
FHS Segment incidence on inorganic growth [%]											

Source: Team Elaboration

## 14. Relative valuation

### SOTP Relative valuation

To account for market perspective, we performed a peer relative valuation, whose result has been used as a check for our DCF analysis. Due to the absence of comparables to IP at Group level (no company has a similar portfolio mix), we carried out a sum of the parts (SOTP) relative valuation. Given Hydraulics and Water-Jetting differences, we selected peers according to market value drivers as well as proxies of risk, growth, profitability and cash generation

Company	Country	Mkt Cap 2017A [€m]	Revenues 2017A [€m]	Product Mix 2017A				Profitability		Risk D/E*	Cash Generation CFO/Curr.Liab. 5Y Avg*	Growth		Competitors	Comps
				Hydraulics	HPP&VHPP	FHS	Other	EBITDA% 2017A	ROIC inc. gdw 2017A			Sales CAGR 2018E-20E	EBITDA CAGR 2018E-20E		
<b>IP Group</b>		<b>3,005</b>	<b>1,087</b>	<b>64%</b>	<b>30%</b>	<b>6%</b>	<b>-</b>	<b>23%</b>	<b>14%</b>	<b>0.55</b>	<b>34%</b>	<b>3.3%</b>	<b>4.2%</b>		
<i>of which Hydraulics</i>	<b>IT</b>	<b>n.a.</b>	<b>691</b>					<b>21%</b>	<b>16%</b>	<b>n.a.</b>	<b>n.a.</b>	<b>3.1%</b>	<b>3.3%</b>		
<i>of which Water Jetting</i>		<b>n.a.</b>	<b>396</b>					<b>26%</b>	<b>12%</b>			<b>5.0%</b>	<b>5.5%</b>		
Alfa laval	SE	8,009	3,655	-	-	35%	65%	18%	11%	0.62	32%	8.8%	10.5%	✓	×
Bosch Rexroth	DE	n.a.	5,506	n.a.	-	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	×	×
Bucher Industries	CH	2,972	2,385	21%	-	-	79%	12%	14%	0.23	28%	2.5%	4.1%	✓	✓
Cat pumps	US	n.a.	20	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	✓	×
Concentric	SE	500	2,317	36%	-	-	64%	18%	37%	0.20	81%	1.2%	-1.2%	×	×
Dana	US	2,075	6,391	21%	-	-	79%	11%	6%	1.78	37%	5.6%	7.9%	×	×
Danfoss	DK	n.a.	5,829	32%	-	-	68%	15%	13%	0.43	50%	n.a.	n.a.	✓	×
Eaton	US	26,679	18,090	12%	-	-	88%	17%	10%	0.45	46%	3.2%	5.7%	✓	✓
Emak Group	IT	225	422	-	33%	-	67%	14%	7%	0.94	21%	2.2%	5.9%	✓	✓
Gardner Denver	US	3,840	2,070	-	35%	-	65%	24%	n.a.	1.38	36%	3.6%	4.0%	×	×
Gates	US	3,698	2,696	33%	-	-	67%	14%	11%	3.90	45%	5.0%	6.4%	✓	×
GEA	DE	4,168	4,605	-	-	10%	90%	12%	10%	0.11	15%	3.5%	6.5%	✓	×
Karcher Group (Woma)	DE	n.a.	2,000	-	n.a.	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	✓	×
KSB SE	DE	495	2,205	-	65%	n.a.	25%	8%	8%	0.11	17%	3.5%	16.0%	×	✓
Lewa	DE	n.a.	218	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	✓	×
Moog A**	US	2,447	2,249	20%	-	-	80%	13%	8%	0.70	35%	5.4%	13.9%	×	×
Parker**	US	18,078	11,836	40%	-	-	60%	15%	13%	1.11	47%	2.4%	5.7%	✓	✓
Rotork	GB	2,679	733	74%	-	-	26%	23%	13%	0.02	74%	5.0%	9.0%	×	✓
Spirax-Sarco	GB	5,216	1,131	-	68%	-	32%	26%	21%	0.86	87%	5.3%	6.0%	×	✓
SPX Flow	US	1,174	1,730	-	-	65%	35%	10%	6%	0.84	24%	1.7%	8.2%	✓	×
Sulzer	CH	2,591	2,746	-	37%	14%	49%	9%	5%	0.94	17%	5.5%	12.2%	✓	✓
Sun Hydraulics	US	983	304	67%	-	-	33%	24%	13%	0.43	279%	11.3%	14.7%	×	×
Uracca	DE	n.a.	70	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	✓	×
Xylem	US	10,822	4,173	-	43%	-	57%	18%	10%	0.88	49%	4.8%	10.3%	×	×

\*D/E and CFO/Current Liabilities are not provided at divisional level, thus we used IP ones

\*\*Parker and Moog fiscal-year ends have been aligned with others.

Source: FactSet, Team Elaboration

**Hydraulics:** Starting from the analysis of HC market main players and focusing on value drivers like (i) product range and (ii) geographical presence, as discussed in our Industry overview and competitive positioning, we selected the following comparables: Bucher, Eaton and Parker which are IP main competitors and three of the biggest global players in the HC market; Rotork, which slightly differs from the previous players in terms of end markets (mainly industrial), but sharing similar product offer and global geographical presence.

Company	Country	Mkt Cap 2017A [€m]	Revenues 2017A [€m]	Portfolio Mix 2017A		Product range*							Revenues Geo-Composition				
				Hydraulics	Other	Accessories	Cylinders & Motors	Hoses & fittings	Power packs	PTO	Pumps	Valves	Europe	North America	Far East & Oceania	RoW	
<b>IP Group</b>		<b>3,005</b>	<b>1,086</b>	<b>64%</b>	<b>36%</b>												
<i>of which Hydraulics</i>	IT	n.a.	691			✓	✓	✓	✓	✓	✓	✓	53%	27%	11%	9%	
Bucher Industries	CH	2,972	2,385	21%	79%	✓	✓	×	✓	×	✓	✓	60%	20%	11%	10%	
Eaton	US	26,679	18,090	12%	88%	✓	✓	✓	✓	×	✓	✓	22%	60%	12%	7%	
Parker	US	18,078	11,836	84%	16%	✓	✓	✓	✓	✓	✓	✓	13%	63%	17%	8%	
Rotork	GB	2,679	733	74%	26%	✓	✓	×	✓	×	×	✓	42%	28%	24%	6%	

\*We considered IP product range as reference

Source: FactSet, Team Elaboration

**Water-Jetting:** water-jetting division serves 2 markets (HPP&VHPP and FHS) with different value drivers. For what concerns HPP&VHPP market segment, value drivers considered were (i) level of know-how and (ii) geographical presence, as discussed in our *Industry Overview and competitive positioning*; instead, for FHS, we focused on (i) product range and (ii) geographical presence. However, since the FHS division represents a small portion of Water-Jetting divisional sales (ca. 17% in 2017), we decided to reflect this by selecting 3 comparables for HPP&VHPP and 1 operating in both markets. For the former we selected Emak Group, which is one of the main global competitors of IP, operating under Comet brand; KSB, which is one of the main global players in water pumps market and Spirax-Sarco, often compared to IP for its niche operating markets and high margins. For the latter, instead, we considered Sulzer, often compared to IP, due to its global geographical presence and catalogue, comprehensive of both HPP and FHS components.

Company	Country	Mkt cap 2017A [€m]	Revenues 2017A [€m]	Portfolio Mix 2017A			Product Range*					Revenues Geo-Composition				Know-How**	
				HPP & VHPP	FHS	Other	HPP & VHPP	Homogenizers	Agitators	Blenders	Other	Europe	North America	Far East & Oceania	RoW		
<b>IP Group</b>		<b>3,005</b>	<b>1,087</b>	<b>30%</b>	<b>6%</b>	<b>64%</b>											
<i>of which Water Jetting</i>	IT	n.a.	396				✓	✓	✓	✓	✓	53%	27%	11%	9%	•••	
Emak Group	IT	225	422	33%	0%	67%	✓	×	×	×	✓	67%	22%	10%	2%	•••	
KSB SE	DE	495	2,205	65%	n.a.	25%	✓	×	×	×	✓	53%	16%	24%	7%	•••	
Spirax-Sarco	GB	5,216	1,131	68%	0%	32%	✓	×	×	×	✓	31%	32%	29%	8%	•••	
Sulzer	CH	2,591	2,746	37%	14%	49%	✓	×	×	✓	✓	35%	33%	21%	11%	•••	

\*We considered IP product range as reference

Source: FactSet, Team Elaboration

\*\* •••-high; ••-medium; •-low

For both markets, we focused on 2 main multiples (i) EV/EBITDA, typical of machinery industry and (ii) EV/CE, since we believe that the value of a company, in any sector, should be related to the Return on Capital.

Company	Est. Fiscal year	2019 1YF EV/EBITDA	2020 EBITDAm	2019 1YF EV/CE	2020 ROIC inc. gdw
<b>Hydraulics</b>					
Bucher Industries	dec-18	7.5x	12.5%	2.2x	16.4%
Eaton	dec-18	8.6x	18.7%	1.6x	12.6%
Parker	jun-18	9.0x	18.6%	2.6x	18.8%
Rotork	dec-18	12.6x	24.5%	5.3x	29.9%
AVG		9.4x	18.6%	2.9x	19.4%
MEDIAN		8.8x	18.7%	2.4x	17.6%
<b>Water Jetting</b>					
Emak	dec-18	5.8x	12.4%	1.0x	10.3%
KSB	dec-18	2.6x	8.6%	0.5x	7.5%
Spirax-Sarco	dec-18	15.1x	26.7%	5.0x	21.7%
Sulzer	dec-18	7.1x	12.6%	1.9x	10.9%
AVG		7.6x	15.1%	2.1x	12.6%
MEDIAN		6.4x	12.5%	1.5x	10.6%

Source: FactSet, Team Elaboration

Performing Ordinary-least-squared (OLS) linear regression between multiples and their respective regressor, we focused on the relation between 2019 1YF EV/EBITDA and 2020 EBITDA margin, and between 2019 1YF EV/CE and 2020 ROIC inc. gdw. Finally, applying the implied multiples to divisional 2019 1YF EBITDA and 2019 1YF CE and averaging divisional EV/EBITDA and EV/CE results, we obtained an EV of €1,750m for Hydraulics and €1,631m for Water-Jetting, resulting in an overall EV of €3,381m and a 2019 target price of €30.4.

Multiple (y)	Regressor (x)	Equation	R <sup>2</sup>	Multiple (y)	2020 IP Regressor (x)	2019 EV [€m]	2019 NFP [€m]	2019 #shares [m]	2019 TP [€]
<b>Hydraulics</b>						<b>IP</b>			
2019 1YF EV/EBITDA	2020 EBITDA margin	y = 42.089x + 1.618	0.81	<b>10.2x</b>	20.3%	1,750			
2019 1YF EV/CE	2020 ROIC inc. gdw	y = 21.993x - 1.350	0.99	<b>2.8x</b>	19.0%				
<b>Water Jetting</b>						3,381	161	106	30.4
2019 1YF EV/EBITDA	2020 EBITDA margin	y = 65.762x - 2.288	0.97	<b>15.4x</b>	26.9%				
2019 1YF EV/CE	2020 ROIC inc. gdw	y = 31.940x - 1.895	0.97	<b>2.0x</b>	12.1%				

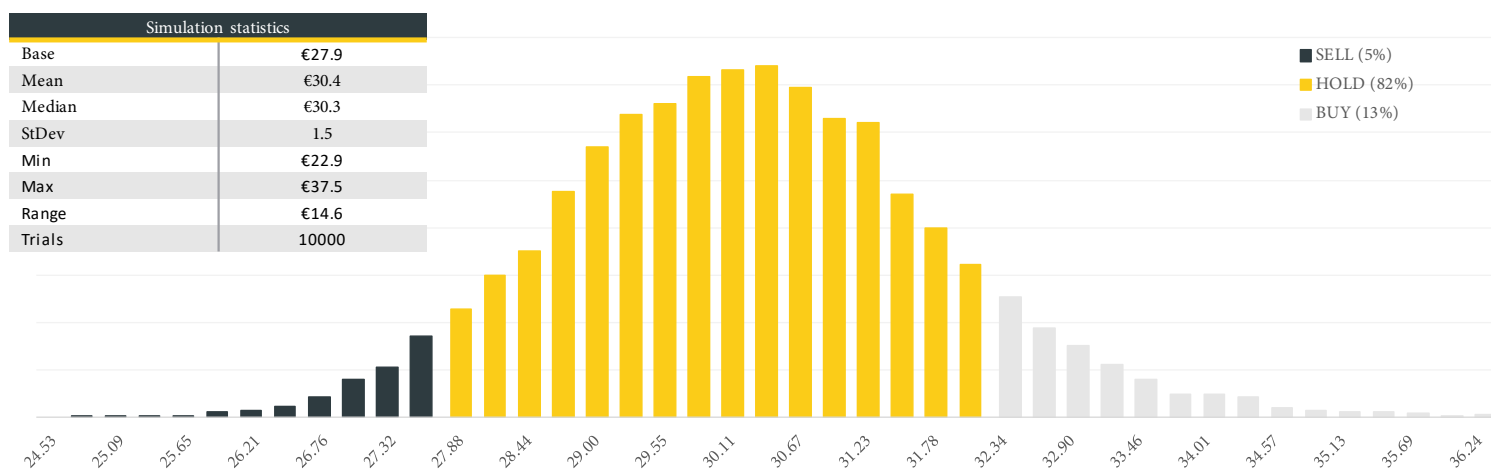
Source: FactSet, Team Elaboration

## 15. Montecarlo analysis

In order to assess the sensitivity of IP target price against the main valuation risks, we performed a Montecarlo simulation stressing each of our core assumptions around its base case. Results show that: (i) 82% of TP outcomes support a HOLD recommendation, with only 5% and 13% of outcomes supporting a SELL and a BUY, respectively and (ii) the most sensitive variable is represented by COGS (Tornado chart), followed by the Forex impact on revenues in IP's countries.

Montecarlo simulation	DCF		Montecarlo simulation		
	Assumptions		Assumed distribution	Key parameters	Description
Nominal GDP growth	Nominal GDP growth forecasts (data source: IMF)		Normal	StDev: standard deviation of the last 5 years	GDP growth variations in 2019E-2023E, impacting IP revenues forecast. Computed for 50+ countries
Forex	Forex forecasts (data source: IMF)		Normal	StDev: standard deviation of last 5 years	Forex variations in 2019E-2023E for each currency, impacting IP revenues forecast
LT Growth	2% (long-term inflation, data source: OECD)		Triangular	Lower limit: 1.8% Upper limit: 2.2%	Long-term inflation variations
COGS	Linear regression of IP historical (2008A/2017A) trends (regressor: Revenues)		Normal	StDev: standard deviation of the forecasting linear regression	Potential variations due to improved (reduced) efficiency and raw materials prices fluctuations
G&A	Linear regression of IP historical (2008A/2017A) trends (regressor: Revenues)		Normal	StDev: standard deviation of the forecasting linear regression	Potential variations due to improved (reduced) efficiency
Selling	Linear regression of IP historical trends (regressor: Revenues)		Normal	StDev: standard deviation of the forecasting linear regression	Potential variations due to improved (reduced) efficiency
OWC	Linear regression of IP historical (2008A-2017A) trends (regressor: revenues for account receivables, COGS for inventory and account payables)		Normal	StDev: standard deviation of the forecasting linear regression	Potential variations due to improved (reduced) OWC optimization (e.g. through inventory centralization)
Beta (WACC)	1.09 (linear Regression of IP historical (2013A/2018E) returns against the STOXX Europe 600 index returns)		Normal	StDev: standard deviation of the returns linear regression	Potential variations due to Italian political instability and other industry related risks.
YoY inorganic growth rate	9% (historical (2005A/2018E) YoY inorganic growth)		Uniform (discrete)	Values sample: [8%, 9%, 10%]	Variations due to potential opportunities and/or target availability in the next 4 years
% of M&A in HC	70% (combination of historical (2005A/2018E) values and our <i>Strategical Assessment</i> (Appendix 5))		Uniform (continuous)	Lower limit: 55% Upper limit: 85%	Variations due to IP acquisition strategy and targets availability

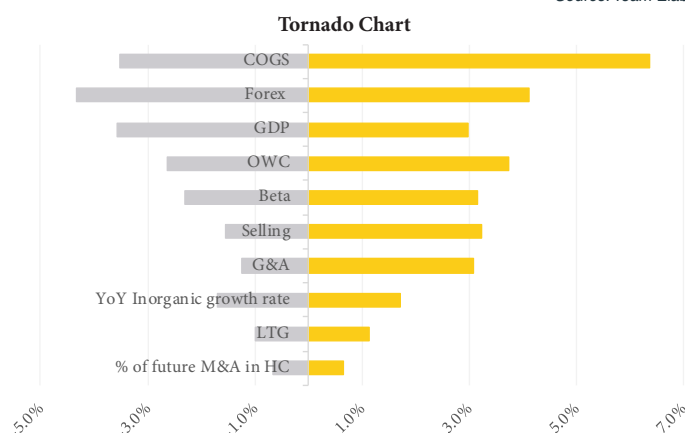
Source: Team Elaboration



Source: Team Elaboration

Variables	5th percentile		95th percentile	
	TP [€]	% variation	TP [€]	% variation
COGS	29.2	-4%	32.2	6%
Forex	29.0	-4%	31.6	4%
GDP	29.2	-4%	31.2	3%
OWC	29.5	-3%	31.4	4%
Beta	29.6	-2%	31.3	3%
Selling	29.8	-2%	31.3	3%
G&A	29.9	-1%	31.2	3%
YoY Inorganic growth rate	29.8	-2%	30.8	2%
LTG	30.0	-1%	30.7	1%
% of M&A in HC	30.1	-1%	30.5	1%

Source: Team Elaboration



Source: Team Elaboration

## 16. Corporate Governance and Corporate Social Responsibility

IP has adopted 'Codice di Autodisciplina' (Italian Code of Conduct for Italian listed companies) since 2000. In the table we summarize the main areas of compliance and not.

COMPLY	DOES NOT COMPLY
Composition of the Board of Directors (BOD): (i) 6/9 are independent directors , (ii) 3/9 are of female gender (iii) presence of the Lead Independent Director.	Chairman and CEO are the same person.
All independent directors were renewed recently.	The president and CEO is a member of the BOD.
Definition of guidelines for the maximum number of offices that directors may cover in the company.	Some members of the BOD have relevant offices in other companies.
Members of Internal Auditor are elected through a voting list system.	There is no international representative.
Presence of Committees of Remuneration, Control and Risk and Appointment proposal. All Committees have been convened at least 3 times in 2017. The Committee of Remuneration (Chairman is not a member) fixes maximum amount of variable remuneration allowed.	Independent directors and one dependent non executive director compose the Appointment Proposal Committee.
A Committee has been appointed to evaluate a succession plan of executives directors.	Except Chairman and Vice Chairman, no member of the BOD has experience in IP related industries.
Disclosure of CG and main ownership stakes annually, since 2005.	
Members of the BOD were elected both from the list of Majority (represented by Gruppo IPG Holding SPA) and minority (a group of funds and institutional investments companies), among which there is one elected from the list of minority.	

Source: Company Data

### Board of Directors

All members of the BOD are in charge until the approval of the Financial Statements of Year 2019. Directors are appointed through a list voting mechanism, shareholders can vote only if they own 2.5% of Group capital.

Full name	Offices	List*	In charge since	N° of other offices	Committees			Background
					Control and Risk	Remuneration	Appointment proposal	
<b>Fulvio Montipò</b>	Chairman and CEO Executive	M	28/04/2017 (Chairman) 1977 (CEO)	1				<ul style="list-style-type: none"> <li>Degree in Sociology</li> <li>Industrial management</li> </ul>
<b>Paolo Marinsek</b>	Vice Chairman Executive	M	28/04/2017	0				<ul style="list-style-type: none"> <li>Degree in Aerospace Engineering</li> <li>Industrial management (automotive)</li> </ul>
<b>Angelo Busani</b>	Independent non Executive director	m	28/04/2017	1	×			<ul style="list-style-type: none"> <li>Degree in Law</li> <li>Board director in many companies</li> </ul>
<b>Antonia di Bella</b>	Independent non Executive director	M	28/04/2017	2				<ul style="list-style-type: none"> <li>Degree in Economics and Social Sciences</li> <li>Accounting and Insurance , Business consultancy</li> </ul>
<b>Franco Garilli</b>	Lead Independent non Executive director	M	28/04/2017	0	×	×	×	<ul style="list-style-type: none"> <li>Degree in Economics and Business</li> <li>Audit, Business consultancy</li> </ul>
<b>Marcello Margotto</b>	Independent non Executive director	M	28/04/2017	1		×	×	<ul style="list-style-type: none"> <li>Degree in Economics and Business</li> <li>Business consultancy</li> </ul>
<b>Stefania Petruccioli</b>	Independent non Executive director	M	28/04/2017	3	×			<ul style="list-style-type: none"> <li>Degree in Business Administration</li> <li>Business Analyst, Investment management</li> </ul>
<b>Paola Tagliavini</b>	Independent non Executive director	M	28/04/2017	4	×			<ul style="list-style-type: none"> <li>Degree in Business Administration</li> <li>Business consultancy, strategic risk management</li> </ul>
<b>Giovanni Tamburi</b>	Non Executive director	M	28/04/2017	4		×	×	<ul style="list-style-type: none"> <li>Degree in Economics and Business</li> <li>Business Investments</li> </ul>

\*M-majority; m-minority

Source: Company Data

### Compensation Plan

Full name	Office	Fixed remuneration [€k]	Participation at committee remuneration [€k]	No-Equity variable remuneration		Fringe benefits	Total [€k]	Fair value of equity remunerations
				Bonus	Profit sharing			
<b>Fulvio Montipò</b>	Chairman and CEO	1,544	-	500	-	-	2,044	1,104
<b>Paolo Marinsek</b>	Vice Chairman	351	-	-	-	9	360	126
<b>Angelo Busani</b>	Independent director	30	13	-	-	-	43	-
<b>Antonia di Bella</b>	Independent director	30	-	-	-	-	30	-
<b>Franco Garilli</b>	Independent director	45	30	-	-	-	75	-
<b>Marcello Margotto</b>	Independent director	45	10	-	-	-	55	-
<b>Stefania Petruccioli</b>	Independent director	45	20	-	-	-	65	-
<b>Paola Tagliavini</b>	Independent director	45	20	-	-	-	65	-
<b>Giovanni Tamburi</b>	Non executive director	45	10	-	-	-	55	-

Source: Company Data

**CG and CSR assessment**

To assess IP CG, we followed the ISS (Institutional Shareholders Services) methodology. The final score (7/10) suggests good practices and thus, high protection of minorities and low risk of private benefits for managers. However, analyzing the (first) No-financial disclosure published in 2017, we noticed poor CSR practices and a not-significant involvement in environmental and social initiatives (with the exception of few subsidiaries), resulting in an area for possible improvements.

CORPORATE GOVERNANCE ASSESSMENT	SCORE
<b>1. BOARD AND COMMITTEES STRUCTURE [Weight = 35%]</b>	<b>6/10</b>
3/3 financial experts serve on the audit committee	1
67% Independent directors	1
33% Women on board	1
Few experts in IP related industries	0
Presence of Appointment proposal, Compensation, Control and Risk Committee	1
Chairman and CEO chairs are covered by the same person	0
Directors do not serve a number of excessive offices outside IP	1
There is no policy for directors annual performances assessment	0
No policy disclosed to evaluate board annual performance	0
<b>2. COMPENSATION AND REMUNERATION [Weight= 25%]</b>	<b>5/10</b>
Since 2014, the Company identified a Lead Independent Director	1
Non-executive directors remuneration is not linked to Group performances	1
The company does not disclose numerical figures for performances related remunerations	0
The Company has equity based compensation plan	1
Montipò remuneration is almost 70% of total remunerations	0
Since 2014, the Company identified a Lead Independent Director	0
<b>3. SHAREHOLDERS RIGHTS &amp; TAKEOVER DEFENSES [Weight= 15%]</b>	<b>8/10</b>
One share one vote	1
The company has not classes of stock with different voting rights	1
When BoD is renewed, not all directors are changed	1
There are no effective takeover defenses	0
<b>4. AUDIT [Weight= 25%]</b>	<b>10/10</b>
No adverse opinion by the auditor in the past year	1
No change in audit company due to questionable reasons	1
<b>TOTAL</b>	<b>7/10</b>

Source: Team Elaboration

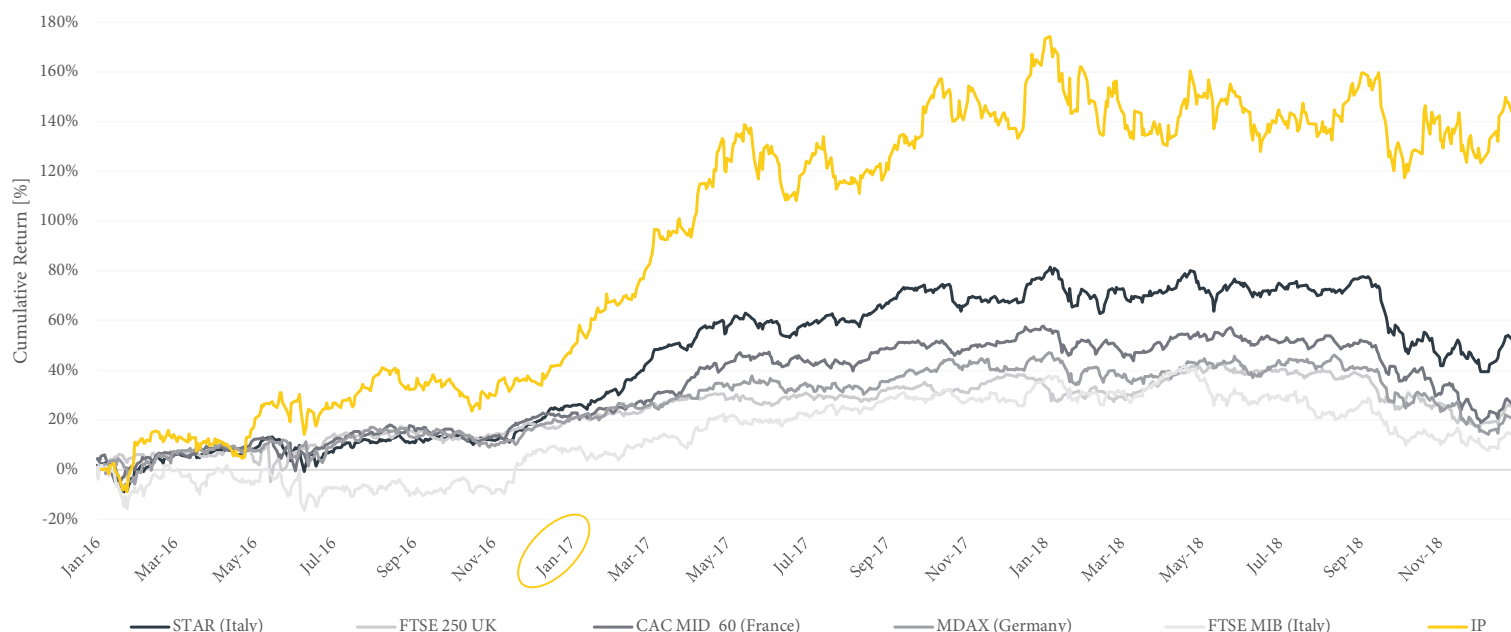
**17. Investment Risks**

**Focus on PIR**

In 2017, the Italian Government introduced ‘Piani Individuali di Risparmio’ (PIR) to promote investments in Italian medium-small Caps granting tax benefits to investors. The STAR segment 2017 high performances and its outperformance benchmarked against EU comparables Indexes (CAC Mid 60, MDAX, FTSE 250 UK) suggested us a strong relation with PIR introduction. Indeed, PIR were responsible for +18.1% (1/1/17-31/12/17) Buy and Hold Abnorma Returns (BAHR) not linkable with factors such as Beta, size, market/book value (source: Intermonte in collaboration with Politecnico di Milano, 2018), increasing liquidity of medium caps and boosting companies multiples. IP P/E increased by +50% YoY in 2017, outperforming the average EU industrial machineries.

PIR Characteristics	
Portfolio requirements	At least: - 70% of the investment in Italian companies or EU companies headquartered in Italy - 21% in Italian companies not belonging to FTSE MIB
Investment	€30k year for each single physical investors (max: €150k cumulated over time)
Benefits	Tax exemption on capital gain, dividends, coupons, interests and on succession taxes if the investment is held more than 5 years

Source: Intermonte



Source: FactSet, Team Elaboration

## 18. Competitors Centralisation Strategy

IP decentralised approach of the group management has been proved effective over time. Still, we wondered what the limit of this approach could be. Given IP outstanding results, we did not try to quantify integration and complexity costs looking at its past performances. Rather, we analysed the history of some of its €1bn+ revenues competitors: Bosch, Eaton, Parker, Bucher, GEA, Alfa Laval and Sulzer. Most of the analysed groups followed a two-phase strategy where an initial decentralised approach has been turned into a more-or-less centralised structure. Instead, Bosch had a centralised approach since the beginning.

Results show that (i) centralisation seems the physiological development of initially-decentralised groups, (ii) centralisation can be implemented in several different ways (e.g. Bucher and Parker adopt a centralised divisional approach which allows for an higher flexibility, while Eaton and Alfa Laval have a more rigid structure allowing for higher cost control) and (iii) the implementation of centralisation is often a long process (at least 5-10 years) which is undertaken by groups at different sizes and for different reasons. Most of the analysed group significantly increased their centralisation efforts when their revenues were around €2bn-€3bn suggesting IP could soon face hard times in scaling up its business with no change in strategy. Moreover, none of these industrial groups reached more than €4bn in revenues without creating a strong central structure supporting the operations of the entire group.

Level of Integration	Brand	Procurement	Production	Distribution	Service	G&A
Interpump	○	◐	◐	◐	●	○
Bosch	●	●	●	◐	●	◐
Eaton	●	◐	●	◐	●	●
Parker	●	◐	◐	●	●	●
Bucher	◐	●	◐	●	◐	●
GEA	◐	◐	◐	◐	●	◐
Alfa Laval	●	◐	◐	◐	◐	◐
Sulzer	●	●	●	◐	●	◐

Source: Team Elaboration on Companies Data

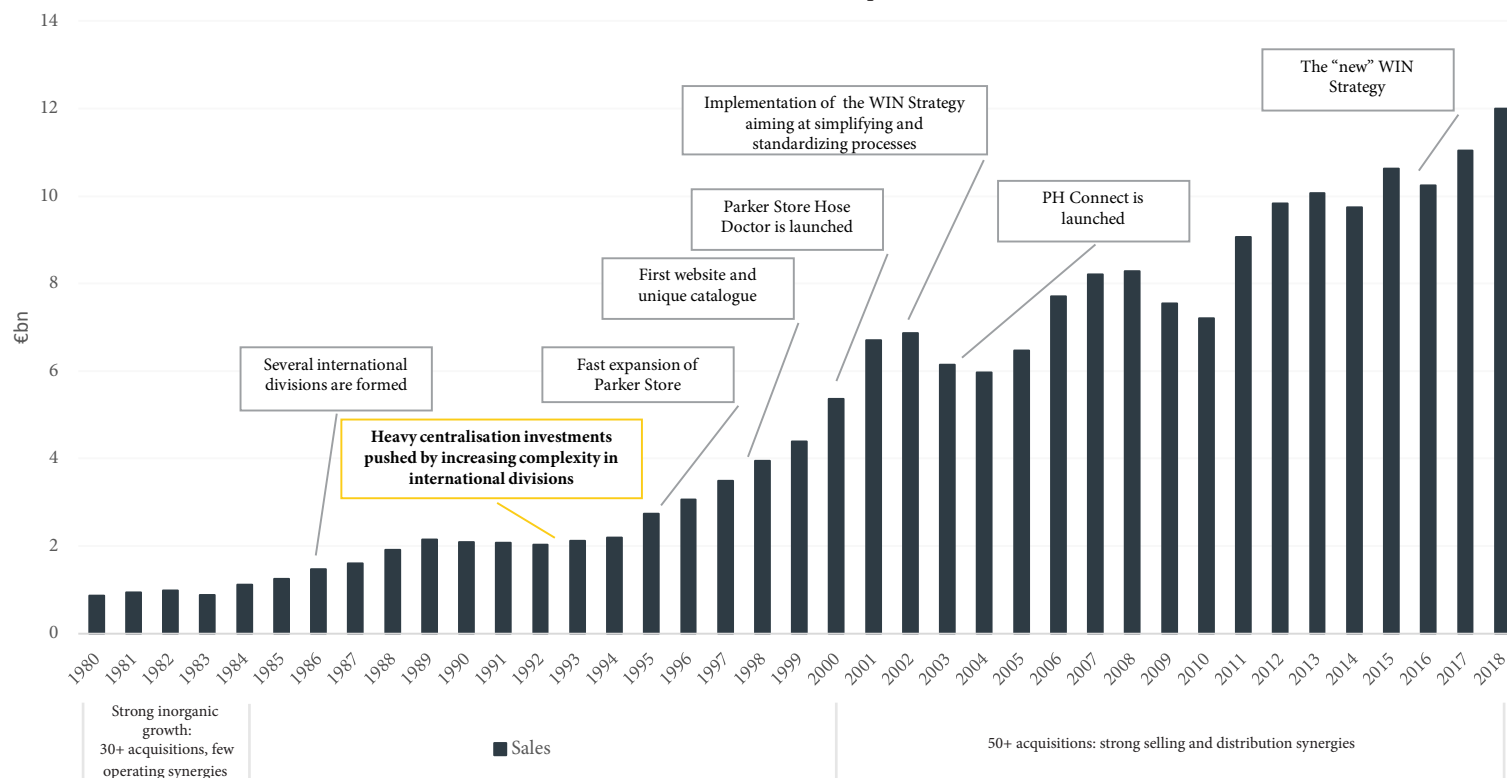
### Focus on Parker

Among the analysed groups Parker emerged as the most interesting, given its strong affinity with IP history due to: (i) the market served (mainly hydraulics), (ii) the inorganic growth strategy (300+ mainly-successful acquisitions) and (iii) post-IPO (1964-1980) strongly decentralised approach at operating level and internationalisation strategy. In particular, we believe IP current business to be well reflected in Parker 90s.

Parker	Centralisation level	Description
Brand	●	(i) Only 45 active brands; (ii) Structured approach to brand management (ParkerID); (iii) Each of the brands is clearly associated to the mother one.
Procurement	◐	(i) Strategic Supply Chain is at the core of the WIN Strategy; (ii) Creation of the PHConnect: Parker's eBusiness portal for partnered customers and suppliers, providing real-time information on accounts and orders and an array of collaboration tools.
Production	◐	(i) Centralised at divisional level, decentralised at group level: this guarantees the right flexibility.
Distribution	●	(i) Parker Store: 13,000+ highly specialised distributors around the world which independently serve customers.
Service	●	(i) ParkerStore Hose Doctor: highly specialised distributors and assistants offering 7/24/365 days of service & repair; (ii) several simplification initiatives undertaken in the last years increased service provision timeliness.
G&A	◐	(i) Lean Enterprise and Simplification are at the core of Parker WIN Strategy. (ii) Standardized processes integration of management teams and administration.

Source: Team Elaboration

### Parker Centralisation Steps



Source: Team Elaboration on Company Data