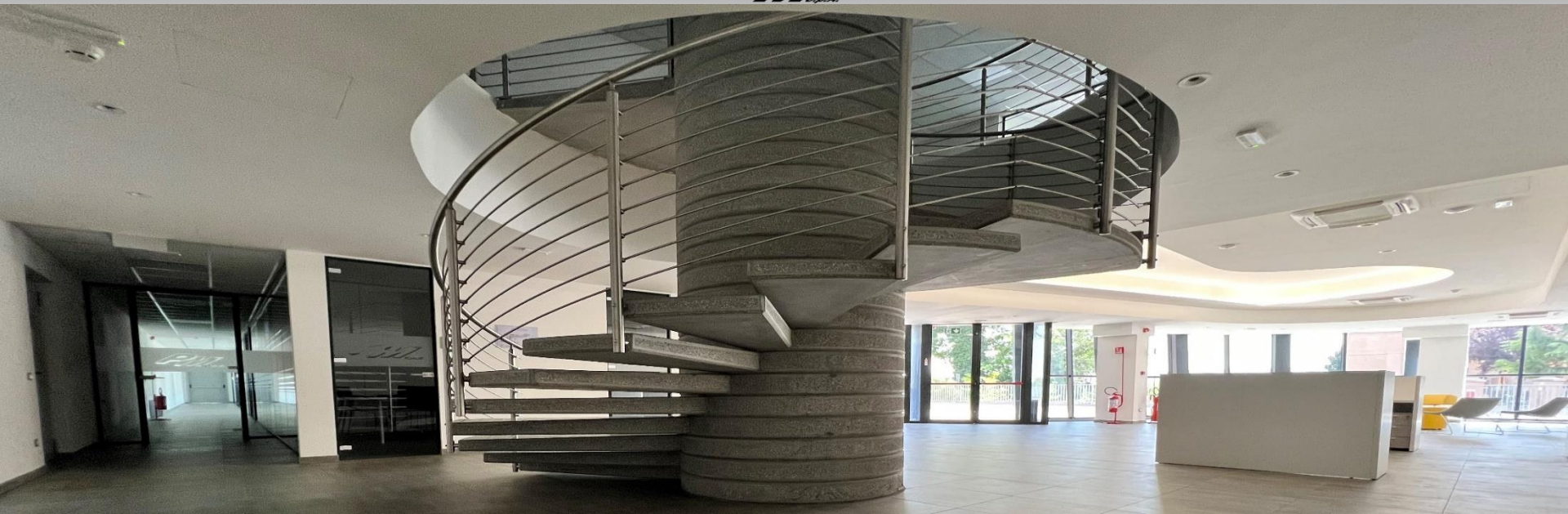


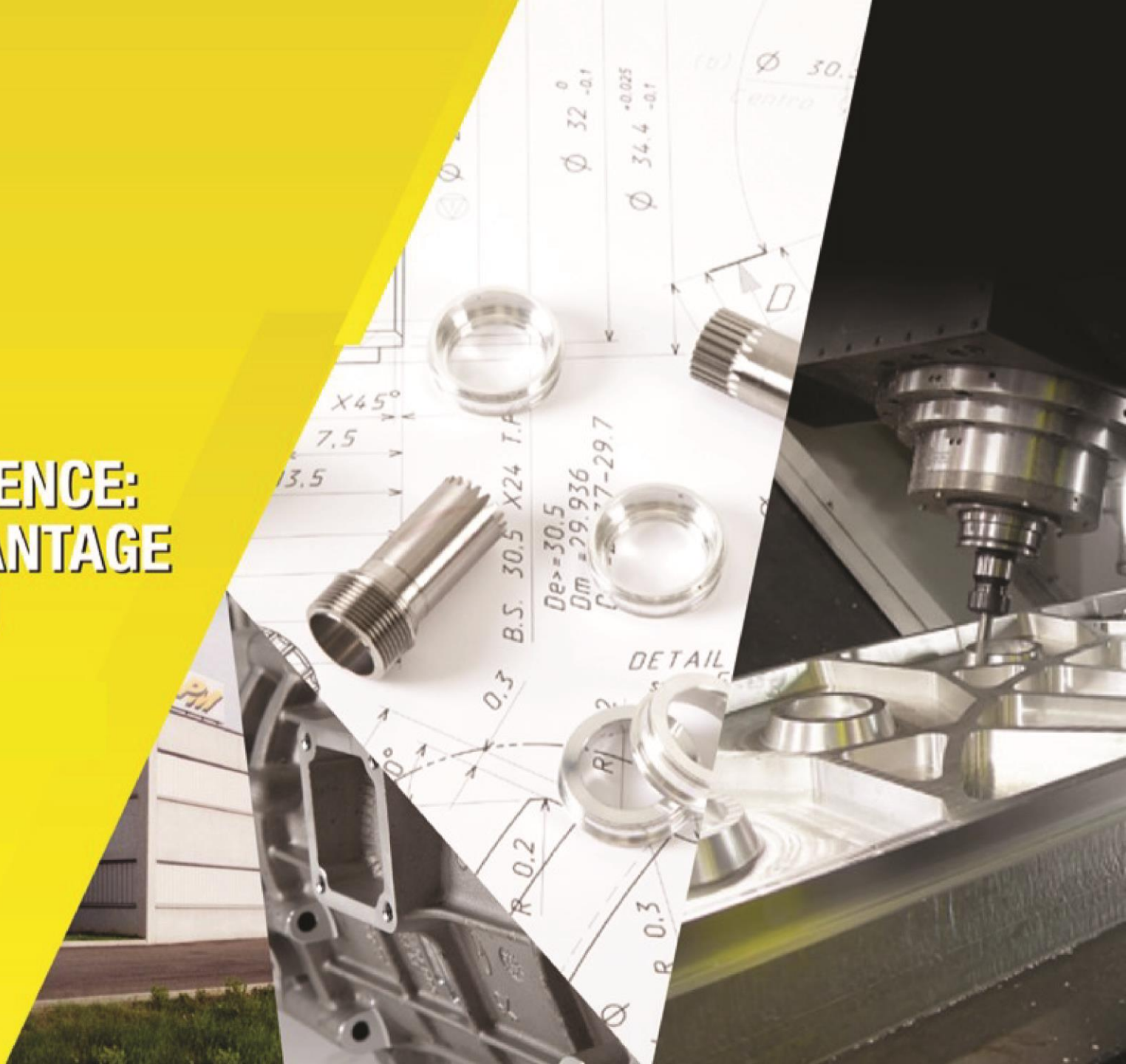
PVM
S.p.A.



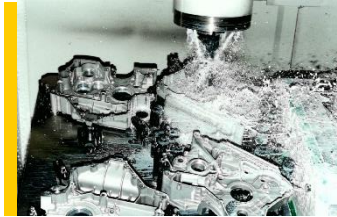
PMI
S.p.A.



**OUR
COMPETENCE:
AN ADVANTAGE
FOR YOU**

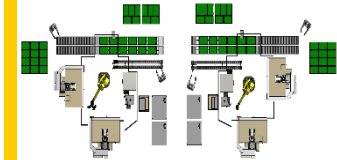


HISTORY TIMELINE



PURCHASE THE 1ST HORIZONTAL MULTIPALLET

The Company strategy moves to the FMS machining centers to open up to the series production.



AUTOMOTIVE SUPPLY

First orders for the Automotive market; new certifications, special systems and dedicated investments: change of corporate culture.



NEW HEADQUARTER

Till now, the company has 7 independent production plants. The new headquarter covers an area of 20,000 sqm, of which 11,000 are covered.

1976

THE BEGINNINGS

The Company was born from a small family business engaged in turning with manual and numerical control machines.



1994

NEW MEMBERS

The company shares are extended to more experienced staff for a strategic collaboration in the medium-long term.



2000

2006

NEW MARKET

New customers in different sectors: diversification of the business; expansion of the market prospects.



2013

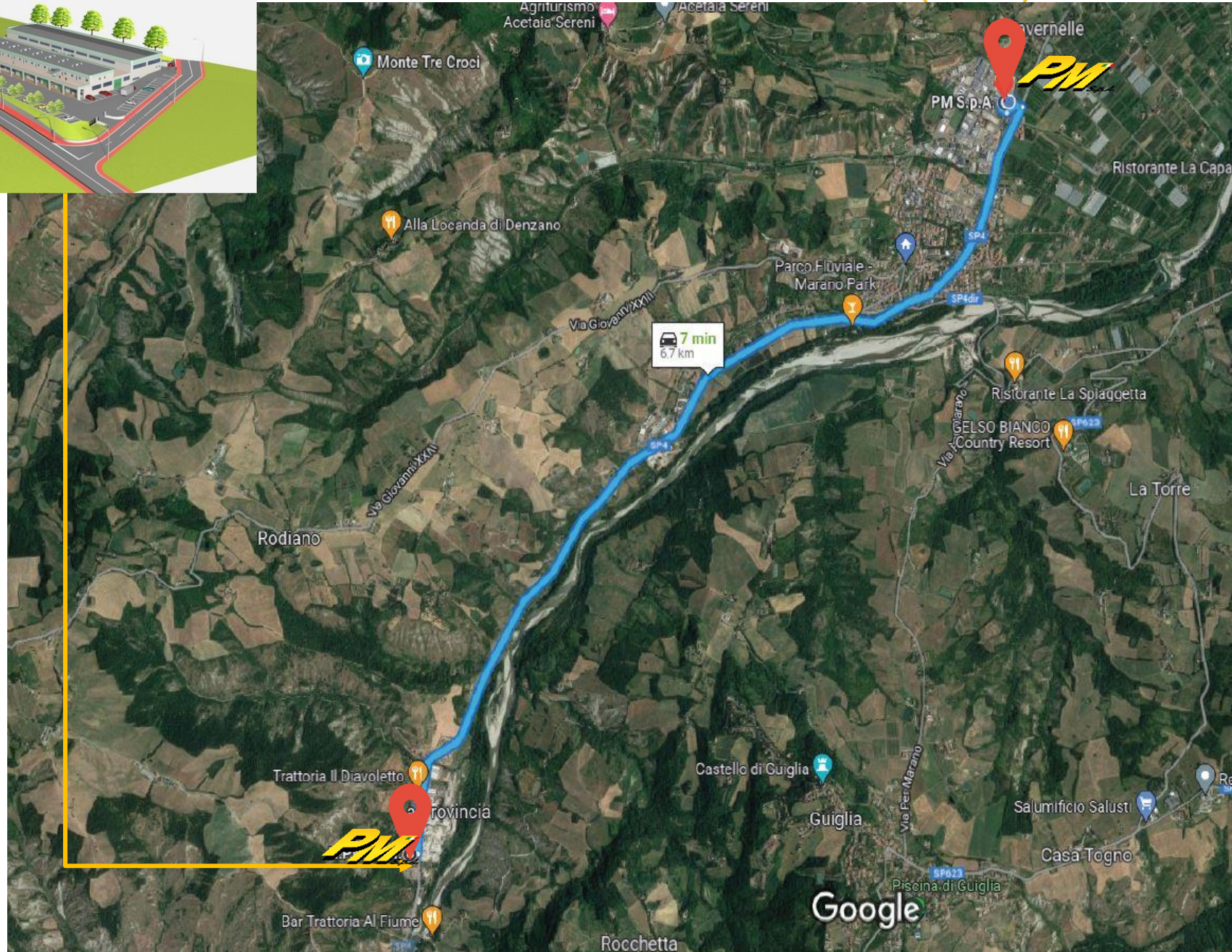
2021

PM'S PRODUCTION PLANTS IN MARANO SUL PANARO (ITALY)

The Company consists of 7 independent production plants for an operating area of 12'000 sqm. The new building extending the main headquarters over an area of 20'000 sqm of which 11'000 are covered.

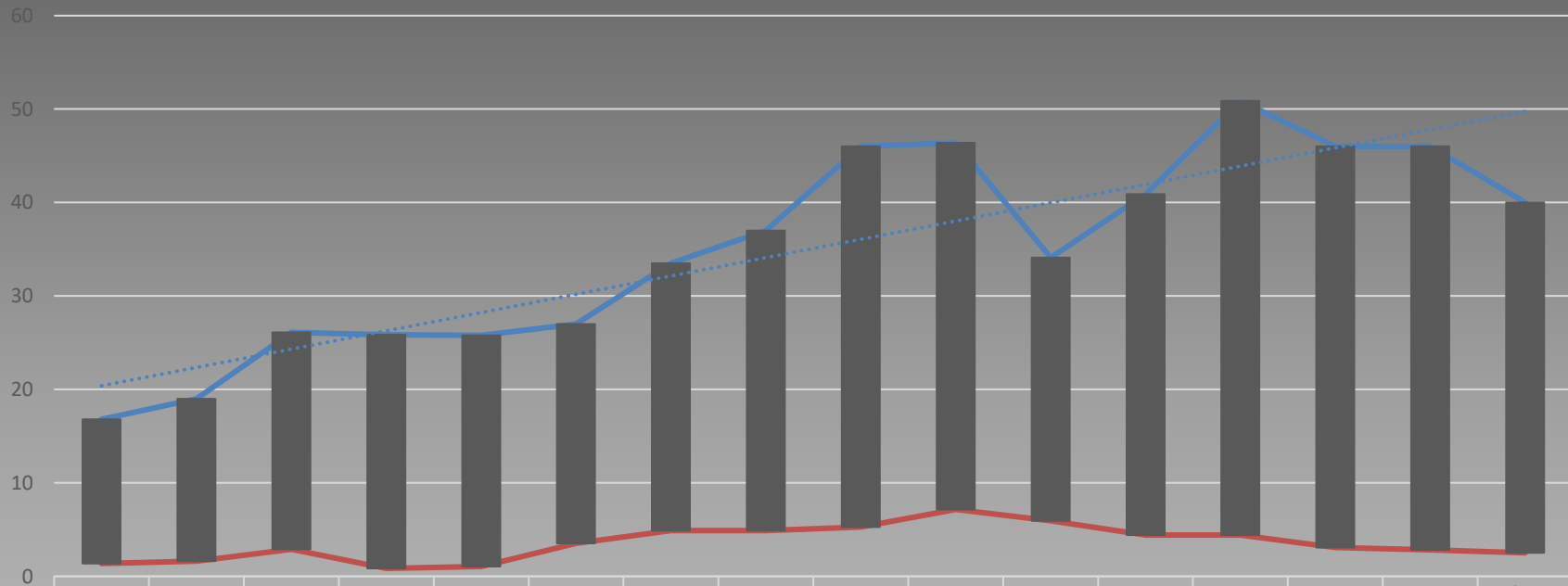


PM'S PRODUCTION PLANT IN CASONA (ITALY)





INVESTMENTS VS TURNOVER



Turnover
2024:
46 M€

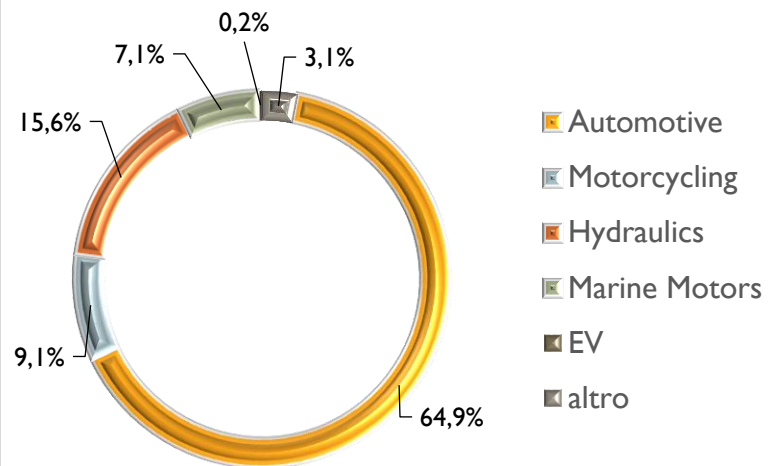
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Estimate d 2025
Turnover [M€]	16,80	19,00	26,12	25,84	25,80	27,00	33,49	37,00	46,00	46,40	34,10	40,89	50,88	46,00	46,00	40,00
Investment [M€]	1,37	1,61	2,88	0,85	1,063	3,534	4,881	4,911	5,266	7,161	5,95	4,424	4,432	3,08	2,833	2,50



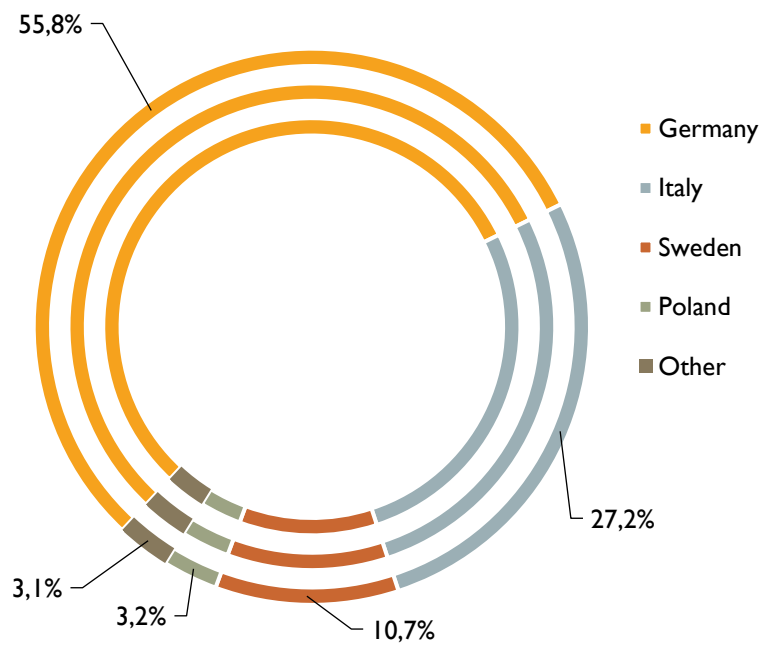
STAFF HUMAN & TECHNICAL RESOURCES

The staff consists of 180 employees: 145 of those in manufacturing, 12 dedicated to the laboratories, quality, environment and safety, 10 in the technical-logistics-production area, 13 dedicated to purchasing, sales and administration processes.

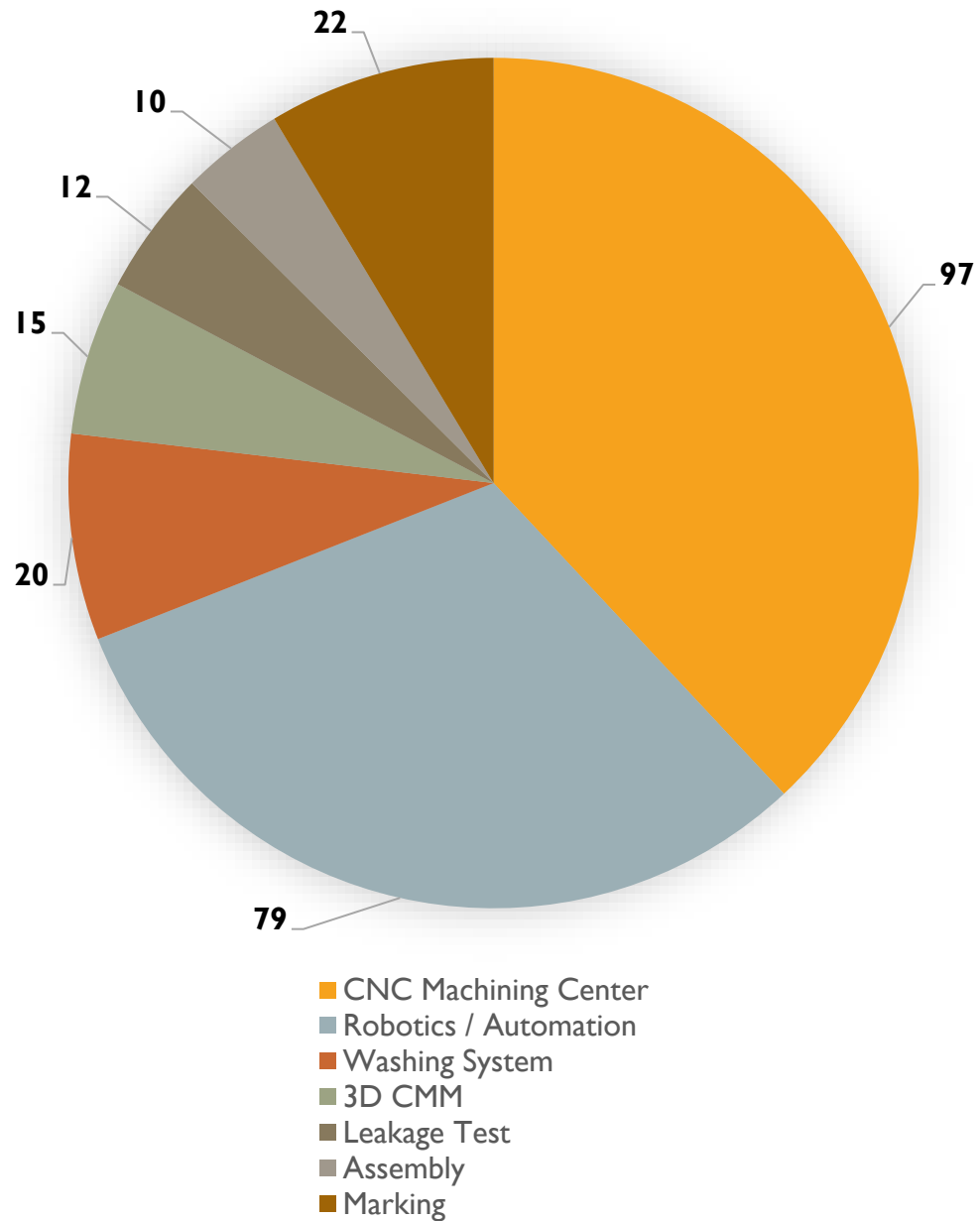
REVENUE BY MARKETS



REVENUE BY REGION



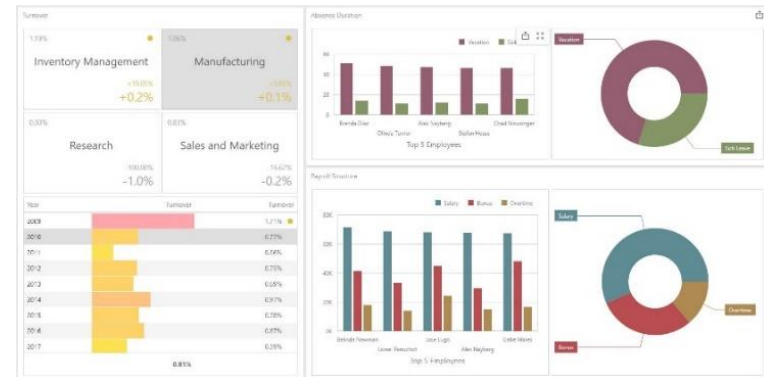
MACHINES & TECHNOLOGY



INDUSTRY 4.0

In the last 4 years PM has strongly invested in the field of digital transformation, developing within it an integrated management system extended to all organizational processes with the aim of:

- To have a centralized and complete control** on quality, environment and safety systems in compliance with the most up-to-date laws and specific requirements.
- Optimize** timing: management, monitoring and analysis.
- Standardization** of control logics of departments, offices and plants.
- Improve** efficiency towards customers and suppliers.
- Sharing** data between the business units of the co even more allowing access to external strategic partners also.





COMPANY PV SYSTEM

PM Headquarter: 862,125 kW

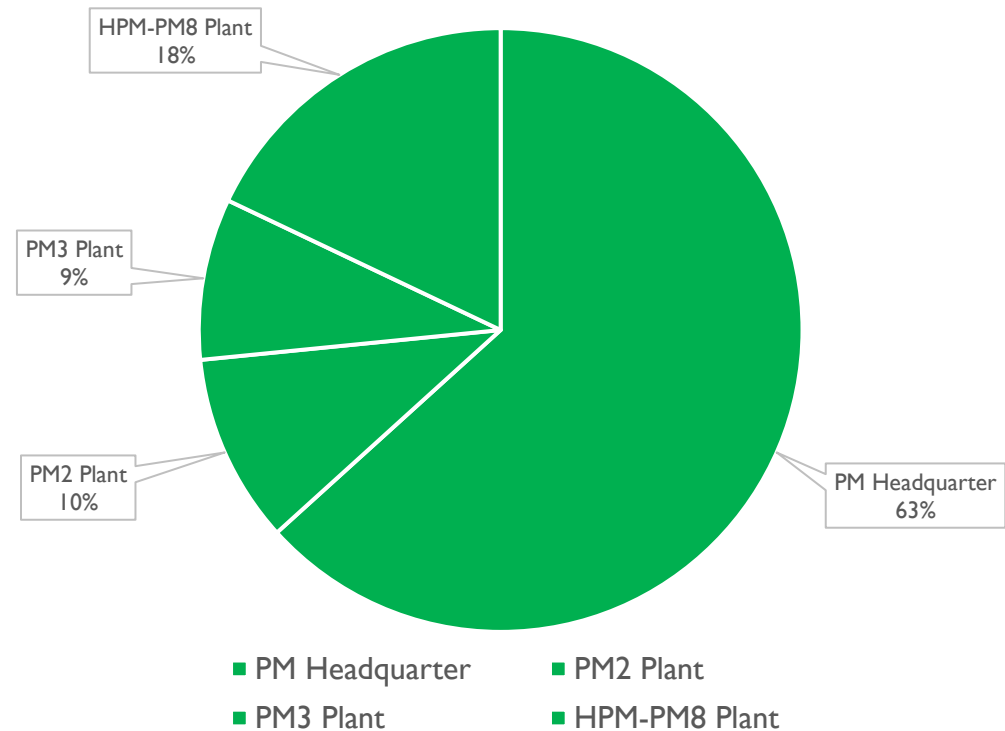
PM2 Plant: 138 kW

PM3 Plant: 117,7 kW

HPM-PM8 Plant: 244,375 kW

Company PV System:

1362,2 kW



CERTIFICATIONS



PM is **DNV** certified for the Management System Certification

PM is **TÜV Italia** certified for the Environmental Management System



In 2024 we have got the update of the certifications of the whole group to the standards **IATF 16949:2016**, **9001:2015 14001:2015**.



CUSTOMERS



AMG



DAIMLER



Campagnolo



MAGNA



GRAZIANO

Transmission Systems



brevini

Fluid Power Systems

BUCHER



Parker
CALZONI



LORD



EVOMEK

SAMP



Bonfiglioli

EATON

SHW

STILL
KION
GROUP

SIRA
INDUSTRIE



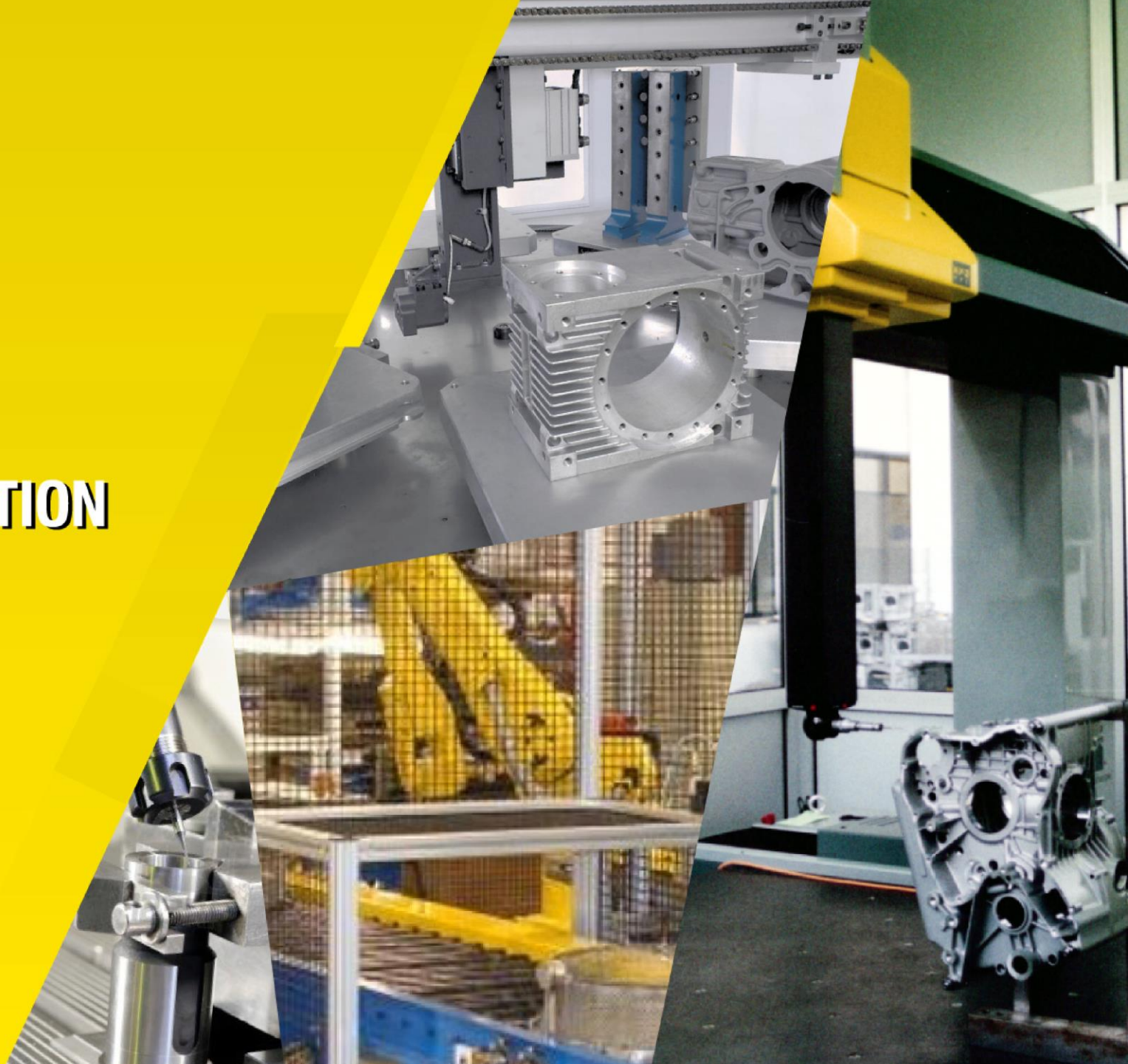
atos®



SIRTEC
POLO DI DOSSO



PRODUCTION



PRODUCTION PROCESSES



CO-DESIGN

- **CO-DESIGN:** Engineering process, with definition of characteristics, such as piece pickup, dimensional tolerances, and geometric tolerances, to adapt the product and its characteristics (rough configuration, machining, assembly requirements, heat and surface treatments) in a perspective of feasibility and cost optimization.

Co-design implies deep analysis, often a complete simulation of the production process using programmed software and algorithms, as well as specific three-dimensional modelling software and tools.

ROUGH

PROTOTYPING

TESTING

MANUFACTURING

ASSEMBLY

- **ROUGH:** The possibility of supplying raw materials (pre-finished) with different surface treatments, such as coating, galvanizing, chroming, cataphoresis and anodizing permits characterising and upgrading the resulting product. The controls dedicated to checking and certifying required technical, chemical and mechanical specifications help guarantee the quality standards to be attained.

The comprehensive know-how acquired over the years involves the use of different raw materials in a whole range of solutions such as aluminium alloys, steel, grey iron, spheroidal iron and titanium and magnesium alloys. The pre-machined products are made using all the casting technologies available today: forging, extrusion, die-casting (including under vacuum), chill casting and sand casting, disamatic.


www.pm-spa.it

PM
SpA

PRODUCTION PROCESSES



CO-DESIGN
ROUGH
PROTOTYPING
TESTING
MANUFACTURING
ASSEMBLY

- **PROTOTYPING:** The company is organized so as to make prototypes and finished sample ranges, inclusive of machining operations and any heat treatments, surface finishes, protective treatments, assemblies and packaging. A process performed in conjunction with the customer, the aim of which, as in the case of co-design, is cost optimization during subsequent mass production. A fundamental service, now quite rightly part and parcel of the production process and which has encountered considerable success in specific sectors such as the automotive and nautical-marine industries.

- **TESTING:** Dedicated areas complete with specific latest-generation instruments for controlling each single work phase, permit checking and complying with required standards. Quality controls on materials, checking contamination parameters, seal tests and automatic selection with class marking, measuring instrument (gauges, P-NP pads, bore meters, micrometers...) and assembly appliance control, are an integral part of the production process.


www.pm-spa.it

PRODUCTION PROCESSES

CO-DESIGN

ROUGH

PROTOTYPING

TESTING

MANUFACTURING

ASSEMBLY

- **MANUFACTURING:** Mechanical machining operations on various types of plants: the company caters to the operating requirements of both small and medium batches, and of fully-automated processes dedicated to individual automotive applications for mass production in very large numbers.

The available machine inventory consists of 4 and 5-axis machines, most of which in FMS (Flexible Manufacturing System) lines with high-capacity tool magazines and robotized systems for tending the material to be worked, special multi-spindle machines, robotized production islands, washing plants of various kinds (with single drum, multi drum with Cartesian robot and multi drum with anthropomorphic robot and high pressure).

The management of the toolroom, which now counts a total of over 8000 codes, is entrusted to a specific department of the company, equipped with automatic warehouses, tool presetting instruments, heat and hydraulic keying appliances and correct-balancing devices.

- **ASSEMBLY:** To cater to what is an increasingly more focused and discerning market, for some years now the company has completed its services by dedicating various departments and production islands to the assembly of component parts after machining operations, including for complex products or with special characteristics.

A delicate and highly-responsible, but also very rewarding process which has also resulted in building specific machinery and appliances (manual or CNC) for the different types of assembly operations. The assembled products then undergo final testing and once packed and delivered can be installed on their applications.




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PM
S.p.A.

MATERIAL AND CASTING PARTNERS



HPDC (High Pressure Die Casting)



LPDC (Low Pressure Die Casting)



FORGING



GRAVITY DIE CASTING



SAND CASTING



SHELL CASTING



EXTRUSION



DISA



Materials	Specs
CAST IRON	EN GJS 500-7
CAST IRON	EN GJS 600-3
CAST IRON	EN-GJL-200 / 250
STEEL	I ISMnPb32
STEEL	I ISMnPb37
STEEL	I0SPb20
STEEL	36SMnPb14
STEEL	I6CrNi4
STEEL	I00Cr6
STEEL	39NiCrMo3
STEEL	C12/C40/C45
STEEL	I6MnCr5
STEEL	20 MnCr5
ALUMINIUM ALLOY	EN AC 42000 / 42100
ALUMINIUM ALLOY	EN AC 46000 / 46400
ALUMINIUM ALLOY	EN AW 6110
ALUMINIUM ALLOY	EN AW 6082
BRASS	CW614N

SPECIFIC PROCESSES

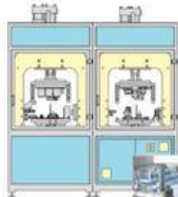


- WASHING TYPES:

- single rack systems.
- multi-racks systems.
- palletizing system with Cartesian robots at high pressure.
- rotary-racks systems with vacuum air dryer.



- **VERIFICATION OF CONTAMINATION** PM set up a dedicated room for this type of testing.



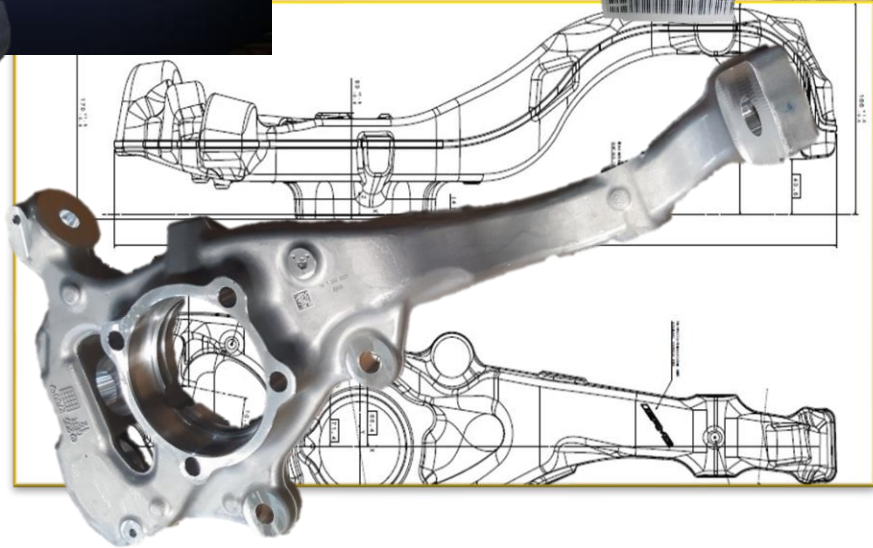
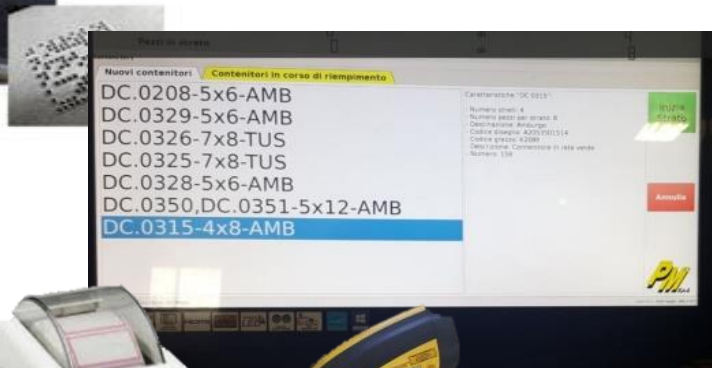
- **LEAKAGE TEST** Many years of experience into the leakage test in air and water. In collaboration with the Department of Engineering "Enzo Ferrari", PM has also developed the leakage test in vacuum.



- **VERIFICATION OF MATERIAL** PM uses an instrument called quantometer for the chemical analysis of raw materials.

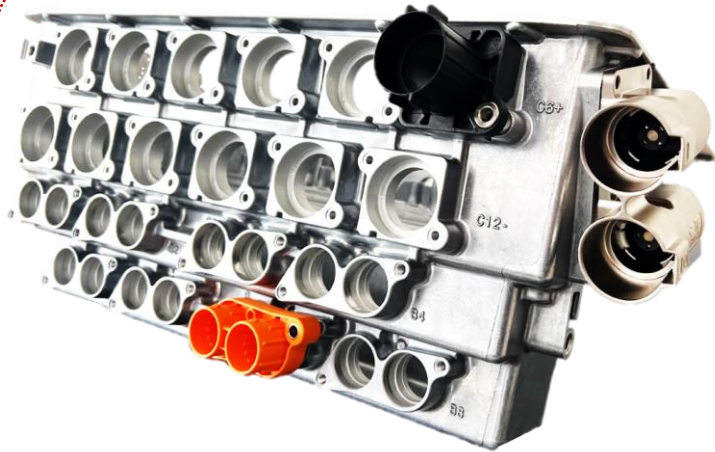
SPECIFIC PROCESSES

TRACKING PRODUCT Traceability with coding systems evolved. (ex: Data Matrix)



PRODUCTION FOCUS





<i>Name</i>	Housing
<i>Reference Vehicle</i>	MAN Truck
<i>Material</i>	Aluminium Alloy
<i>Volume</i>	20'000 Pcs/Year



Name **Gearbox & Clutch Housing
M66 Project**

Material Aluminium Alloy

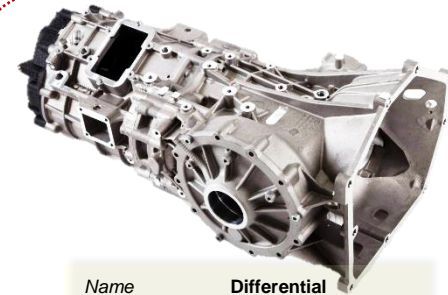
Volume 40'000 Pairs/Year



Name **Differential transmission casing
Clutch**

Material Aluminium Alloy

Volume 8'000 Pcs/Year



Name **Differential
transmission casing
Clutch**

Material Aluminium Alloy

Volume 4'000 Pcs/Year
--out of production--



Name **Differential transmission
casing**

*Reference
Vehicle* Maserati Granturismo

Material Aluminium Alloy

Volume 1'000 Pcs/Year



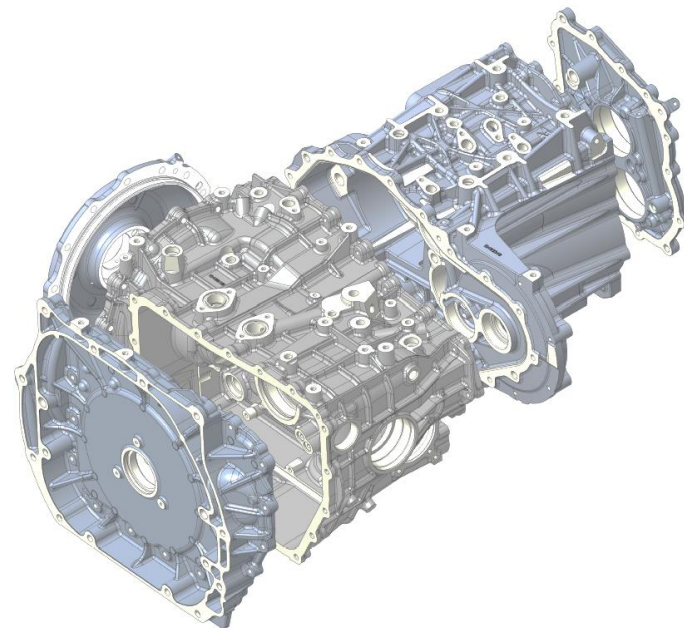
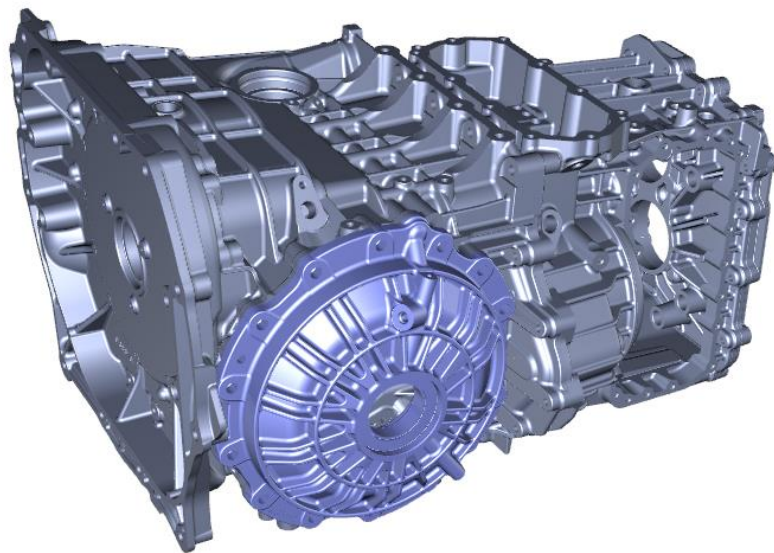
Name **Differential transmission
casings**

*Reference
Vehicle* Aston Martin DB11
Aston Martin Vantage

Material Aluminium Alloy

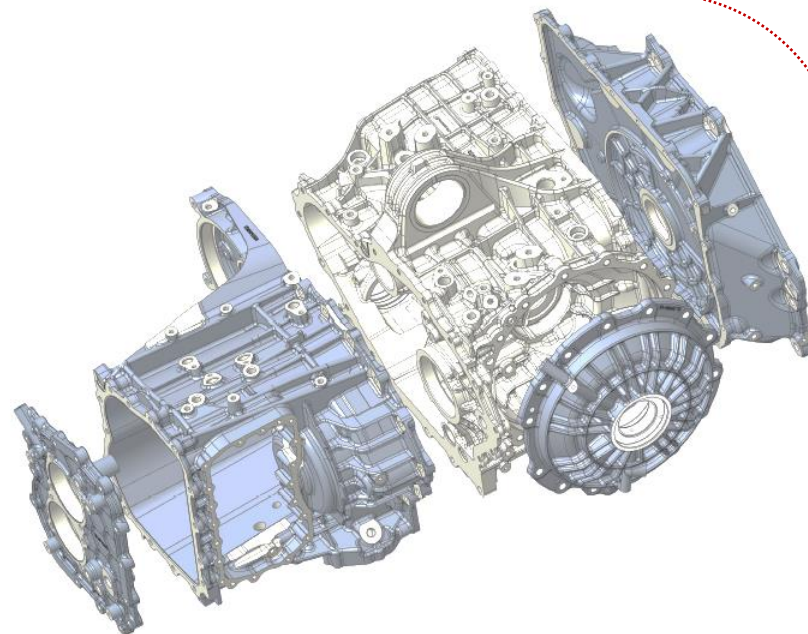
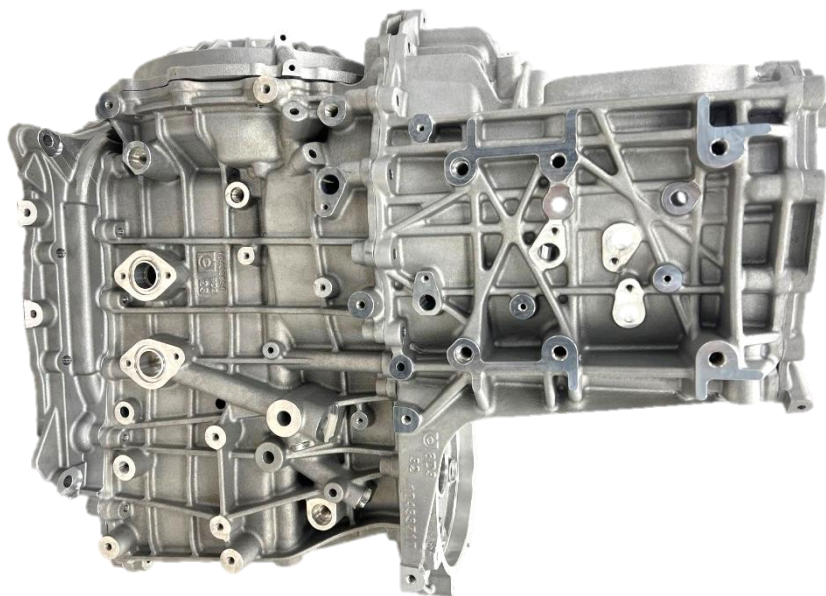
Volume 7'000 Pcs/Year





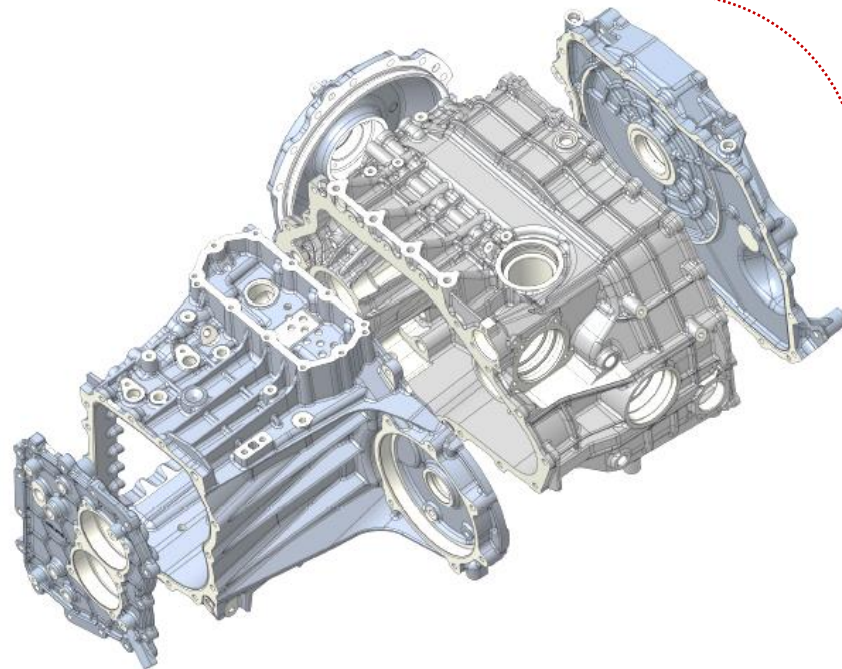
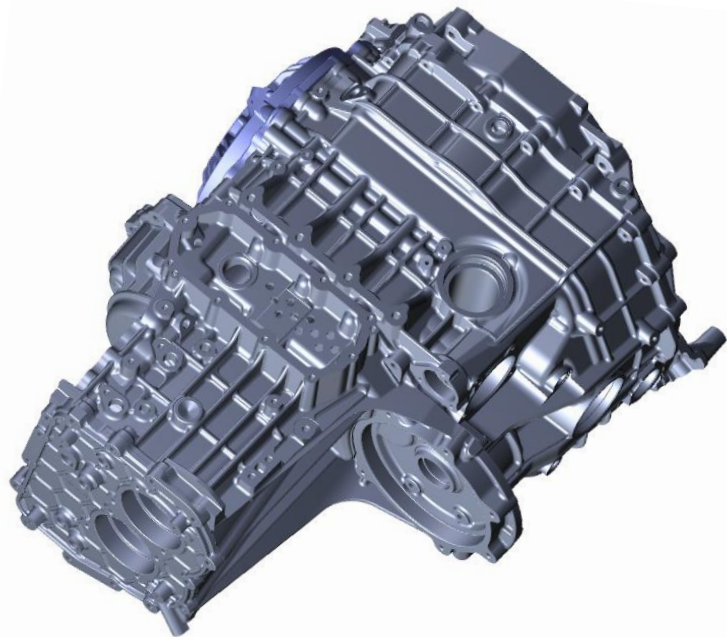
Parts Description	Weight [kg]	Dimension	Material	Overall Size	Total Weight Assembly [kg]
DIFFERENTIAL COVER	2,89	315 X 80	AL-SI-MG		
REAR COVER	2,39	265 X 321 X 60	AL-SI-MG		
CLUTCH	20,26	540 X 355 X 300	AL-SI-MG		
GEARBOX	15,4	574 X 338 X 306	AL-SI-MG		
FRONT CASING	5,41	510 X 395 X 51	AL-SI-MG		
				581 X 403 X 683	46,35





Parts Description	Weight [kg]	Dimension	Material	Overall Size	Total Weight Assembly [kg]
DIFFERENTIAL COVER	2,89	315 X 80	AL-SI-MG		
REAR COVER	2,39	265 X 321 X 60	AL-SI-MG		
CLUTCH	21,8	554 X 455 X 300	AL-SI-MG		
GEARBOX	13,7	560 X 306 X 340	AL-SI-MG		
FRONT CASING	2,45	525 X 90,9 X 360	AL-SI-MG		
				581 X 470 X 723	43,23





Parts Description	Weight [kg]	Dimension	Material	Overall Size	Total Weight Assembly [kg]
DIFFERENTIAL COVER	2,89	315 X 80	AL-SI-MG		
REAR COVER	2,39	265 X 321 X 60	AL-SI-MG		
CLUTCH	20,26	540 X 355 X 300	AL-SI-MG		
GEARBOX	15,4	574 X 338 X 306	AL-SI-MG		
FRONT CASING	5,98	520 X 386 X 62,4	AL-SI-MG		
				588 X 401 X 694	46,92



AUTOMOTIVE TRANSMISSION AND CLUTCH



Name **Main hub**

Material Steel

Volume Assy stator and oil distribution sleeve + Main hub **group** 10'000 Pairs/Year

Name **Assy stator and oil distribution sleeve**

Material Steel



Name **Transmission Casing**

Material Aluminium

Volume Transmission Housing:
2'500 Pcs/Year



Name **Clutch Group**

Reference Vehicle BMW X6 Hybrid
Mercedes ML Hybrid

Material Cast Iron

Volume 2'000 Pcs/Year
--out of production--



Name **Plate Reinforce Transmission**

Reference Vehicle Fiat Ducato

Material Die-casting Aluminum

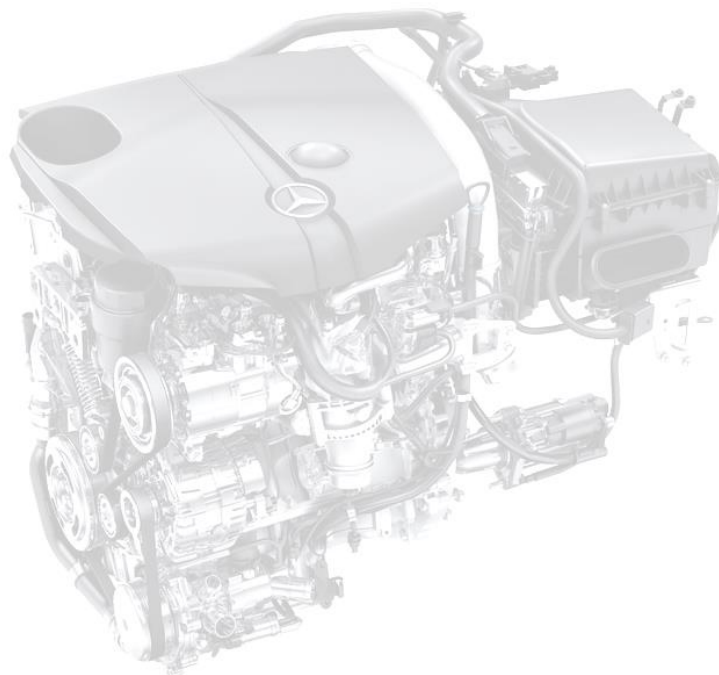
Volume 100'000 Pcs/Year



AUTOMOTIVE ENGINE COMPONENTS



Name	OM 654 Diesel Engine Project- Bearing Caps
Reference Vehicle	Mercedes cars
Material	GGG600
Volume	Ca. 2'500'000 Pcs/Year in series



Name	M256 MOPF Petrol Engine Project- Bearing Caps
Reference Vehicle	Mercedes cars
Material	GGG600
Volume	Ca. 900'000 Pcs/Year

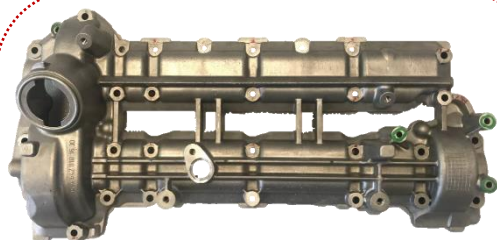


Name	Carrier Mech. and Electr. Träger)
Reference Vehicle	Mercedes cars
Material	Aluminum alloy
Volume	500'000 Pcs/Year

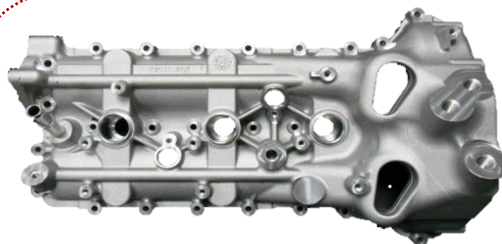


AUTOMOTIVE

ENGINE COMPONENTS CYLINDERHEAD COVERS – CASE CHAIN



Name	Cylinderhead covers
Material	Die-casting Aluminum
Volume	170'000 Pcs/Year



Name	Cylinder head covers
Reference Vehicle	Honda NSX
Material	Aluminum alloy

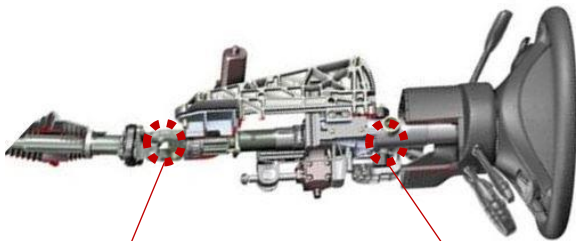


Name	Case chain
Reference Vehicle	Honda NSX
Material	Aluminum alloy



AUTOMOTIVE

STEERING WHEEL – STEERING COLUMN WHEEL HUB PARTS – REAR KNUCKLE



<i>Name</i>	--Steering Wheel--
<i>Reference Vehicle</i>	Mercedes Cars
<i>Material</i>	Aluminum alloy
<i>Volume</i>	150'000 Pcs/Year



<i>Name</i>	--Steering Coloumn
<i>Reference Vehicle</i>	Mercedes Cars
<i>Material</i>	Aluminum alloy
<i>Volume</i>	100'000 Kits/Year



Microlino **CECOMP**



<i>Name</i>	Rear Knuckle
<i>Reference Vehicle</i>	Microlino
<i>Material</i>	Aluminium
<i>Volume</i>	10'000 Pcs/Year

TAZZARI **EV**
ZERO EMISSION MOBILITY

AUTOMOTIVE WHEEL HUB PARTS – FRONT & REAR KNUCKLE



<i>Name</i>	Front Knuckle
<i>Reference Vehicle</i>	AMG Cars
<i>Material</i>	Aluminum alloy
<i>Volume</i>	70'000 Kits/Year



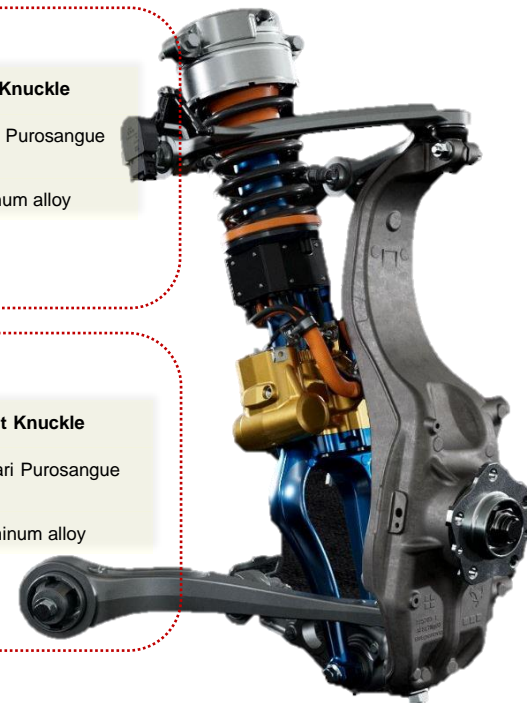
<i>Name</i>	Rear Knuckle
<i>Reference Vehicle</i>	AMG Cars
<i>Material</i>	Aluminum alloy
<i>Volume</i>	30'000 Kits/Year



<i>Name</i>	Front Knuckle
<i>Reference Vehicle</i>	Ferrari Purosangue
<i>Material</i>	Aluminum alloy

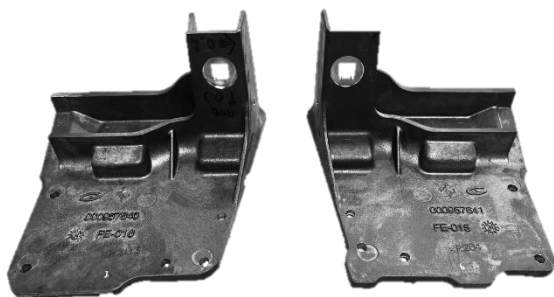


<i>Name</i>	Front Knuckle
<i>Reference Vehicle</i>	Ferrari Purosangue
<i>Material</i>	Aluminum alloy



AUTOMOTIVE

FRAME- CHASSIS PARTS



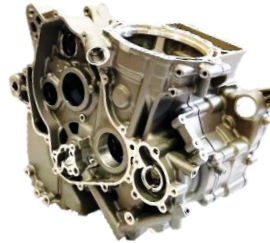
<i>Name</i>	Frame-Chassis Supports
<i>Reference Vehicle</i>	Ferrari f167-f169 projects
<i>Material</i>	Aluminium Alloy
<i>Volume</i>	5'000 Pcs/Year on 7 codes

MOTORCYCLING ^{RACING}

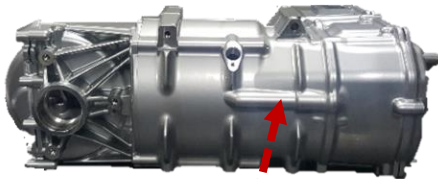


PM has been committed for over 20 years to the World Superbike Championship as a partner in development and technical support. PM has been working together with the Ducati Team since the founding of the MotoGP project.

MOTORCYCLING ENGINE CRANKCASE



<i>Name</i>	Engine Crankcase
<i>Reference Vehicle</i>	Ducati Motor Holding DMH
<i>Material</i>	Die-Cast Aluminium
<i>Volume</i>	20'000 Engine/Year



Water Jacket Case
inside the engine

<i>Name</i>	Engine crankcase for electric motorcycle
<i>Reference Vehicle</i>	Harley Davidson LiveWire
<i>Material</i>	Aluminium Alloy
<i>Volume</i>	4'000 Kits/Year on 6 codes

- Cover Gearbox
- Housing Gearbox
- Housing E-Motor
- Water Jacket Case
- Housing Inverter
- Cover Inverter



MOTORCYCLING

TIMING LAY SHAFT – ROCKER SHIM
WHEEL SPINDLE - REAR SWINGARM



<i>Name</i>	Timing lay shaft
<i>Reference Vehicle</i>	All Ducati models
<i>Material</i>	Tempered steel
<i>Volume</i>	30'000 Pcs/Year



<i>Name</i>	Rocker shim
<i>Reference Vehicle</i>	All Ducati models
<i>Material</i>	Steel
<i>Volume</i>	140'000 Pcs/Year



<i>Name</i>	Wheel spindle – Front wheel shaft
<i>Reference Vehicle</i>	Ducati Monster
<i>Material</i>	Aluminium shell
<i>Volume</i>	8'000 Pcs/Year



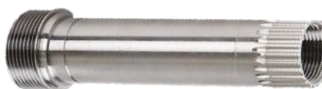
<i>Name</i>	Rear swingarm
<i>Reference Vehicle</i>	BMW R1200 GS
<i>Material</i>	Aluminium shell
<i>Volume</i>	20'000 Pcs/Year



CYCLING PARTS RACING



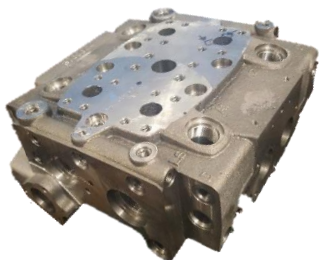
PM as official supplier has contributed to affirming Campagnolo all over the world: a recognized brand of cycle racing.



Campagnolo



HYDRAULIC DISTRIBUTORS – PUMP VALVE BODY - BRASS GLANDS



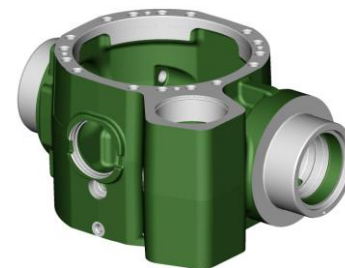
Parker



BUCHER



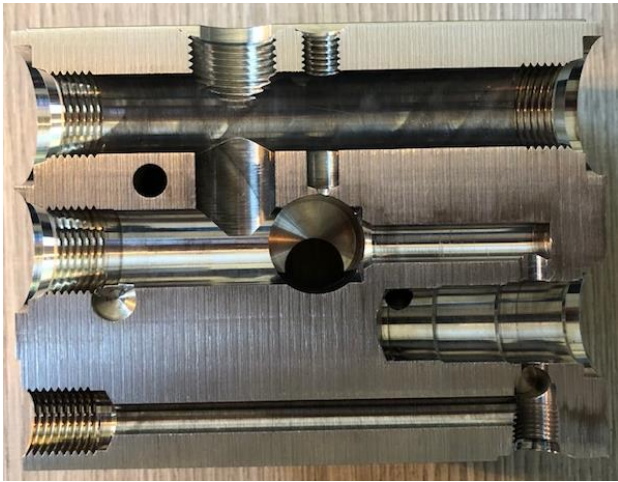
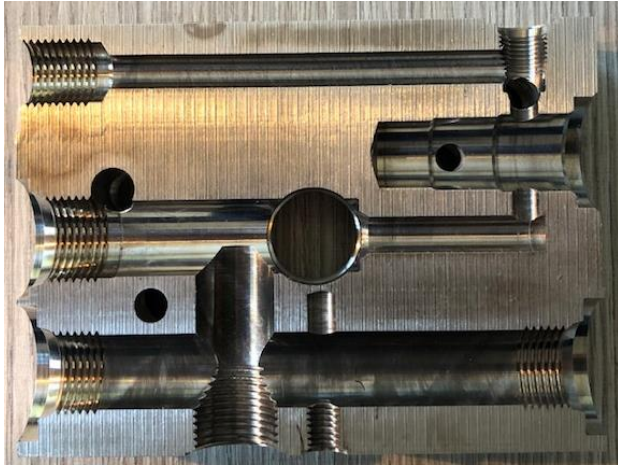
SHW



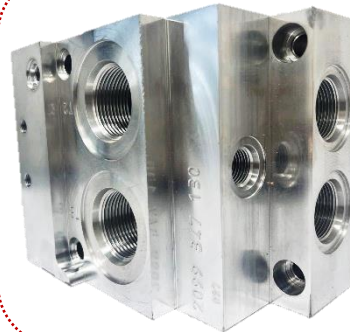
HYDRAULIC DISTRIBUTORS – PUMP VALVE BODY



Critical Tolerances: section parts



BUCHER



We perform the check with:

Pneumatic Marposs Station

MARPOSS DUO AIR

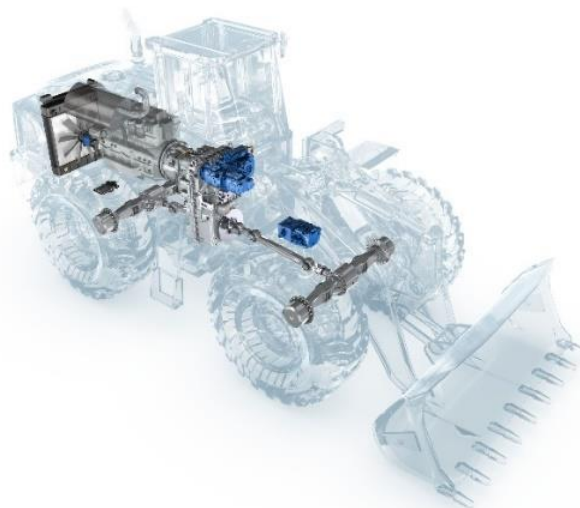


MEASUREMENT	UNIT	VALUE	TOLERANCE	STATUS
16.5020		8.0034		
0.0019		0.0022		
16.5019		8.0031		
0.0026		0.0014		
16.5019		16.0020		
0.0023		0.0015		
8.0030		16.0016		
0.0017		0.0020		

Roundness Equipment



HYDRAULICS DISTRIBUTORS – VALVES – ARMS



<i>Name</i>	Housing / Valve Body
<i>Reference Vehicle</i>	Earth-Moving Machinery
<i>Material</i>	GJL / GJS
<i>Volume</i>	4'000 Pcs/Year



<i>Name</i>	Valve Body
<i>Reference Vehicle</i>	Earth-Moving Machinery
<i>Material</i>	GJV – Cast Iron
<i>Volume</i>	3'000 Pcs/Year



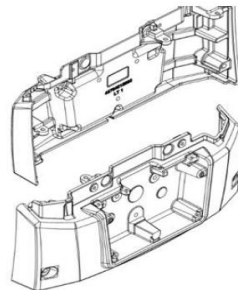
<i>Name</i>	Turned Flange
<i>Reference Vehicle</i>	Earth-Moving Machinery
<i>Material</i>	Aluminium alloy
<i>Volume</i>	20'000 Pcs/Year



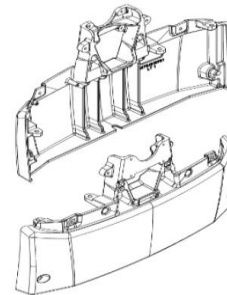
<i>Name</i>	Arm – Modular Axle
<i>Reference Vehicle</i>	Earth-Moving Machinery
<i>Material</i>	GJS 500 – Sferoidal Cast Iron
<i>Volume</i>	10'000 Pcs/UYear on 2 codes



FORKLIFTS



<i>Name</i>	EXV 14-20
<i>Reference Vehicle</i>	Transpallet / Lift / Forklifts
<i>Material</i>	Cast Iron
<i>Volume</i>	5'000 Pcs/Year



<i>Name</i>	EXV 14-20
<i>Reference Vehicle</i>	Transpallet / Lift / Forklifts
<i>Material</i>	Cast Iron GJS-400-15
<i>Volume</i>	250 Pcs/Year



<i>Name</i>	Arm Tube body assembly
<i>Reference</i>	Industrial Robots Automation Technology
<i>Material</i>	Aluminium alloy
<i>Volume</i>	100 Pcs/Year

<i>Name</i>	Arm Tube
<i>Reference</i>	Industrial Robots Automation Technology
<i>Material</i>	Aluminium alloy
<i>Volume</i>	1'000 Pcs/Year



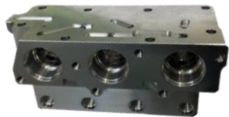
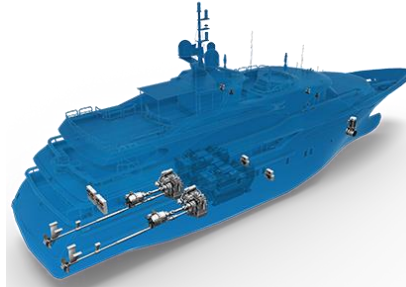
<i>Name</i>	Main Housing & Covers Assembly
<i>Reference</i>	Industrial Robots Automation Technology
<i>Material</i>	Spheroidal Cast Iron EN-GJS 400
<i>Volume</i>	4'500 Pcs/Year



<i>Name</i>	Lower & Upper Gearbox Housings
<i>Reference</i>	Industrial Robots Automation Technology
<i>Material</i>	Aluminium alloy
<i>Volume</i>	600 Pcs/Year

MARINE TRANSMISSION

ENGINE CONTROL BLOCK
- STERNDRIVES - HOUSINGS
AND COVERS



Name Sterndrives, Housings & Covers,
Engine Control Block for Marine
Transmission

**Reference
Vehicle** Yacht
Vessel

Material Aluminium Alloy

Volume 60'000 Pcs/Year on 50 codes





<i>Name</i>	Housing
<i>Reference</i>	Energy Industry
<i>Material</i>	Aluminium
<i>Volume</i>	1000 Pcs/Year



<i>Name</i>	Operating Mechanism Housing
<i>Reference</i>	Energy Industry
<i>Material</i>	Aluminium
<i>Volume</i>	500 Pcs/Year

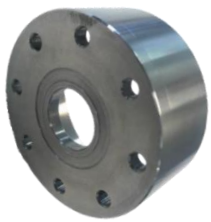
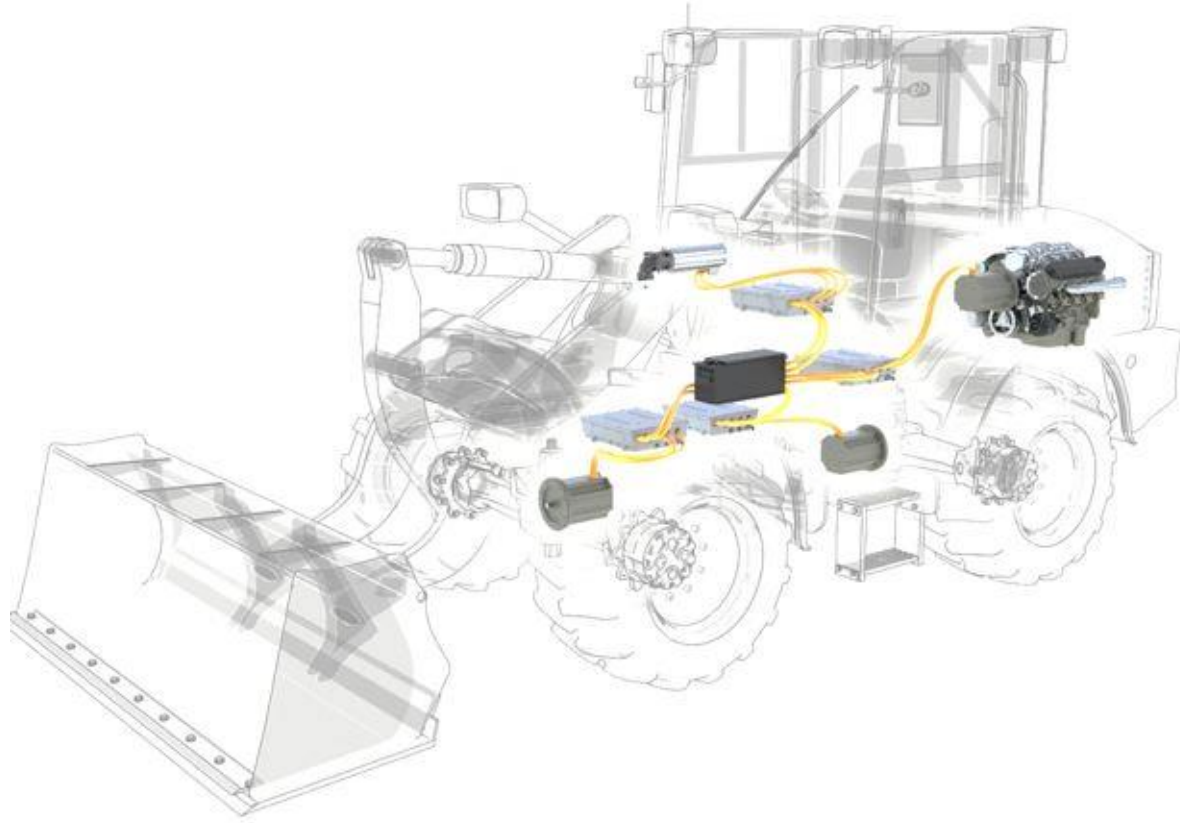


<i>Name</i>	Housing
<i>Reference</i>	Energy Industry
<i>Material</i>	Aluminium
<i>Volume</i>	500 Pcs/Year



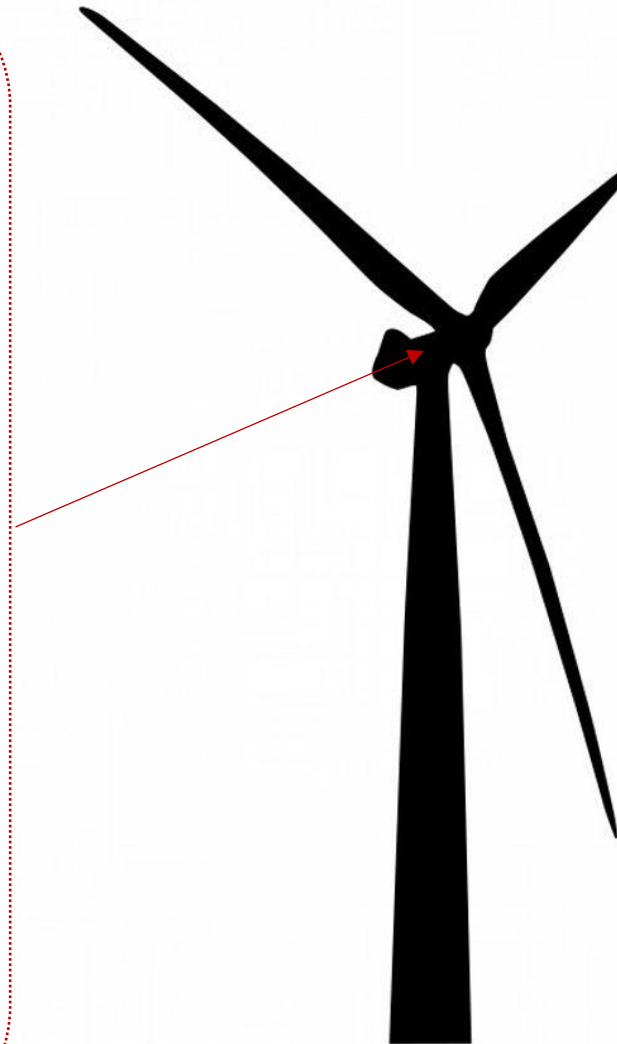
ELECTRIC

PARTS FOR ELECTRIC
VEHICLES (EVs)



WIND ENERGY

ENERGETICS PARTS



 Bonfiglioli



SOLAR POWER COMPONENTS FOR COMMERCIAL PV SYSTEMS



<i>Name</i>	Housings for commercial PV Systems
<i>Reference</i>	Solar Power Industry
<i>Material</i>	Aluminium
<i>Volume</i>	150'000 Pcs/Year on 4 codes
<i>Size</i>	L x W x H [mm] 520 x 400 x 280 700 x 500 x 150



PHILOSOPHY



Innovation, Training, Research: the three pillars of our success.

Innovation is a crucial factor for maintaining a competitive edge on today's increasingly more global and competitive market. In the metalworking sector, the company boasts the most advanced technologies and the most flexible production systems currently available on the market, to provide high-performance and truly competitive solutions.

Training affects various aspects of our business activities: younger staff members work alongside those with more experience, so they really learn the job and acquired experience is not lost. Staff training is targeted both from a technical viewpoint and from that of workers' safety so workers are independent and, above all, safe in whatever situation they have to operate.

Research is consistent with the requests of our customers. Our flexibility also consists in taking care of problems and finding inexpensive solutions, but without ever scrimping on quality, which is always of the highest quality.

The company involves the younger generations thanks to ongoing cooperation with local high schools and the university of Modena and Reggio Emilia.


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M.M. info@pm-spa.it
T. +39 059 9772700 - F. +39 059 705118

Via Pietro Miani, 14
41054 Marano sul Panaro (MO) - ITALY