







COMPANY

The company was born in 1972 as an individual firm founded by Gianluigi Merletti and his wife Narcisa. In 1995 it welcomed their son Ruggero and their daughter Sabrina in the team.

Highly developed in precision mechanics, the core of its production, the company is particularly skilled today in the aerospace field with a wide set of activities ranging from planning to construction.

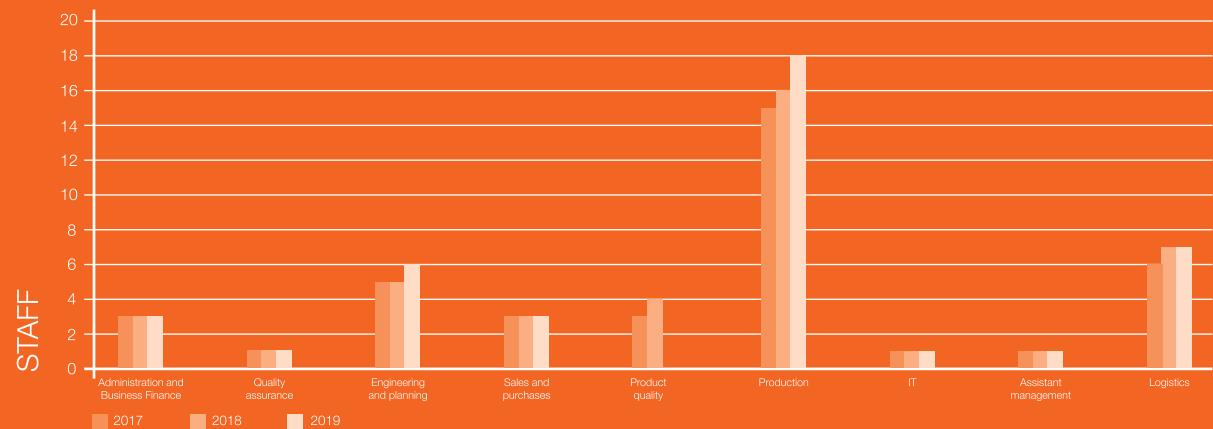
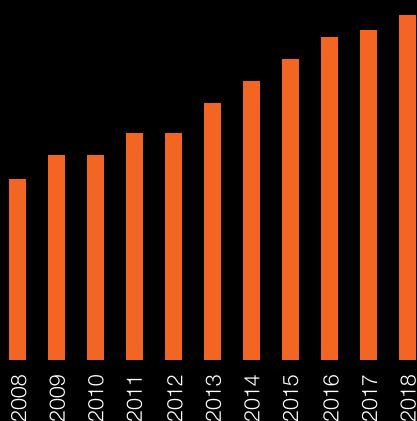
Since 1995 it's qualified as an UNI EN ISO 9001 certified operator and since 2006 as an UNI EN 9100 certified operator and since 2018 as EASA PART 21 G ENAC approved.

Merletti srl is also a member of Lombardia Aerospace Cluster and member of AIAD (Italian Federation of Industries for aerospace, Defence and Security).

Equipped with a high level of technological know-how in every field of precision machining it offers maximum planning flexibility along with top-quality standards.



HUMAN RESOURCES 2008 - 2018



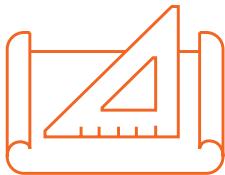
AIRPLANE

HELICOPTER

DEFENCE

	m²	ft²
Production line:	2.000	21.527
Offices:	300	3.229
Photovoltaic plan (150 kW)	2.000	21.527
Total area:	4.300	46.283
Available for future investment:	1.500	16.145

Full Vertical integration



DESIGN

- tooling project
- concurrent engineering



INSPECTION

- dimensional inspection
- chemical analysis
- ultrasonic inspection
- fluorescent penetrant inspection



ENGINEERING AND PLANNING

Engineering

- digital manufacturing stations
- 2D and 3D cad/cam systems + Catia V5

Planning

- ERP software and personalized MRP application (NAV2013 + Zucchetti)



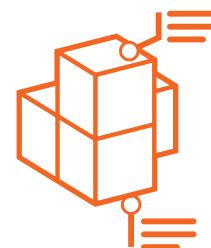
SURFACE TREATMENTS

- pre-treatments
- surface (galvanic)
- auxiliary and painting



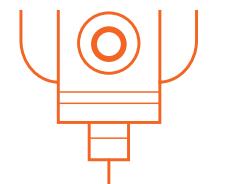
PURCHASE

- Supply chain management



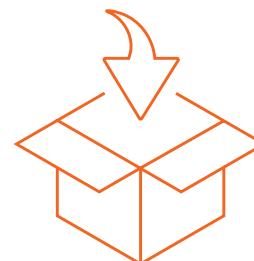
ASSEMBLY AND TESTING

- full vertical integration of subassemblies
- hot and cold bearings/bushings mounting
- proof loading test



PRODUCTION

- machining (milling, turning, lapping and grinding) up to:
↔ 6000 mm
Ø 3000 mm



PACKAGING AND DELIVERY

MILLING

The milling department is equipped with 3, 4 and 5 axis horizontal and vertical machining centers up to 6000 mm.



MAX. CAPACITY (MM)	
1 Breton Matrix center - 5 axis Vacuum system integrated	6000 x 3000 x 1000
1 Donau drilling center - 4 axis 3 Tables	Ø 3000 x 1600
5 DMG centers - 5 axis Vacuum clamping system	1800 x 1300 x 1000
2 Maho centers - 4 axis Pallet Exchange	1600 x 1200 x 750
1 Spindle center - 4 axis Inconel - titanium	1200 x 500 x 520
1 Seiki center - 3/4 axis	750 x 500 x 500

TURNING AND MULTITASKING

MAX. CAPACITY (MM)

4 CNC laters	Ø 850 x 2000
1 Mori Seiki NT4250 multitasking center	Ø 600 x 1540
1 MAZAK INTEGREX i200 - SmoothX	Ø 650 x 1580

Traditional machining

The department is also equipped with traditional machines (modified for specific applications, when required) in order to support the entire production.

Milling, turning, lapping, grinding inside-out, tangential grinding, centerless grinding, rolling, slotting, drilling, high speed sensitive drilling up to 20.000 rev/min, welding, pressing the shears.



INSPECTION



All inspections are performed at a room controlled temperature of 20°C / 68°F

Dimensional

With 3d coordinate measuring machines up to (mm):

x-axis: 1600

y-axis: 4200

z-axis: 1000

Profiles

With optical machines and profilometer

Hardness tests

Rockwell, Brinell, Vickers

ASSEMBLY, FLY KITS AND GSE

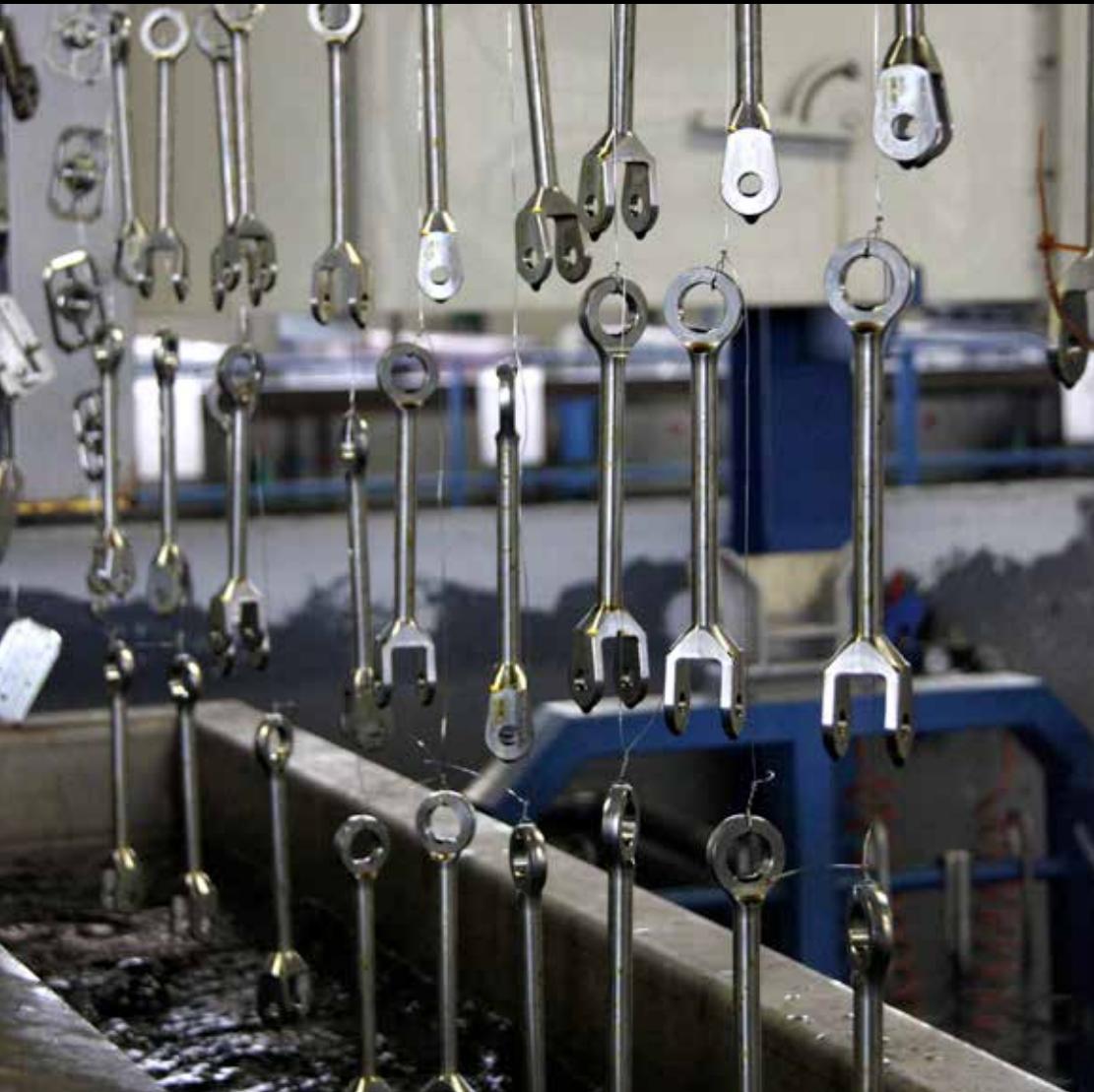
Precision assembly and subassembly

Hot and cold bearings and bushings installation

Fly kit and Ground Support Equipment



SURFACE TREATMENTS AND PAINTING



Surface (galvanic)

- chromic acid anodizing
- sulfuric acid anodizing
- sulfuric hard anodizing
- chemical conversion coating (Alodine 1200s)
- stainless steel passivation

Pre-treatments

- degreasing and etching

 **Nadcap** NADCAP approved processes

 **merletti**[®]
aerospace

Auxiliay

- sandblasting (Coridone 180 mesh)
- primer and top coat application
- solid lubricants application
- painting (3 rooms of 6m each)



NADCAP approved processes

Tanks size:

↔ 2.800 x 1.000 x ⌀600mm

↔ 6.6 x 3.3 x ⌀2 ft

Internal laboratory for chemical analysis and coating tests



CUSTOMERS



Ogma



GE Aviation Czech



Leonardo



Patria

Patria

GF Precicast

+GF+ PRECICAST

SABCA



Avio Aero



F1 racing teams



Civil Programs

Airbus A319
Airbus A320
Airbus A321
Airbus A330
Airbus A350
Airbus A380
AW 101
AW 109
AW 119 Koala
AW 139
AW 169
AW 189
Dassault Falcon F5X
Dassault Falcon F7X
Embraer 175
SSJ100

Military Programs

Airbus 400M
AW 101
AW 109
AW 139
CH 47
Embraer KC390
Eurofighter Typhoon
F35
M346
MB339
NH90
Saab 2000 Erieye AEW&C
T129 ATAK

Aircraft engine

PW1100
PW4000
GEnx
H75
H80
H85
Trent 1000

Member of



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