# ORGANIZATION

## Experience

With over fifty years of expertise in chip removal machining (turning and milling), Precision Machine Workshop BERTOLASO SRL stands as a trusted name in the industry.

Founded in 1972 by Bertolaso Loris Mario, Precision Machine Workshop BERTOLASO SRL has grown significantly over the years. Currently, their facilities span over 5,500 square meters, with 3,000 square meters under cover. With Matteo, Mario's son, taking over as the manager, the company has experienced a renewed energy, underwent structural renovation, and implemented cutting-edge processes and processing lines.

With its extensive experience in industrial precision mechanics, Bertolaso now boasts state-of-the-art technology and cutting-edge equipment for cutting and milling. With a team of highly specialized professionals, the company is well-equipped to meet diverse requirements in precision mechanics, including complex mechanical processes. Moreover, it consistently delivers customer satisfaction through quality results, prompt availability, and reliable punctuality.

# **COMPANY POLICY**

Under the leadership of Matteo, the company has experienced continuous improvement. This has resulted in updates to their machinery and equipment and a regular training of their staff.

An additional distinguishing element is the choice of having "More Machinery than People". This decision allows for a production setup based on specialized production islands, aimed at achieving high levels of specialization, flexibility, and the ability to cater to any production needs.

# **APPLICATIONS**

Bertolaso machine workshop has an extensive track record of experience in various fields. Some of the most important are:

Components for food plants, leather processing machines (rolling-presses), bottling, packaging, wear components (cast iron NI-Hard, Chrome-Hard), cableways installation, drums, shoulders, pumps, dredges, for drums hoisting winches.

# **MANUFACTURING**

The workshop provides turning, milling, EDM and balancing services.

Raw material, such as bars and rods made of steel, cast iron, aluminium, brass or other metal alloys, are processed with machine tools to obtain mechanical parts according to customer's design or specifications. The latter are translated into design by the in-house engineering department. The workshop primarily serves manufacturers who require semi-finished products for their own production processes. As a result, Bertolaso focuses on providing competitive solutions that prioritize not only price, but also product quality and punctuality.

## Precision machining for every need

HORIZONTAL TURNING up to Ø 2000, 5000 mm long

VERTICAL TURNING up to Ø 2000, 1200 mm long

TURNING AND MILLING HARDENED MATERIALS - cast iron, ni-hard, crom-hard, tempered cast irons up to 700 Brinell-65HRC

MILLING up to 6000 mm long, 2000 mm high + swinging-sliding table

GANTRY MILLING, up to 5,000 of length and 2,700 of width with heads change

WIRE AND SINKER EDM

DYNAMIC BALANCING

CAD/CAM for Design and Implementation of CNC programming from 3D environment

# QUALITY CONTROL

Bertolaso is ISO 9001 certified. Its wide range of services sees the addition of static or dynamic balancing machines on hardened impellers in compliance with ISO1940/1 – the international standard that regulates the quality of balancing. The workshop is also equipped with a ZEISS NC850 measuring machine.

# **MACHINERY**

### **Horizontal turning:**

Max capacity Ø2,000 mm and 5,000mm of length

## **Vertical turning:**

Max capacity Ø1,60 0mm and 1,500mm of length

Milling: max capacity

X=6,000mm Y=3,000 Z=2,000 + swinging-sliding table 2,000mm\*2,000mm

### **HORIZONTAL TURNING**

Horizontal cnc lathe max rotation 2,000\*5,000 mm with "c" axis and motorized tools Horizontal cnc lathe max. rotation 1,350\*4,000 mm (max. bar capacity 160 mm) Horizontal cnc lathe max. rotation 1,000\*3,000 mm (max. bar capacity 130 mm) Horizontal cnc lathe and 1,000\*5,500 4 with steady rest guides one cycle and 350 motorized

Horizontal cnc lathe  $\varnothing$  500\*1,200 mm motorized with "c" axis Horizontal cnc lathe  $\varnothing$  900\*2000 mm with motorized tools

Horizontal cnc lathe Ø 800\*600 / 500\*600 mm

### **VERTICAL TURNING**

Vertical cnc lathe  $\emptyset$  max. 1,400\*1,100 mm cnc lathe with "c" axis and motorized tools (also for hardness's up to 65 HRC)

Vertical cnc lathe and max. 1.000 mm with motorized tools and "c" axis

Vertical cnc lathe and max. 800 mm with motorized tools and "c" axis

OKUMA MULTITASKING TURNING LOKUMA

Okuma multitasking b400-l. Multitasking lathe with double spindle,  $\emptyset$  max. 700 L= 1600 mm

Okuma U4000 5 continuous axis, 2 turrets Ø max. 700 L=2000 mm

Okuma multitasking B300 double spindle lathe

Okuma motorized lathe U3,000 Ø600 L=1,100 mm

### **EDM**

CNC Sinker EDM, 3 continuous axis, table 600\*400\*400 mm CNC Sinker EDM, table 1,700\*700\*600 mm Winker EDM, max. cutting height 400 mm

#### **AUXILIARY EQUIPMENT**

No. 6 parallel lathes with sizes from 250\*1,000 up to 1,200\*5,000 mm

Manual milling cutter x1000\*y400\*2500 mm

Welding zone with 3 welding machines with positioner

No. 4 overhead crane max. 10 t

Measuring instruments with diameter up to 2,000 mm

Automatic pre-setting with measuring projector e 500 mm, h= 400 mm

Bench with altimeter with a millimetre precision up to 600 mm

### **BALANCING**

Cemb balancing machine max. diameter 1,000, max. weight 500 kg, balancing certificate IS01940/1

### **MILLING**

Gantry milling Machine x5,000\*y2,700\*z1,500 mm - heads change, rotary table, Reni Shaw probe for probing the piece

FPT travelling column milling machine x6000\*y1250\*z2000 mm, rotary table, 1,200x1,200 automatic head with Reinshaw probe for workpiece probing

FPT travelling column milling machine x6000\*y1250\*z2000 mm, swinging-sliding table 2000x2000 w1500, head with millimetric precision and Reinshaw probe for workpiece probing

CNC T shaped milling machine x4000\*y1250\*z1600 mm with automatic head - 4 axis continuous Heidenhain

5-axis milling machine x3000\*y800\*z900 mm rotary table  $\varnothing$  600 - Reinshaw probe for workpiece probing

4-axis CNC machining centre 1,500\*650\*900 mm (4 continuous axes. Ø 600 mm) 4-axis CNC machining centre 1.600\*700\*900 mm (4 continuous axes. Ø. 400 mm) 3-axis CNC machining centre 1,050\*450\*700 mm (4 continuous axes. Ø 600 mm) OKUMA MILLING LOKUMA

Okuma MU6300 V-L machining centre, 5 continuous axis, vertical turning option with 6-pallet changer

Okuma horizontal machining centre MA600H III with pallet changer + turning option