



**ELLE EMME**

MECCANICA DI PRECISIONE

INTEGRATED AND CUSTOMIZED/  
**MECHANICAL SOLUTIONS**  
/FOR INDUSTRIAL APPLICATIONS



## CONTENTS:

ELLE EMME/BEYOND MACHINING

PROJECT/INTEGRAL SOLUTION

FITTING / ASSEMBLY

FLEXIBILITY / GLOBAL PROFICIENCY

INTEGRATED CONTROL/

INDUSTRY 4.0 – THE FACTORY OF THE FUTURE/

WORK IN PROGRESS/

MACHINING / SERVICES

CONTACTS/

02

05

08

12

17

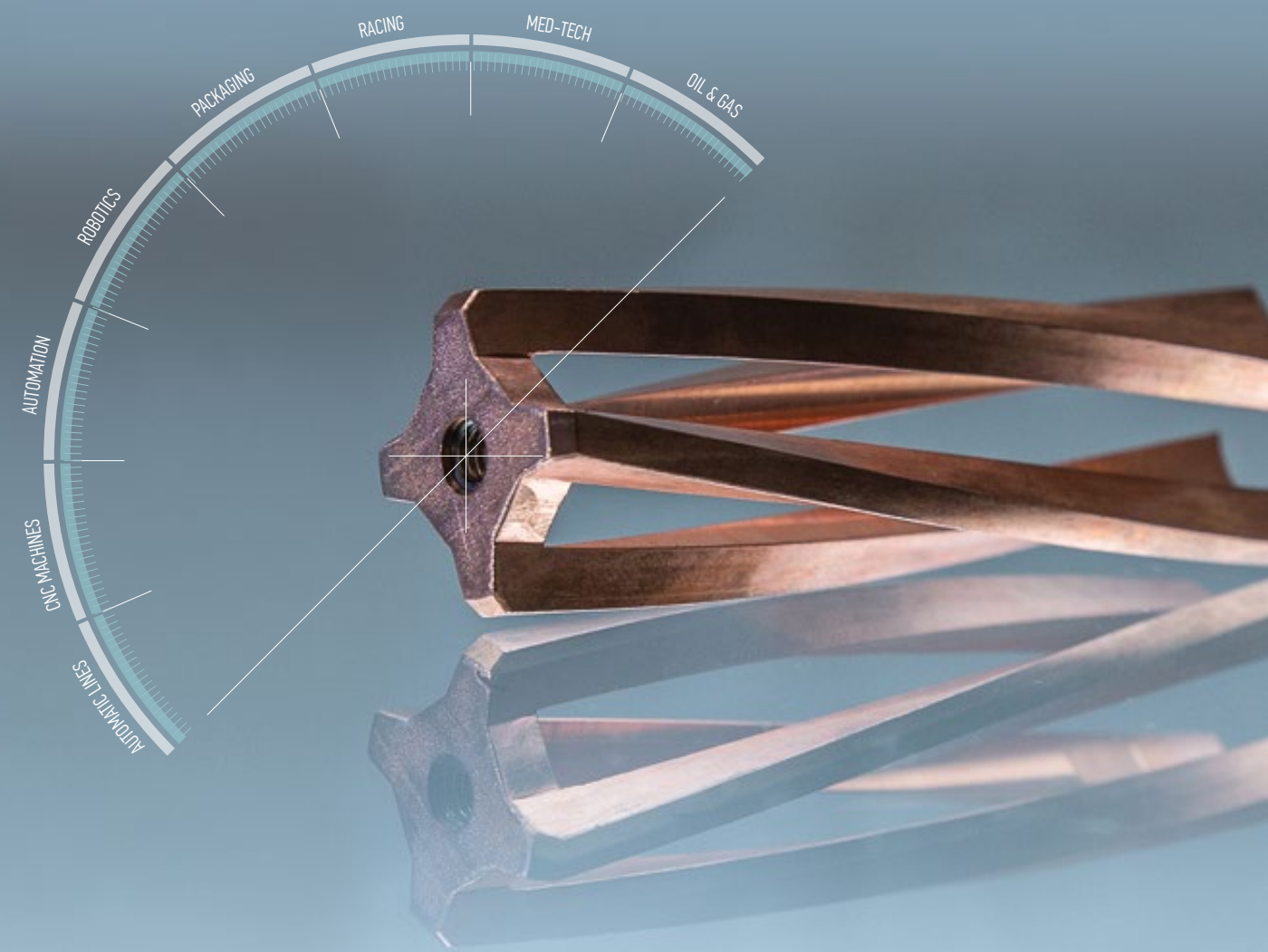
19

20

23

24

## SECTORS/SOLUTIONS





# ELLE EMME/**BEYOND** MACHINING

OUR UNUSUAL APPROACH TO MACHINING: **WE HEAR YOU OUT.** DIALOGUE AND OUR KNOW-HOW ARE THE TOOLS TO **DELIVER EXCELLENCE.**

Elle Emme was established in 1974 as a precision machining company providing complex solutions of great added value. Over the years, the company has constantly evolved specializing in highly specific sectors. Today, beyond being subcontractors:

- + ELLE EMME is a project PARTNER
- + ELLE EMME is strategic outsourced machining



Plastic blow moulding group







Although we cannot show the entire machine, this detail reveals our skills: we can work with any material, thermal treatment and galvanized finishes to produce complex applications

## PROJECTS/INTEGRAL SOLUTIONS

FROM YOUR PROJECTS AND THROUGH DIALOGUE,  
WE CAN MANUFACTURE **COMPLEX TESTED MACHINING GROUPS**

Our outstanding craftsmanship enables us to manufacture **complex machining groups**.  
After careful analysis of your project,:

- + we select materials, production cycles, surface treatment and coating and control panels.
- + each individual part is manufactured at our premises
- + we manage all the outsourcing processes
- + we acquire customized parts (gears, engines, joints)
- + we acquire complementary parts from metalworking, foundry and plastic material processing
- + we assemble and test.

**OUR CLIENTS "FOCUS" ON DESIGN. ELLE EMME TAKES CARE OF THE REST**

mini self-centering chuck – the clamps are turned and  
EDM (Electrical Discharge Machining) finished





automated systems for quality control (pharmaceutical industry)

Automotive sector – gear box showing various finished stages:

- ROUGHING
- SEMI-FINISHING
- FINISHING

1

3

2



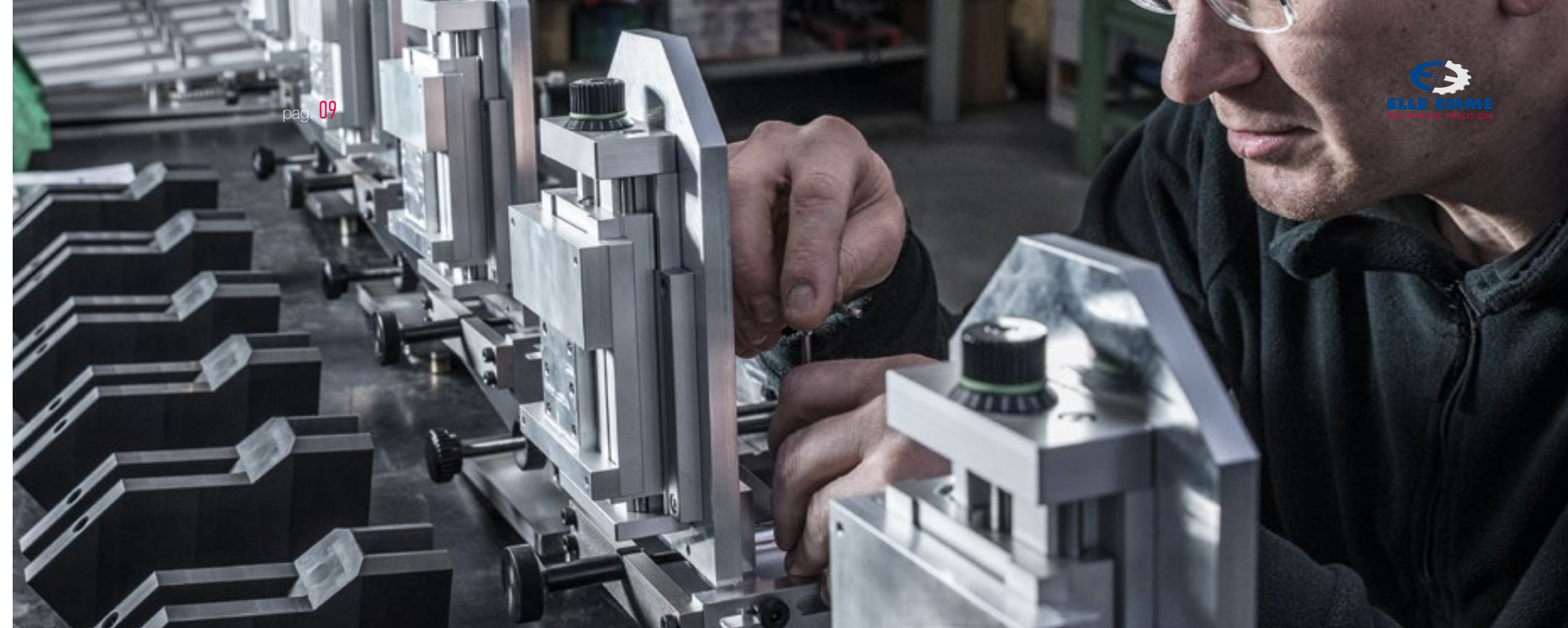
# FITTING/ASSEMBLY

WE MAXIMISE OUR EXPERTISE IN MANUAL FINISHING,  
FITTING AND ASSEMBLY:  
HERE **EXPERIENCE MAKES ALL THE DIFFERENCE**

We have always stood out from other machining companies for our complete range of services.  
Our assembly department is at your disposal with an organized section with full-time operators specialized in:

- + high-quality manual finishes
- + laser marking
- + fitting and assembly
- + functional testing
- + declaration of compliance (upon request)

Grip and manipulation group of an automatic line  
(pharmaceutical industry)







Magnetic inducer — the complexity of machining a component is not only given by its shape, but also by its relief details. Milling experience is essential to avoid vibrations.

pag. 10



Final skim of tolerated dimensions after anodizing



pag. 11

Ergal spindle body, roll finishing hole after milling



# FLEXIBILITY / GLOBAL PROFICIENCY

FROM INDIVIDUAL PARTS TO SMALL-MEDIUM SERIES  
WE ARE ORGANIZED TO PROVIDE **HIGHLY FLEXIBLE SOLUTIONS**

Over the years, we have achieved **total control of materials**, from high-alloyed steel to light alloys and polymers. Unusual shapes hardly deter us, as complex geometrical components challenge our skills, knowledge and desire for improvement.

We provide our customers with all they need starting from these strengths:

- + Feasibility analyses
- + Prototyping
- + Pre-series prototyping
- + Small and medium series
- + Spare parts

pag. 12

pag. 13

Multitasking turning center with millesimal positioning head for complex components machined in one-setup.





pag. 14



Complex aluminum component. The resulting product reveals excellent CAD/CAM design carried out by highly skilled staff.

pag. 15



Aerospace alloy steels upper and lower cams





Geometric check with 3D automatic machine  
in a climate-controlled room

## INTEGRATED CONTROL/

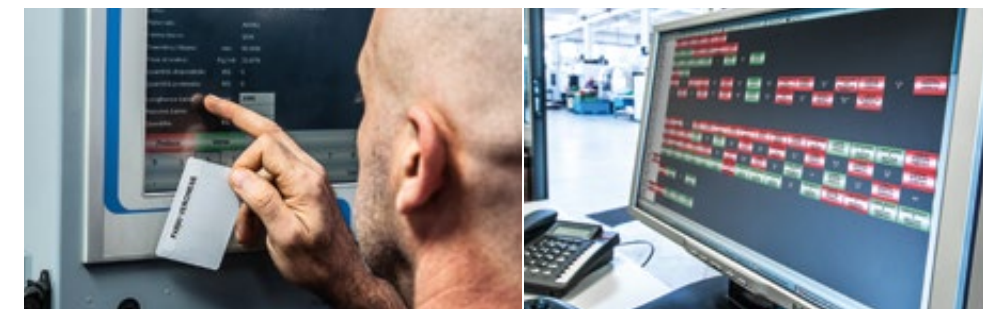
FROM COMPLYING WITH THE PRODUCTION PROTOCOL TO VERIFYING DIMENSIONS OF INDIVIDUAL PARTS: IT ALL AMOUNTS TO AN **INTEGRATED CONTROL SYSTEM**

Nothing is left to chance or is borne out of empirical assessment:

- + Sophisticated planning software drives the production system according to a **precise protocol since estimate issue**.
- + The latest CAD-CAM systems provide product models from which we obtain specific lead times, costs and data to set and equip machines correctly.
- + Each operator has a **badge** containing information about project status - from collecting the material from the warehouse to recording set-up and phase times. This provides us with **real-time machine loading views**.
- + Products undergo dimensional verification, geometry inspection and hardness testing in our metrology and measurement facility.



ISO 9001:2008  
CERTIFICATO N° 6692/1



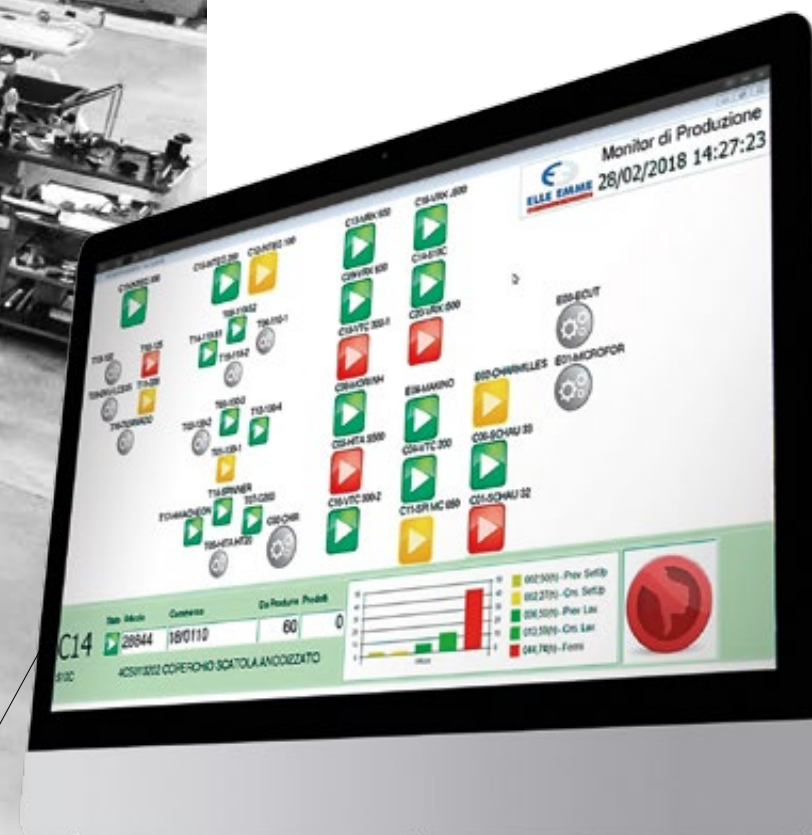


# INDUSTRY/4.0

A DIGITAL REVOLUTION IS ALREADY  
TAKING PLACE

Real-time production monitoring, sharing of data and  
methodical analysis of results prompt us to improve  
our performances constantly.

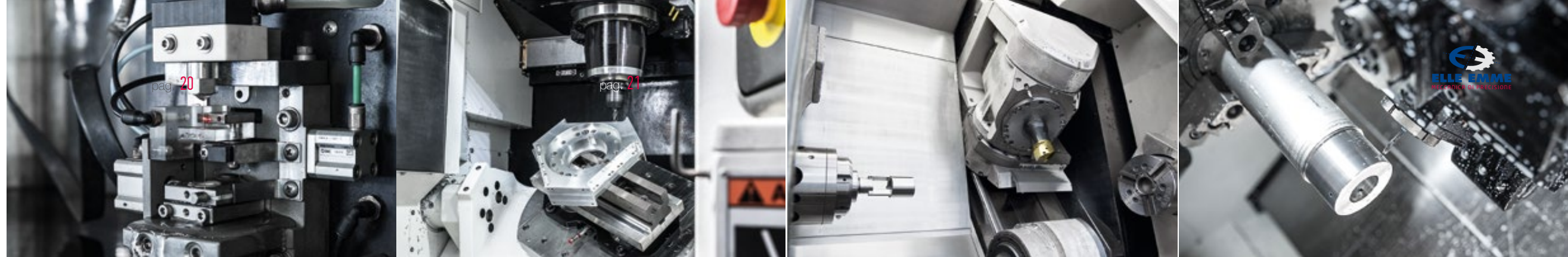
All our machines are connected.  
Custom-made software provides real-time  
information about factory automation.





# WORK IN PROGRESS/

THE MACHINES AND TOOLS WE USE TO PROVIDE EXCELLENCE  
ARE CONSTANTLY UPGRADED



## CNC TURNING DEPARTMENT

Integrated milling/turning centre for the production of complex parts	Nr. 1 Mazak Integrex i300-S	Ø 380 max.	2th spindle
	Nr. 1 Mazak Integrex 200-III	Ø 200 max.	
	Nr. 1 Mazak Integrex 100-II SY	Ø 250 max.	2th spindle
6-axis bar and secondary turning machine with live tool-setting arms	Nr. 1 Schaublin 220	Ø 42 x 310	milling tools
3-axis bar and secondary turning machine with live tool-setting arms	Nr. 1 Mazak QT200 MYx1000	Ø 340 x 1000	milling tools
	Nr. 1 Index G200 CNC	Ø 60 x 380	milling tools
	Nr. 1 Spinner TC 52 CNC	Ø 50 x 350	milling tools
	Nr. 1 Hwacheon Cutex 160	Ø 28 x 100	milling tools
	Nr. 1 Okuma LCS 15	Ø 45 x 320	milling tools
	Nr. 3 Schaublin 130 CNC	Ø 32-42 x 170-310	milling tools
	Nr. 4 Schaublin 110 CNC	Ø 32 x 170	milling tools
2-axis bar turning machine	Nr. 1 Schaublin 125	Ø 30 x 170	
	Nr. 1 Schaublin 102	Ø 42 x 150	
	Nr. 1 Hitachi Seiki HT 20	Ø 51 x 350	

## CNC MILLING DEPARTMENT

5-axis milling machine center and machine with 4th/5th built-in tilting rotary tables for complex parts	Nr. 2 Mazak Variaxis I 500	501 x 500 x 405	pallet change
	Nr. 1 Mazak Variaxis j 500	550 x 510 x 350	
	Nr. 1 Mazak Variaxis 630 2 pallets	630 x 630 x 500	pallet change
	Nr. 1 Mazak Variaxis 500 2 pallets	500 x 500 x 405	pallet change
	Nr. 1 Schaublin 33 CNC - 5 axes	500 x 500 x 470	
	Nr. 1 Schaublin 32 CNC - 5 axes	500 x 300 x 200	
4-axis horizontal machining center with pallet-changers	Nr. 1 Mazak HCN5000	730 x 730 x 800	multi pallet
	Nr. 1 Mazak FH4800	560 x 560 x 610	pallet change
	Nr. 1 Hitachi HS 500	500 x 500 x 500	pallet change
	Nr. 1 Mori Seiki NH400DCG	500 x 500 x 500	pallet change
vertical machining center	Nr. 2 Mazak VTC 300 C - 4° axes	1740 x 760 x 660	central partition
	Nr. 1 Mazak mod. VTC 200B - 4° axes	1300 x 570 x 510	central partition
	Nr. 1 Mazak mod. VCN Nexus 510C III	1120 x 510 x 500	
	Nr. 1 Spinner MC 650-P - 4 axes - 2 pallets	500 x 500 x 400	pallet change
	Nr. 1 Chiron FZ 12W - 4 axes - 2 pallets	500 x 300 x 300	pallet change

## COMPLEMENTARY MACHINING

cnc surface and profile grinding machine	Nr. 1 Kent	700 x 350
electric discharge machining (wire-cutting) for detail cutting and shaping	Nr. 1 Makino UP32j Nr. 1 Charmilles Robofil 440 Nr. 1 Charmilles Robofil 440 CC	380 x 300 550 x 400 550 x 400
hole drilling electric discharge machine	Nr. 1 CR611 CNC	Ø 0,3-3,1 x 200
traditional tooling machine	Nr. 2 traditional turning CU 400 Nr. 3 traditional milling machine Nr. 1 sharpening Tacchella	200 x 1500
laser marking	Nr. 1 Sisma Big Smark 200F	
bandsaws sandblaster	Nr. 3 (MAP Shark 330 Axis, Pedrazzoli, Thomas) Nr. 2 CP mod. C800	

## QUALITY CONTROL AND METROLOGY FACILITY

3D measuring machines	Nr. 1 ZEISS Contura G2 Nr. 1 Etalon derby 454	1000 x 700 x 600 500 x 460 x 340
optical measuring machine	Nr. 1 Vicivision MTL 500 EVO	Ø 120X500
roughness tester	Nr. 1 Mitutoyo surftest 301	
digital altimeter	Nr. 2 (Testa McroHITE 350, Mitutoyo 600)	
profiles projector	Nr. 1 Orion 400H (Quadra-check control)	
hardness tester	Nr. 1 Ernst AT 200DR	
calipers (digital and dial)	Nr. 71	
gauge calipers	Nr. 2	
inside/outside micrometers	Nr. 47/39	
dial indicators	Nr. 33	
smooth and threaded gauges	Nr. 112	
bore gauge	Nr. 6	
smooth and threaded rings	Nr. 86	

## TECHNICAL / PLANNING OFFICE

2D drawing software	Nr. 1 stations Extracad
3D solid design	Nr. 2 stations Solidwork
CNC programming	Nr. 2 station Solidcam, Esprit (3 stations), Camware



4-axis horizontal machining center for the production of medium-high batches for complex parts

pag. 22

pag. 23

## KEY TECHNOLOGIES/ SERVICES:

- + professional advice during design phase
- + turning
- + milling
- + rectifying
- + micro-drilling
- + wire-Cut EDM
- + fitting
- + assembly
- + outsourced thermal and surface machining
- + testing



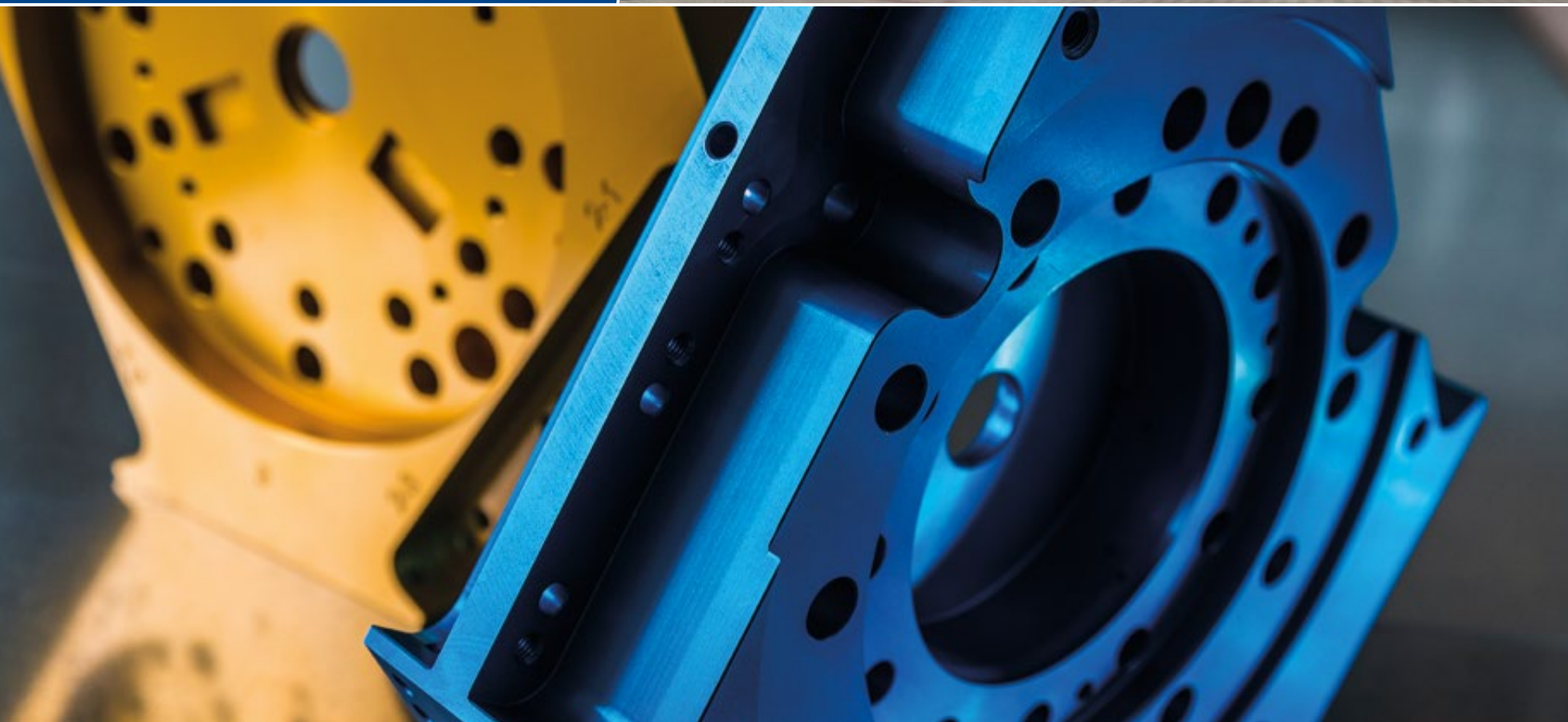
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