PROJECT DEFG - DEAL SUMMARY

Company Name	PQR
Sponsoring Member	NA, IS
Deal Team	TU, IS
Sponsor	ABC
Intermediary	HIJK
Debt Commitment	EUR xx.xm
Equity Commitment	EUR xx.xm
Company Location	LMNO
Expected IP/Closing	Q2

Revenue	2017A EUR xx.xm; 2018E PF €xx.xm
Adj. EBITDA	2017A EUR xx.xm; 2018E PF €xx.xm
Total Leverage	Senior leverage of a.ax 2018E Adj. PF EBITDA; total leverage of a.ax 2018E Adj. PF EBITDA
Acquisition Multiple	a.ax LTM March 2018E EBITDA
Rate	E+a.a% cash +a.a% PIK (a% EURIBOR floor)
Fees, Non-Call	a.a%
Debt Returns	aa.a% ; a.aax (4yrs, ex. fees)
Equity Return	a.ax CoC / a.a% (4 yrs)
Blended Return	a.ax CoC / a.a% (4 yrs)

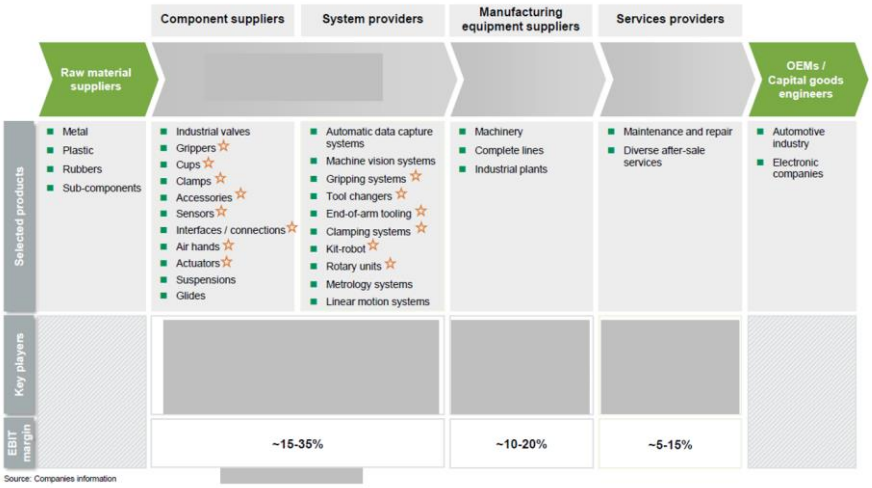
Transaction Background

PQR develops and manufactures accessories, automation components and “end-of-arm-tooling” (EOAT) solutions for industrial automation and robotic applications. PQR is the largest player in the EOAT market, at approximately xx the size of its largest competitor. The Company occupies a segment of the market that is witnessing double-digit growth and is characterised by technological and IP-related barriers to entry, superior operating margins, ‘sticky’ customer relationships, and a high rate of cash conversion. Headquartered at LMNO, the Company has a global presence with xx subsidiaries, and over xx distributors. As of 20xx, the Company had a headcount of ~xx people (xx at headquarters, xx elsewhere in Europe, and xx in Asia), including those from its vertically integrative acquisition of XYZ in 20xx. In 20xx, MNO invested in a majority stake in PQR at an EV of over EUR xx. Existing investors DEF Private Equity as well the CEO of the Company acquired minority stakes in the investment round.

(Redacted)

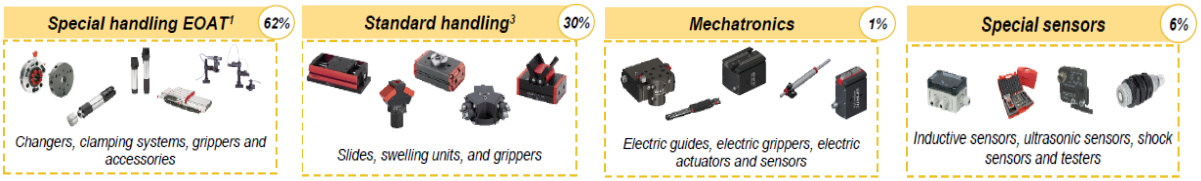
Business Overview

PQR is a component supplier and systems provider in the overall factory automation value chain, preceding manufacturing equipment suppliers, services providers, OEMs and capital goods engineers. The Company’s portfolio of nearly xx products has applications across a range of industries, including automotive, packaging, food, home appliances, pharmaceuticals and semi-conductors.



PQR has a diversified customer base of over xx clients, including large multinationals. The Company operates in a highly fragmented, 'line-critical' niche of robotic automation solutions that have a high cost of failure and a low cost per unit. The Company's products represent, on average, x% of the total cost of a robot investment but are critical parts of the system. PQR's components and modules are sold to various actors in the value chain, both as 1st equipment, and as after-sales.

The Company operates in the following product segments:



- **Special Handling EOAT –** (x% of FY 2017 Revenues)
  - Products include interlocking components for plastic injection moulding machines: quick changers, profiles, brackets, suction cups, and grippers
  - End use**:** Plastics material handling, general automation industry
  - Over xx products in the portfolio

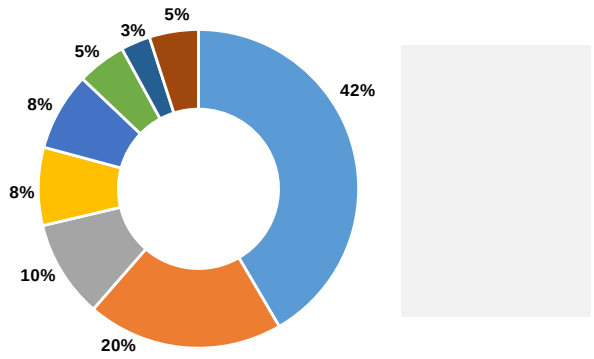
- **Standard Handling –** (x%)
  - Pneumatic components for general handling applications: grippers, guides, rotary units, and suction cups
  - End use: High speed automation systems, general automation industry, assembly machines, packaging, food and general handling
  - Over xx products in the portfolio
  - PQR entered the Standard Handling market in 19xx

- **Special Sensors –** (x%)
  - Magneto-resistive sensors and related, for cylinders, grippers, and linear guides
  - End use: Automotive parts, special sensors applications
  - Over xx products in the portfolio
  - PQR entered the sensors market in 19xx

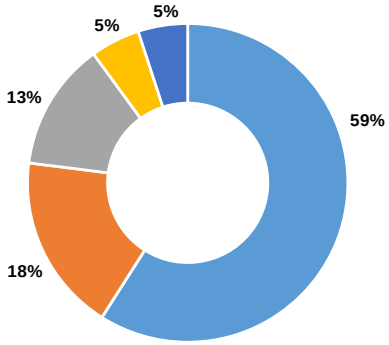
- **Mechatronics –** (x%)
  - Electric actuators, electric grippers and rotary electric drives
  - End use: Pharmaceutical, medical, food, semiconductor industries, automotive, robotic automation and electronics
  - Over xx products in the portfolio
  - PQR entered the Mechatronics market in 20xx

PQR's offering includes all aspects of the sales process, starting from customer engagement, followed by technical design/engineering, procurement, manufacturing/assembly and after-sales spares and support – both directly, as well as through distributors. Customers are highly sensitive to supplier-change risk, which provides ample scope to develop 'sticky', long-term direct customer relationships. As a result, PQR has a significant share of recurring revenue, as Grippers have a typical lifetime of two to three years (~10m cycles), while new EOAT systems are typically ordered alongside product facelift and design changes every three to five years. Additionally, with around x% of revenues from 'solutions sales', the Company has a track record of co-developing products with its customers, and the capability to deliver customised solutions in relatively small-time frames of less than two months. Around x% of sales revenue is invested back into R&D on a product portfolio protected by over xx patents.

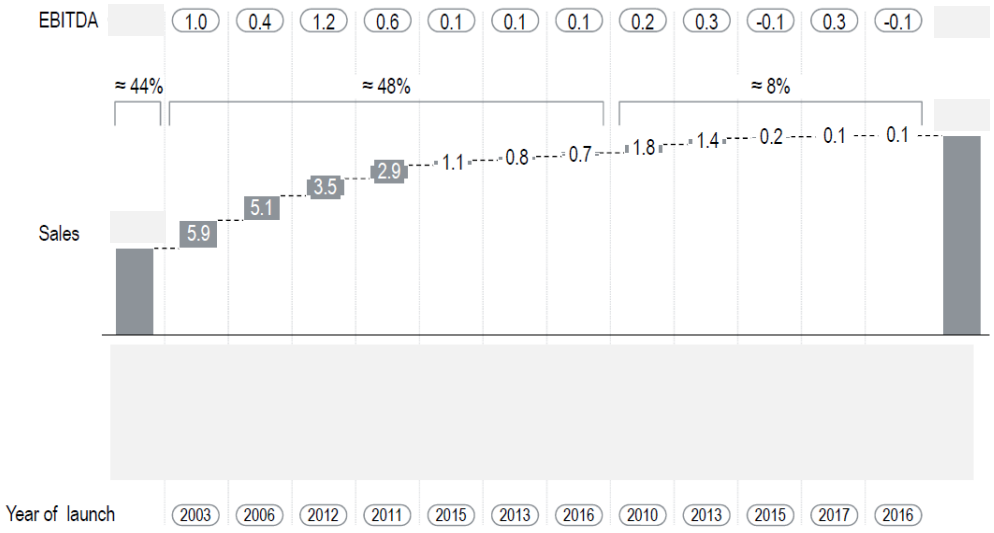
Revenue Breakdown by Sector



Revenue Breakdown by Geography



The automotive sector accounted for x% of PQR's sales in FY 20xx, while automation accounted for x%; food and beverage for x%; tooling machines and home appliances accounted for x% each, followed by pharmaceutical at x% and semiconductors at x%. About x% of the Company's revenues come from other sectors. In terms of geographical distribution, x% of the Company's revenues came from Europe, x% from Italy, x% from the Americas, x% from Asia and with the rest of the world accounting for another x%. In the last three years PQR's focus has been on growing its presence in Asia by opening local subsidiaries in China (20xx), South Korea (20xx) and Japan (20xx). New subsidiary openings are planned in India, Thailand, Russia, UK and Bulgaria in 20xx.



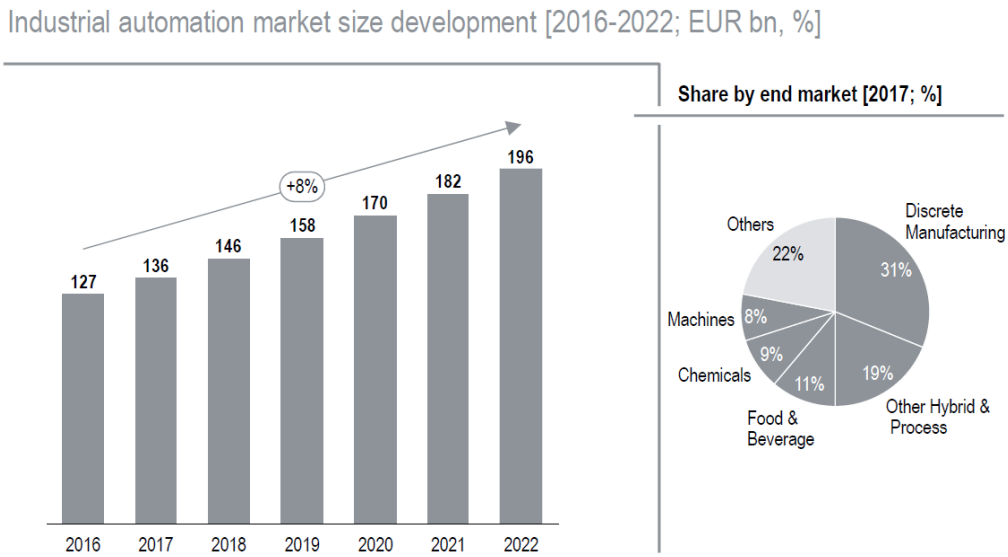
Going forward, the Company is looking to execute on a five-pronged growth strategy – i) geographic expansion in Asia and Eastern Europe, ii) consolidation of its position in core markets of Germany, France, and Italy, iii) expansion of its product portfolio iv) development and expansion into the emerging field of Mechatronics/collaborative robots, and v) the pursuit of select M&A opportunities.

XYZ Acquisition

In 20xx, PQR acquired XYZ, an Italian manufacturer of mechanical parts, and a key supplier to the Company for over xx years. The main rationale for this acquisition was the interdependent relationship between the two businesses (PQR accounted for x% of XYZ's sales; XYZ accounted for x% of PQR's raw material purchases), and the know-how of XYZ in mechanical components design. PQR plans to invest in the renewal of machinery at XYZ, with the aim of increasing production by x% in 20xx.

Geographic footprint
PQR has a production facility in LMNO and xxx international subsidiaries, including in Germany, Turkey, Spain, the Czech Republic, Romania, Slovenia and Japan. PQR also has competence centres in Serbia and China. The Company also has xxx distributors worldwide. PQR is also preparing to set up a new manufacturing plant in 20xx in STUV to fulfil incoming orders, and in expectation of future growth.

Market Snapshot

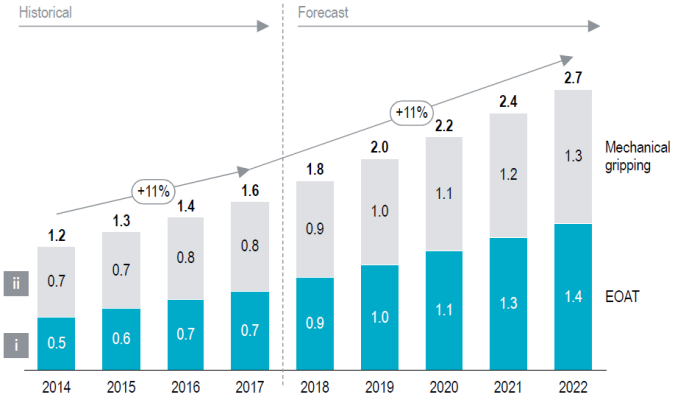


As a component supplier and systems provider, PQR has benefited from a number of macro drivers that have accelerated the growth in the total stock of robots to a rate of nearly x% per annum. These include i) an increasing emphasis on automation for its benefits of higher speed, greater flexibility, quality, and consistency; ii) rising competition and labour input costs, especially in historically low-cost countries like China; iii) relocation and in-shoring in mature markets, closer to consumers iv) the adoption of concepts like Industry 4.0 as policy initiatives v) fast-changing consumer preferences (demanding faster production and greater manufacturing flexibility), vi) the prevalence of E-commerce (requiring efficient logistical solutions), and vii) greater environmental awareness (that calls for improved industrial efficiency).

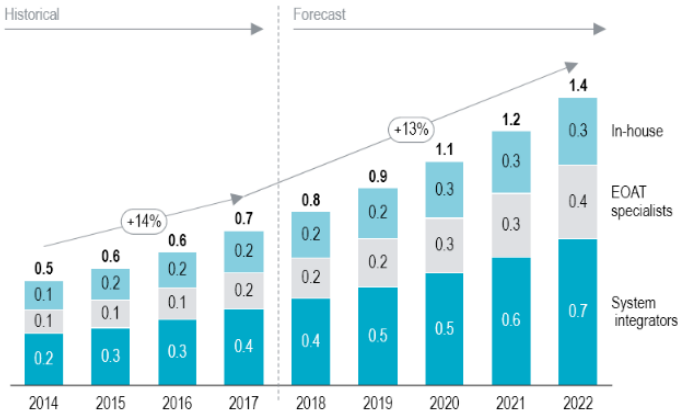
All of this translates to a forecasted industrial automation market of over EUR xxxbn over the next five years to 20xx, implying a CAGR of x%. Discrete manufacturing constitutes x% of the total end market, followed by food and beverage, chemicals, and machines – together accounting for x%. In terms of robots, unit sales are expected to increase in line with historic growth at a CAGR of x% over 20xx-20xx, mainly driven by the above-trend growth in the automotive and electronics segments, which together accounted for x% of unit sales in 20xx.

In the medium to long-term, three factors are likely to characterise the development of the robotics and automation industry – i) supportive technological trends driven by a transition towards automated handling and connected automation, ii) an increase in industrial output, driven by population growth and higher levels of per-capita consumption, and iii) industry consolidation, from the need to gain scale advantages, and expand geographical reach.

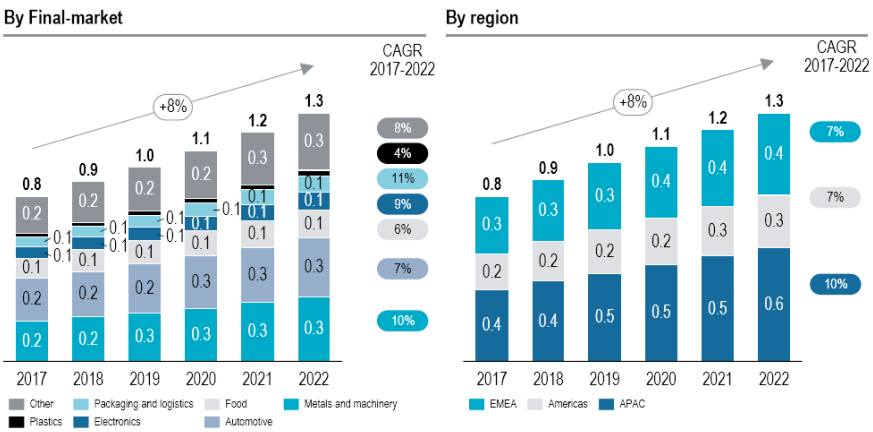
PQR's Key Markets
EOAT and Mechanical Gripping, which accounted for over x% of the Company's revenues in 20xx, has a total market size of EUR xx, and is forecasted to grow by x% to EUR xx by 20xx. The expected CAGR for the Mechanical Gripping sub-segment is x% over 20xx-20xx, while the EOAT market is expected to grow at a faster rate of x% over the same period, driven by the growth in the automotive, electronics, and packaging and logistics segments, which made up x% of the market in 20xx. In terms of geography, the APAC region, at a CAGR of x%, is expected to grow faster than EMEA and the Americas – both these markets are expected to grow at an annual rate of x% over the same period.



Within the EOAT market, sales by specialists such as PQR are forecasted to double from current levels, to EUR xx by 20xx. This increase is largely enabled by economies of scale, driven by an increasing trend towards outsourcing, and comes at a time when system integrators focus on software, and end-users insource simple applications previously done by system integrators.

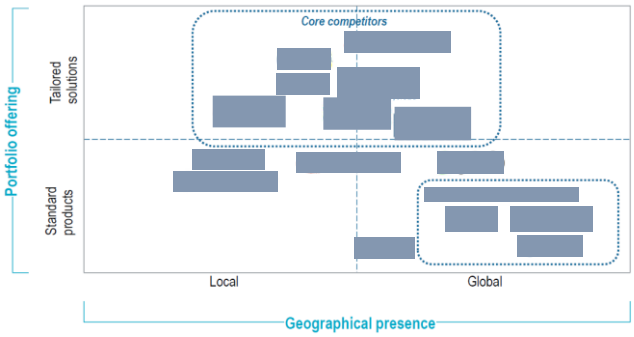


In Mechanical Gripping, the Machinery and Automotive segments accounted for x% of sales, totalling EUR xx in 20xx. Geographically, the APAC region accounted for x% of the market in 20xx, and is also expected to grow the fastest, at a CAGR of x% over 20xx-20xx.



Competitive Landscape

GHI, JKL, STU, and VWX comprise some of PQR's core competitors, given their portfolio offering of tailored solutions, and their global geographic presence. In comparison, others such as ACE, FGH, and IJK are standard component suppliers. In terms of segmentation, most players tend to focus on one of EOAT, or Robotic Automation Components, with PQR perhaps the only player with a strong focus on both.



Within automation components, products are generally classified by whether they are gripping-focused, or vacuum-focused, and players tend to focus on one type or the other within this. The main industry of focus is automotive, although most players also cater to the others in varying degrees. Packaging and logistics, and plastics are the other common industries of focus for this sub-group.

Overview of key robotic automation components competitors

Key competitor	HQ	Revenues[3]	Focus products		Focus industries					
			Vacuum focused	Gripping focused	Auto-motive[1]	Electronics	Packaging & logistics	Food	Pharma	Plastics[2]
		42			■	▨	▨	▨	▨	■
		104			▨	▨	■	▨	▨	■
		250-300			▨	▨	▨	▨	▨	▨
		216[4]			■	▨	⬚	▨	▨	⬚
		163[5]			■	□	□	□	□	□
		113[4]			■	▨	■	▨	▨	▨
		75-125			▨	▨	▨	▨	▨	▨
		24			■	▨	▨	▨	▨	■
		15-20[5]			▨	▨	▨	▨	▨	▨
		5-10			▨	▨	■	▨	▨	▨
		30			■	⬚	■	⬚	⬚	⬚

1) Used by automotive OEMs and not automotive suppliers; 2) includes suppliers to other industries (e.g., automotive) 3) 2017; 4) 2016; 5) 2015

■ Key focus ▨ Some focus ⬚ Limited presence □ Not covered

In the sub-category of EOAT, competitors are primarily component-focused, or solutions-focused, and tend to focus on 1-2 key sectors (automotive and plastics being the most common), with a more limited presence in others.

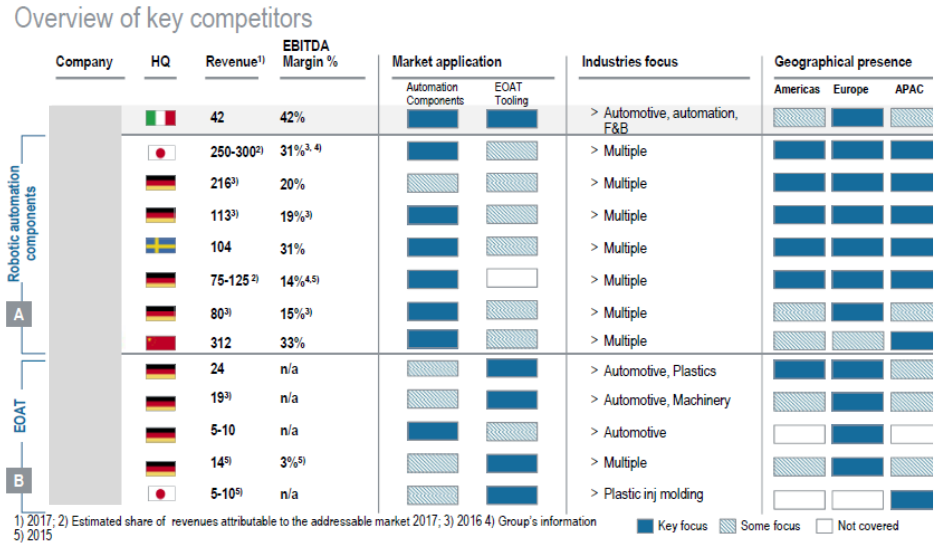
Overview of key end-of-arm tooling competitors

Key competitor	HQ	Revenues[3]	Focus products		Focus industries				
			Component focused	Solutions focused	Automotive[1]	Plastics[2]	Metals[2] & Machinery	Packaging	Food
		42			■	■	⬚	▨	⬚
		104			▨	■	■	■	▨
		24			▨	■	▨	⬚	▨
		4[4]			▨	▨	▨	□	□
		14[5]			■	▨	■	□	□
		30			■	⬚	■	⬚	□
		5-10			▨	▨	▨	■	▨
		80[4]			■	▨	■	▨	▨
		216[3]			■	⬚	▨	▨	▨
		5-10[3]			■	■	⬚	▨	⬚

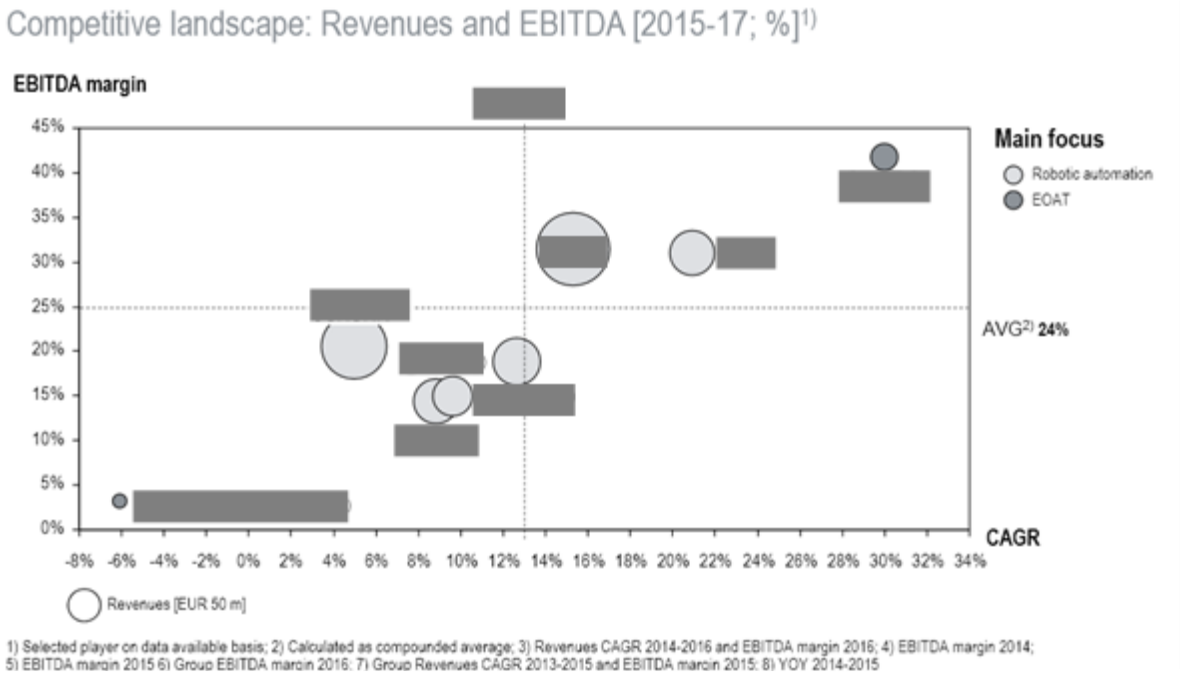
1) End-of-arm tooling that are used by automotive OEMs and not automotive suppliers, 2) includes suppliers to other industries (e.g., automotive) 3) 2017 4)2016 5) 2015

■ Key focus ▨ Some focus ⬚ Limited presence □ Not covered

Combining the key competitors in both groups – most of PQR's competitors are European and have Automation Components as their key focus. The broad group tends to have a significant presence across all the main geographies of the Americas, Europe, and APAC, and serve multiple industries. South Korea-based STU is the outlier, specializing in EOAT for plastic injection molding, and with a geographic presence confined to the APAC.



In terms of financial performance, LMN, FGH and JKL are the largest in terms of revenues – with each generating at least EUR xx in sales to markets relevant to PQR. Operating profitability varies significantly – with EBITDA margins ranging from x% for ATM, to x% for PQR. The recent financial performance trends for a sub-set of these companies suggests that PQR leads the group on the fronts of revenue growth as well as EBITDA margins.



Potential competitive threats to EOAT specialists exist in the form of portfolio extension by automation component suppliers, and the threat of low-cost competitors – which is significant as these players typically offer the advantage of a local presence in fast-growing APAC geographies. Barriers to switching are assessed to be relatively high for both segments, as switching suppliers requires testing, and can lead to production stops.

Financial Summary

	Actual				Forecasts			CAGR	CAGR
FYE December, € million	FY14A	FY15A	FY16A	FY17A	FY18E	FY19E	FY20E	'14-'17	'18-'20
Profit & Loss									
Revenue									
Plastics									
% Growth									
Handling									
% Growth									
Handling Plastics									
% Growth									
Sensors									
% Growth									
Mechatronics									
% Growth									
Total Revenue									
% Growth									
EBITDA									
% Growth									
% Margin									
EBIT									
% Growth									
% Margin									
Cash conversion %*									

**Note - Calculated as EBITDA – Capex / EBITDA. Capex includes only ordinary capital expenditures (i.e. excluding acquisitions)*

Historical Financials

PQR's recent financial performance has been driven by the establishment of new subsidiaries, rapid internationalization in Europe and Asia, and the launch of new products. PQR's revenue grew at a CAGR of x% during 20xx-20xx. At the product level, revenue growth was mainly driven by growth in the Plastics and the Handling Plastics segments, which together (Special Handling EOAT, as mentioned above) accounted for x% of revenues in 20xx. PQR's subsidiaries accounted for x% of total sales in 20xx, and have collectively recorded a growth CAGR of x% from 20xx to 20xx. This outpaced both direct sales and distributor sales CAGRs over the same period, at x% and x% respectively. The top xxx customers within the group of subsidiaries accounted for x% of its total revenues in 20xx, while the top xxx accounted for x%.

The remaining x% share of total revenues is accounted for by direct sales (x%), distributor sales (x%) and private label sales (x%). Of the xxx customers serviced by this group, the top two accounted for x% of this group's revenues while the top xxx accounted for x%. More than x% of revenues generated in 20xx by these channels were through repeat customers.

EBITDA margins improved by over xxx percentage points, from x% in 20xx to x% in 20xx, despite investments in the sales force and IT sytems, as a result of a shift in the product mix towards higher value added segments (like special handling, EOAT) and improved operating leverage.

Capital Expenditures

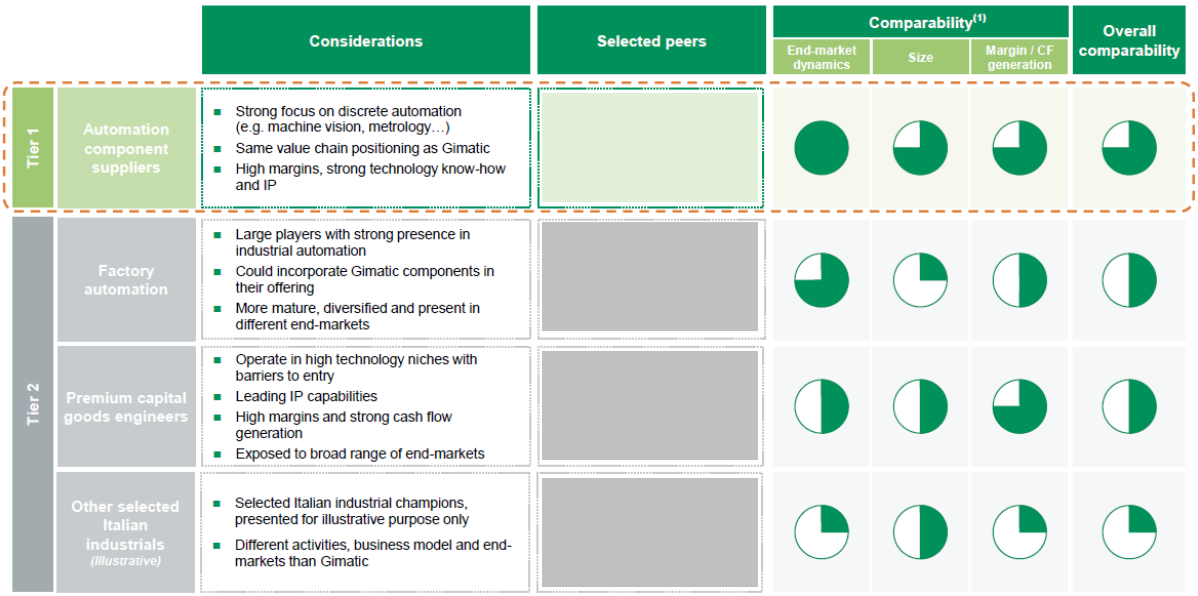
PQR spent EUR xx on capex in 20xx (x% of revenues, x% of EBITDA) and EUR xx in 20xx (x% of revenues, and x% of EBITDA). x% of this total expenditure was classified under the heads of industrial equipment, and office refurbishment for commercial expansion in China. x% was invested in plant and machinery; and x% on patents and licenses. The remainder was accounted for by subsidiaries, and under other heads of expenditure.

Projections

Revenue is expected to grow from EUR xx in 20xx to EUR xx in 20xx, indicating a CAGR of x%. EBITDA is expected to grow at the same rate over the period, with margins constant at x%. On the other hand, EBIT margins are expected to improve, from x% in 20xx to x% in 20xx.

Valuation

As with the capital goods and automotive sectors, EBIT is a key metric that can be used to evaluate performance in the robotics and automotive space, as it is a simple proxy for cash flow generation that also reflects the capital intensity of the business model, relative to other commonly used metrics such as EBITDA.



Note: (1) Assuming a transaction size of ~€300-400m, EBIT margin of ~35% and an EBITDA cash conversion >80%

In a broad sense, PQR's peers can be classified in one of the three categories - Automation Component Suppliers, Factory Automation players, and Premium Capital Goods Engineers. As seen above, in terms of overall comparability it is the Automation Component Suppliers that make up the first tier of PQR's comparables. The high degree of correlation in end-market dynamics, as well as their focus on discrete aspects of automation implies a value chain positioning that is very similar to PQR.

On the other hand, companies like FSH, AEI and KLM – though major players in factory automation, tend to be much larger, more mature and diversified, and are present in different end markets. Premium Capital Goods Engineers ostensibly have more in common with Automation Component Suppliers – such as operating in high-tech niches with barriers to entry, as well as high margins and solid cash flow generation. However, they also tend to be larger in size, and with exposure to a much broader range of end markets. In terms of operational benchmarking, the rest of this analysis focuses, therefore, only on PQRs' Tier 1 comparables.

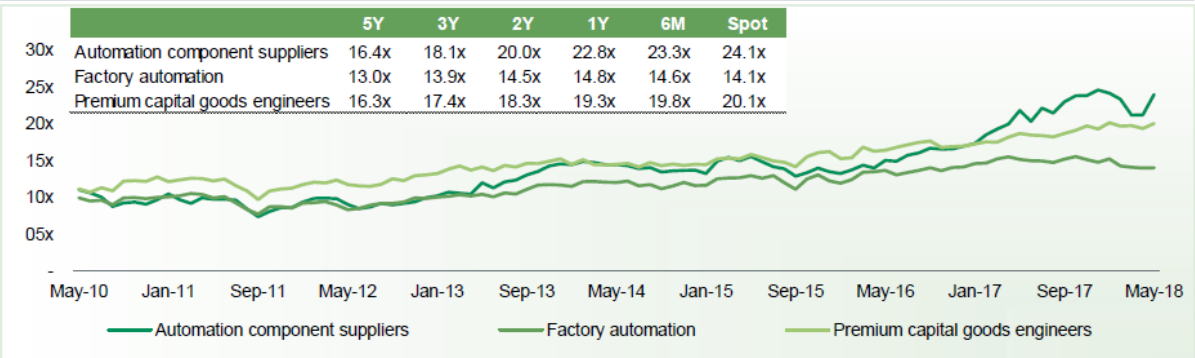
As seen below, nearly all of PQR's Tier 1 peers have a majority of the business exposed to automation, except KMN. Overall, PQR compares favourably to the peer group averages, with a two-year sales CAGR of x% (20xx-20xx) compared to the 20xx-20xx average of x% for the group.

Tier-1 Comparables	**A**	**B**	**C**	**D**	**E**	**F**	**G**
Exposure to Automation	100%	94%	55%	27%	60%	100%	
Market Capitalization (EUR m)	6,810	4,659	1,975	1,800	656	205	
Operational Benchmarking							
Sales CAGR 2017-19E	12.6%	9.4%	10.7%	6.4%	8.9%	11.4%	***9.9%***
EBIT Margin - 2018E	29.3%	23.4%	17.5%	14.6%	15.5%	20.6%	***20.2%***
EBITDA Margin - 2018E	32.2%	29.8%	20.8%	17.3%	21.4%	29.5%	***25.2%***
EBITDA-Capex Margin - 2018E	28.2%	21.5%	n.a.	14.6%	15.6%	22.4%	***20.5%***
Implied Cash Conversion	87.6%	72.1%	n.a.	84.4%	72.9%	75.9%	***78.6%***

In terms of profitability, PQR leads the group by a wide margin, with an estimated 20xx EBITDA margin of x%, compared to the peer average of x%. Lastly, looking at implied cash conversion, PQR's average of x% over the last two years is well ahead of the peer average of x%.

Trading comps through the cycle are presented next. On reviewing the evolution of the one-year forward EBIT multiple over the last eight years, it becomes apparent that valuations are currently at record highs. The spot NTM EBIT multiple for the group of Automation Component Suppliers is xxx (xxx over the last one year) compared to the five-year average of xxx. Additionally, while this group has historically traded in-line with its factory automation peers, a significant re-rating that began in early 20xx has seen Automation Component Suppliers trade at a premium of ~10x EBIT at current levels.

Historic EV/EBIT NTM multiples



The re-rating of valuation multiples is also reflected in comparable transactions over the last five years. JUV, NDL and KFS are businesses that were each acquired twice in this time. While NDL's margins improved significantly – the expansion in EV as well as transaction multiples is evident in the cases of JUV and KFS.

Comparable Transactions in Automation Precision Components: 2013 - 2018

Date	Target	Country	Business Overview	Acquirer	EV (EUR m)	EBITDA margin	Implied Multiples	
							Sales	EBITDA
			Manufacturer of pneumatic components and systems	Emerson	527	11.5%	1.24x	10.8x
			Manufacturer of mechanical motion technology	ICG	n.a.	26.0%	-	-
			Manufacturer of gripping moving parts solutions	Investor AB	661	30.0%	6.76x	22.5x
			Manufacturer of EOAT solutions, pneumatic components, and sensors	AGIC	100*	38.7%	4.72x	9.1x
			Provider of vacuum products and system solutions	EQT Partners	277	30.0%	3.70x	12.3x
			Manufacturer of linear solutions and transmission elements	21 Partners	56	21.1%	1.46x	6.9x
			Specialised pneumatic manufacturer, division of Bosch Rexroth	Triton	135	6.3%	0.40x	6.1x

Note: Gimatic's transaction EV is above EUR 100m - implied multiples may be higher

Management

The deal team met with:

- **Mr. X (Founder and CEO)**: founded the Company X years ago. He showed in-depth knowledge of the market and a clear vision and enthusiasm for the Company. We were very positively impressed. He is very keen to stay involved in the business
- **Mr. Y (COO):** joined X years ago. We were positively impressed by him and his knowledge of the business; we also met him in CPR at the TT trade fair
- **Mr. Z (CFO)**: joined X years ago; we had the impression of an average CFO for a mid-market company; needs to be further tested

Key Considerations

ESG considerations will be developed at a later stage; in particular environmental safeguards and risks will be analyzed in each plant.

Proposed Terms

The EV we are planning to bid is EUR XXm or a.ax LTM EBITDA of EUR XX.Xm (a.ax 2018E EBITDA of EURXX.Xm). We plan to finance the transaction through of combination of:

- **Bank senior debt** of a.ax LTM EBITDA;
- **PIK facility** underwritten by ABC with a bullet profile and a maturity of X years, priced at Euribor + a% (Euribor+a% cash and a% PIK) but the cash interest can be capitalized during any interest period by paying a premium of a% PIK. Including a a.a% arrangement fee, the facility returns would be **aa.a% IRR and a.aax CoC in a 4-year period**. The implied equity cushion would be X%;
- **Equity** by ABC and management, who will reinvest 100% of its net proceeds

We plan to sweeten the offer giving Mr.X the option to invest alongside ABC in equity up to €Xm. Assuming an exit in 4 years and delivery of the management plan, ABC would achieve **a.ax CoC/ aa.a% IRR** on its equity investment and a.ax CoC/ a.a% IRR blended assuming a.ax LTM EBITDA.

Investment Thesis

1. Leading player operating in a fragmented market
2. End-markets as well as the broader automation industry have growth fundamentals
3. 'Mission critical' nature of products makes customers sensitive to supplier change risk
4. Largest player in the EOAT segment, at approximately 4x size of its largest competitor
5. Double-digit revenue growth and consistent margin expansion
6. Significant share of recurring revenue
7. Global footprint, with an existing presence in key Asian and European markets
8. Long-standing relationships with a diversified client base, and end markets. Over xxx customers operating across different sectors.
9. Growth potential from further penetration of key markets, and new product development – potentially a platform for M&A consolidation
10. Asset light business model with strong cash flow generation

Key Due Diligence

1. Key personnel risk
2. Technological / IP-related risks
3. R&D spend benchmarking vs. competitors
4. Capex spend benchmarking vs. competitors
5. Operating performance/margin variance among subsidiaries
6. Share of product portfolio catering to 'mission-critical' functions
7. Duration of customer relationships, frequency of repeat business
8. Client concentration – share of revenues from top xxx customers
9. Validation of leadership position in the MNOP segment
10. Exposure to final project risk
11. Management of FX exposure, given broad and expanding international footprint
12. Performance in China – given PQRS investment and their strategic focus
13. Future capex requirements, given relatively high cash conversion
14. Valuation and exit multiple assumptions
15. Higher trading multiples – whether justified by a structural change in demand

Recommendation

The deal team seeks approval to progress the transaction and submit an FGH asking for exclusivity on the terms outlined as this opportunity represents an attractive risk-return profile given outstanding industry fundamentals and dynamics, attractive defensible position (customized mission-critical products), great founder with clear vision, robust historical performance as well as strong cash flow generation.