

MECHANICAL SOLUTIONS/ INTEGRATED AND CUSTOMIZED FOR INDUSTRIAL APPLICATIONS

# MACHINING/SERVICES

- + turning + milling
- + grinding
- + micro-drilling
- + EDM
- + fitting + assembling
- + testing

- + robotics + med-tech
- + packaging
- + aerospace
- + racing



MACHINING//SERVICES/ EXPERIENCE
ELLE EMME/ BEYOND MACHINING
PROJECT/ INTEGRAL SOLUTIONS
FITTING/ASSEMBLING
FLEXIBILITY/GLOBAL PROFICIENCY
TOTAL CONTROL OF THE WHOLE PROCESS
TECHNICAL DEPARTMENT
INDUSTRY 4.0
WORK IN PROGRESS
METROLOGICAL ROOM
THE NEXT GENERATION
CORPORATE VIDEO/ QR CODE

01

02 05 06

10 15

16

19

20

23

25

27 28

CONTACTS





+ professional advice during design phase

+ heating and surface treatments (in out-sourcing)

# SECTORS/EXPERIENCE

+ automated lines



# ELLE EMME**/BEYOND** MACHINING

### OUR UNUSUAL APPROACH TO MACHINING: WE REALLY LISTEN. DIALOGUE AND OUR KNOW HOW ARE OUR 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 we are much further from being only subcontractors:

> + ELLE EMME is a project partner + ELLE EMME is machining "strategic" in out-sourcing

Agitator pump for plastic injection.



pag. 02



pag. **03** 







pag. <mark>05</mark>



# PROJECT/INTEGRAL SOLUTION

### FROM YOUR PROJECTS THROUGH DIALOGUE, WE CAN MANUFACTURE COMPLEX TESTED MACHINING GROUPS.

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

+ we select materials, work cycles, surface treatments, coating and control plans

- + each individual part is manufactured on our premises
- + we oversee all the outsourcing process
- + we acquire customized parts (gears, engines and joints)
- + we acquire complementary parts form metalworking, foundry and plastic material processing + we assemble and test.

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

Mini self-centering chuck, clamps are turned and EDM (electrical discharge machine) finished.





pag. <mark>06</mark>

# FITTING**/ASSEMBLING**

### 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 intricate details. Milling experience is essential to avoid any vibration during this process.







### FLEXIBILITY/GLOBAL PROFICIENCY

### FROM AN INDIVIDUAL PART TO A SMALL-MEDIUM SERIES WE ARE STRUCTURED TO PROVIDE HIGHLY FLEXIBLE SOLUTIONS

Over the years, we have achieve complete mastery of all materials, from high-alloyed steel to light alloys and polymers.

Unusual shapes hardly deter us, as complex geometric components challenge our skills, knowledge and desire for improvement.

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

- + feasibility studies
- + prototyping
- + pre-series prototyping
- + small and medium series
- + spare parts





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





A circular rotating plate for automatic optical inspection machines.



pag. **15** 

- system.



## TOTAL CONTROL OF THE WHOLE PROCESS/

FROM COMPLYING WITH PRODUCTION PROTOCOL TO VERIFYNG THE DIMENSIONS OF INDIVIDUAL PARTS: IT ALL COMES DOWN TO HAVING COMPLETE CONTROL OF THE WHOLE PROCESS

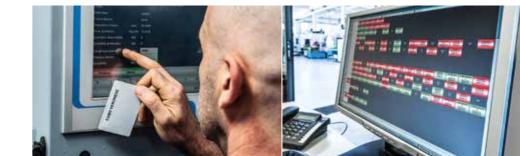
Nothing is left to chance or is the result of an assumption:

+ after an estimate has been issued, following a precise protocol, a sophisticated management software drives the production

+ The latest CAD CAM systems create a realistic simulation of machining, providing technical data, lead time and costs to set-up and equip machines correctly.

+ Each operator uses a badge to declare the project status - from the withdrawal of the material from the warehouse to recording set-up and phase times. This provides us with a real-time machine loading overview.

+ Dimension, geometry and profiles are tested in the metrological room. A hardness test is also performed if necessary.



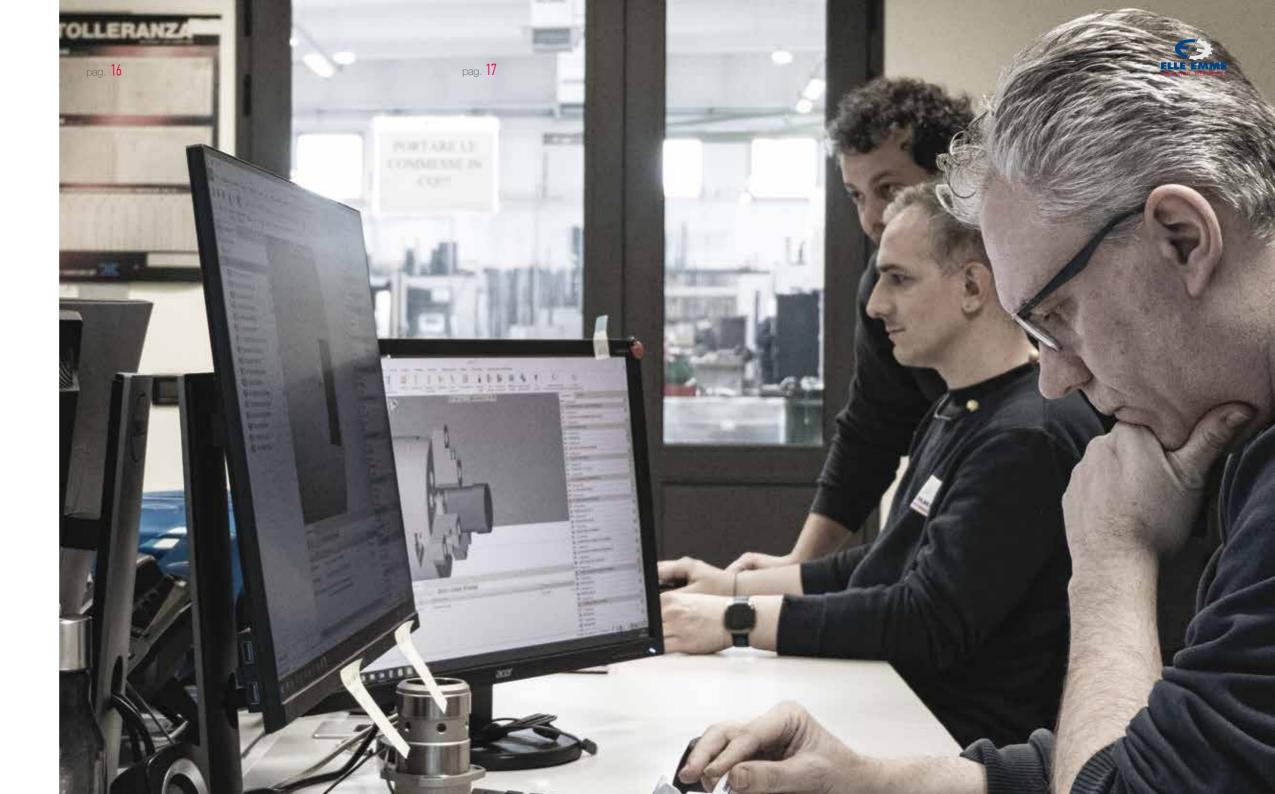
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1	FINITURA FACCIA
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653	Collegamento
1	FINITURA DIAMETRO ESTERNO TOLLERATO 0.5MM
639	Collegamento
P	CONTROLLO DIAMETRO CALIBRATO
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	T9 GL32-L250 DCMT11T304 R0.4
	Collegamento
10	FINITURA DIAMETRO INTERNO D45 SECONDA PARTE
	Collegamento
U	T40 CENTRINO D16 A 90GR SPORG 70
63	Collegamento
23	CENTRATURE M5
63	Collegamento

- 143 PUNTA MD D4.3X6D SPOR42MM
- Collegamento
- **FORATURE D4.3**
- Collegamento
- TEL TEL MASCHIO ME COREMAN

## TECHNICAL DEPARTMENT/

- + feasibility studies

- Preasionity studies
  2D drawing Extracad
  3D modelling Solidworks
  + CNC programming Solidcam, Esprit, Camware, Smooth-Cam









# WORK IN PROGRESS

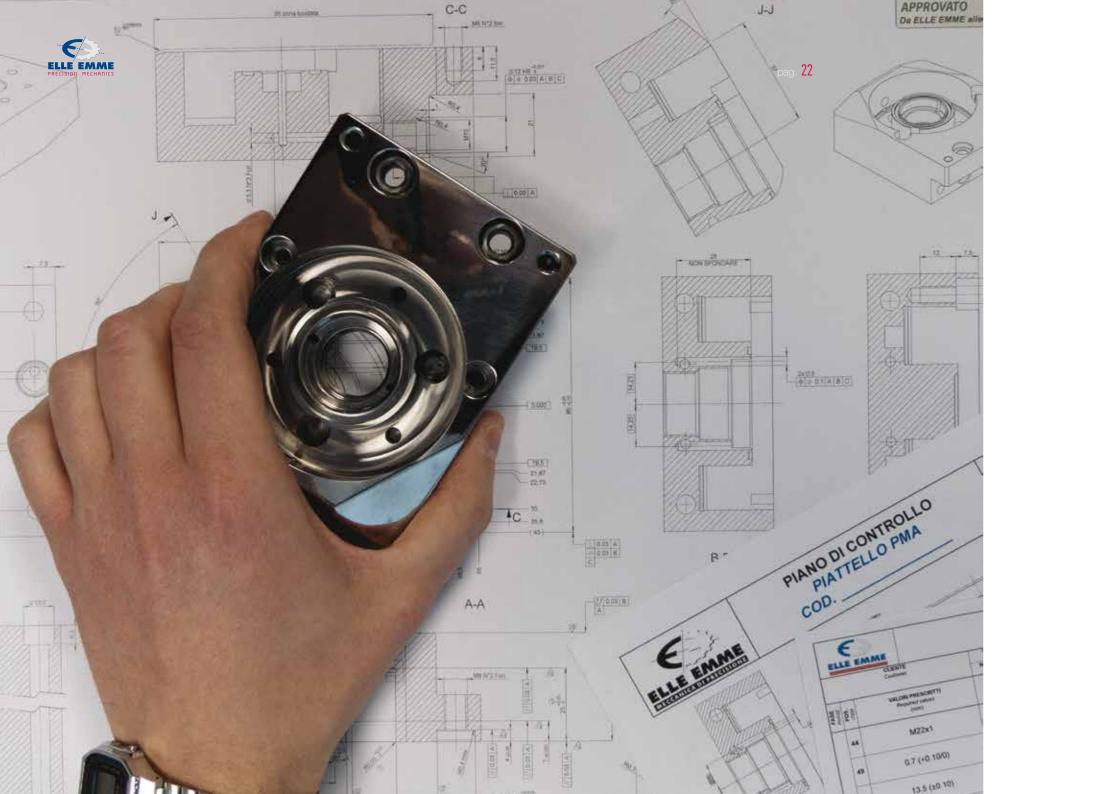
### THE MACHINES AND THE TOOLS WE USE TO **PROVIDE EXCELLENCE** ARE CONSTANTLY UPGRADED



CNC TURNING DEPARTMENT	Multitasking lathe machine for turning/ milling machining	Nr. 1 Mazak Integrex I-250H S	Ø 380 max.	Maximun raw material dimension Ø102mm
		Nr. 1 Mazak Integrex I-300-S	Ø 380 max.	Robotic arm
		Nr. 1 Mazak Integrex 200-III	Ø 200 max.	
		Nr. 2 Mazak Integrex 100-II SY	Ø 250 max.	Double spindle
	4-axis lathe machines with motorized	Nr. 1 Mazak QT200 MYx1000	Ø 340 x 1000	Motorized tool holders
	tool holders	Nr. 1 Mazak QTE-300 MYSG	Ø 340 x 1000	Motorized tool holders
				Maximun raw material dimension Ø80mm
		Nr. 1 Schaublin 32	Ø 32-42 x 310	Motorized tool holders
	3-axis lathe machines with motorized	Nr. 1 Index G200 CNC	Ø 60 x 380	
	tool holders	Nr. 1 Spinner TC 52 CNC	Ø 50 x 350	
		Nr. 1 Hwacheon Cutex 160	Ø 43 x 150	Motorized tool holders
		Nr. 3 Schaublin 130 CNC	Ø 32-42 x 170-310	
		Nr. 3 Schaublin 110 CNC	Ø 32 x 170	
		Nr. 1 Schaublin 220 CNC	Ø 42 x 310	
	2-axis lathe machines	Nr. 1 Schaublin 125	Ø 30 x 170	
		Nr. 1 Schaublin 102	Ø 15 x 100	
		Nr. 2 Schaublin 110 CNC	Ø 32 x 170	
		Nr. 1 Hitachi Seiki HT 20	Ø 51 x 350	
CNC MILLING DEPARTMENT	5-axis milling machines	Nr. 1 Mazak Variaxis I 300 AWC 40 pallets	350 x 350 x 315	Pallet changer + 275 tools
	-	Nr. 1 Mazak Variaxis I 500 2 pallets	501 x 500 x 405	Pallet changer
		Nr. 1 Mazak Variaxis j 500	550 x 510 x 350	
		Nr. 1 Mazak Variaxis 630 2 pallets	630 x 630 x 500	Pallet changer
		Nr. 2 Mazak Variaxis 500 2 pallets	500 x 500 x 405	Pallet changer
	4-axis milling machine with pallet	Nr. 1 Mazak HCN5000	730 x 730 x 800	Multi-pallet
	changer	Nr. 1 Mazak FH4800	560 x 560 x 610	Pallet changer
		Nr. 1 Hitachi HS 500	500 x 500 x 500	Pallet changer
		Nr. 1 Mori Seiki NH400DCG	500 x 500 x 500	Pallet changer
	••••••	Nr. 2 Mazak VTC 300 C 4 axis	1740 x 760 x 660	Pendulum processing
	Vertical milling machine	INT. Z MIDZAK VIC 300 C 4 dXIS	1/40 X /00 X 000	Feliaduulli piocessiing
	Vertical milling machine	Nr. 1 Mazak mod. VTC 200B 4 axis	1300 x 570 x 510	Pendulum processing
	Vertical milling machine			1 0

### COMPLEMENTARY MACHINING

CNC grinding machines	Nr. 1 Kellenberger 1000 UR Nr. 1 Kellenberger 600 U Nr. 1 Kent	Inner diameter grinding machine Inner diameter grinding machine For flat surfaces 700 x 350	
EDM (Electrical discharge machine)	Nr. 1 Makino U6 Nr. 1 Makino UP32j Nr. 1 Charmilles Robofil 440 Nr. 1 Charmilles Robofil 440 CC	650 x 450 380 x 300 550 x 400 550 x 400	
Microdrilling machine	Nr. 1 CR611 CNC	Ø 0,3-3,1 x 200	
Manual machines	Nr. 2 Parallel lathes CU 400 Nr. 3 Manual milling machines Nr. 1 Tool sharpener	200 x 1500	
Laser marker	Nr. 1 Sisma Big Smark 200F		
Mitre cutting bandsaw machines Sandblaster cabinet	Nr. 4 (Imet XT410, Shark 330 Axis, Pedrazzoli, ISTECH) Nr. 2 CP model C800		



pag. <mark>23</mark>

- + roughness tester:
- + Altimeters:

- + calipers

- + dial gauges
- + bore gauges
- + threaded gauges

## **METROLOGICAL** ROOM/

+ measuring machines: Nr. 1 Zeiss Contura G2 1000x700x600 Nr. 1 Etalon Derby 454 500x460x340 + contour measuring instrument: Nr. 1 Mitutoyo Formtracer Avant C3200 200mm + optical measuring machine: Nr. 1 Vicivision MTL 500 EVO 120x500 Nr. 1 Mitutoyo Surftest SJ-210 Nr. 2 (Tesa Microhite 350, Mitutoyo 600) + profiles projector: Nr. 1 Orion 400H + hardness tester: Nr. 1 Ernst AT 200DR + internal quick calipers + micrometers (internal, external, screw thread micrometer) + go/no go gauges





# THE NEXT GENERATION/

### WE "MANUFACTURE" THE FUTURE. FROM SCHOOL TO WORK

We have been collaborating with technical and professional institutes for years, allowing students to visit the company, creating dual learning projects and internships. We believe in constant exchange of experience between the world of work and the world of education: we believe in the next generations, we invest in their future in order to grow together.









## CORPORATE VIDEO/ **QR CODE**



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