

MACHINING CAPABILITIES
OF THE PRODUCTION PLANT
IN PRABUTY

MACHINING MACHINERY PARK

1. Small and medium conventional lathes

Diameter: 480 mm
Length: 2000 mm
Roughness: 1.25
Accuracy: 0.02mm
Type: TUD 40, TUD 50, TUR 50

2. Conventional lathes large

Diameter: 1300 mm
Length: 6000 mm
Roughness: 1.25
Accuracy: 0.02 mm
Type: PEAR, TRD 100, TRD 130

3. Conventional milling machines

Max. table area: 400 x 1600 mm
Milling height: 500 mm
Ra: 5-2.5
Type: FWA 41, FU 315

4. C 500 milling center

Table area: 545 x 1820 mm
Max working space: 200 x 1599 x 2558 mm
Roughness: 1.25 – 2.5
Accuracy: 0.01

5. Boring Machine WHN13

Working surface of table: 1800 x 1600 mm
Max working space: 3300 x 1180 x 1700 mm

6. Boring Machine WHN10

Working surface of table: 1000 x 1000 mm
Max working space: 1211 x 1106 x 2921 mm

7. Grinding machine BUC63

Roller grinders (diameter up to 630, length up to 3000)
maximum weight: 1 ton (restriction is crane)

8. Honing machine

Max Length: 1800 mm
Max diameter: from $\varnothing=40$ mm to $\varnothing=430$ mm

9. Gantry milling center HSA-423 EA

Working area: 3000 x 2450 mm
Vertical travel: 1020 mm
Permissible load: 13,000 kg
Rotations: 4000 rpm head and 6000 rpm spindle



CHROME PLATING CAPABILITIES

The Production Plant in Prabuty has a technological line that allows for technical chrome plating of shaft elements with maximum dimensions $l=2500$ mm, $f_i=500$ mm and weight up to 1000 kg. This process allows the production of new elements and the regeneration of worn elements, e. g. cylinder piston rods. We have over 50 years of experience in applying chrome coatings and an experienced crew.

PAINTING POSSIBILITIES

Production Plant in Prabuty has a technological line allowing to paint various types of structures and products with a maximum length of 6 m and a weight not exceeding 2000 kg.

We have qualified painters and supervision with extensive experience in wet painting. Every day we paint our products, i. e. hydraulic cylinders, pumps, watertight doors for difficult marine operating conditions. The process of shot blasting and painting is fully supervised and carried out in accordance with external standards and internal instructions, as well as according to special customer guidelines.

The shot blasting and painting process is based on the following standards:

EN ISO 8501-1 Preparation of steel substrates prior to application of paints and similar products – Visual assessment of surface cleanliness

EN ISO 8502-3 Preparation of steel substrates prior to the application of paints and similar products — Tests for assessing surface cleanliness

EN ISO 8503-1 Preparation of steel substrates prior to the application of paints and similar products – Surface roughness characteristics of steel substrates after blasting and abrasive treatment

EN ISO 12944-5 Paints and varnishes – Corrosion protection of steel structures by protective paint systems

ISO 19840 Paints and varnishes — Corrosion protection of steel structures by protective paint systems — Measurement and acceptance criteria for dry coatings on rough surfaces

EN ISO 2808 Paints and varnishes – Determination of coating thickness

For each painting process, we issue quality documents confirming the implementation of the process according to the established instructions and guidelines so-called. PAINTING PROCESS PROTOCOL. We are able to help our clients to choose a painting system for their products and to purchase the required paint.

We have:

- shot blasting cabin with mechanical abrasive recirculation system and scraper floor

Internal dimensions: 6.0 x 3.1 x 2.9 m

Gate dimensions: 3 x 3 m

- varnishing and painting booth

Internal dimensions: 6,9 x 4 x 2,650 m

Door dimensions: 3 x 2,6 mm

Drying temperature: max. 80 C.

Air Purification System:

- 1- Pre-filter (Filter Nonwoven Cl. EU4)
- 2- Ceiling filter (filtering non-woven EU5/6)
- 3- Wall filter (glass filter nonwoven)
- 4- Carbon Filter

- measuring and control devices

We have measuring and control equipment that is regularly validated, which allows you to maintain the high quality of the painting process.

PAINING POSSIBILITIES

Examples of realizations:



WELDING POSSIBILITIES

Production Plant in Prabuty has a modern welding plant that allows welding of various types of spatial structures with a weight not exceeding 4000 kg and welding and repairing cylindrical elements with a maximum weight of 2000 kg and a length of 950 mm.

We have welders and supervision with a lot of experience which allows us to take on difficult unusual challenges. Our welders have welding licenses:

1. EN ISO 9606-1 135 T BW FM1 S s12 D50 PC ss nb – DNV
2. EN ISO 9606-1 136 P BW FM1 P s12 PA ss mb – DNV
3. EN ISO 9606-1 138/136 T BW FM1 M/P t3/9 D40 PC PH ss nb/ss mb – BV
4. EN ISO 9606-1 138/136 T BW FM1 M/P t3/37 D130 PC PH ss nb/ss mb – BV

We weld watertight door structures and hydraulic cylinders under the supervision of classification societies such as DNV GL, LR, BV, PRS, RMRS.

We have modern welding equipment:

1. Cylindrical parts welding and welding machine with CNC control

The device allows to fully automate the welding process by means of CNC control by synergic control of rotation drive B and linear drives Y, Z. It is possible to program, enter welding parameters in a newly developed technology or selecting a previously developed technology.

Dimensions of welded cylindrical elements

Welded diameter range 40 mm-600 mm

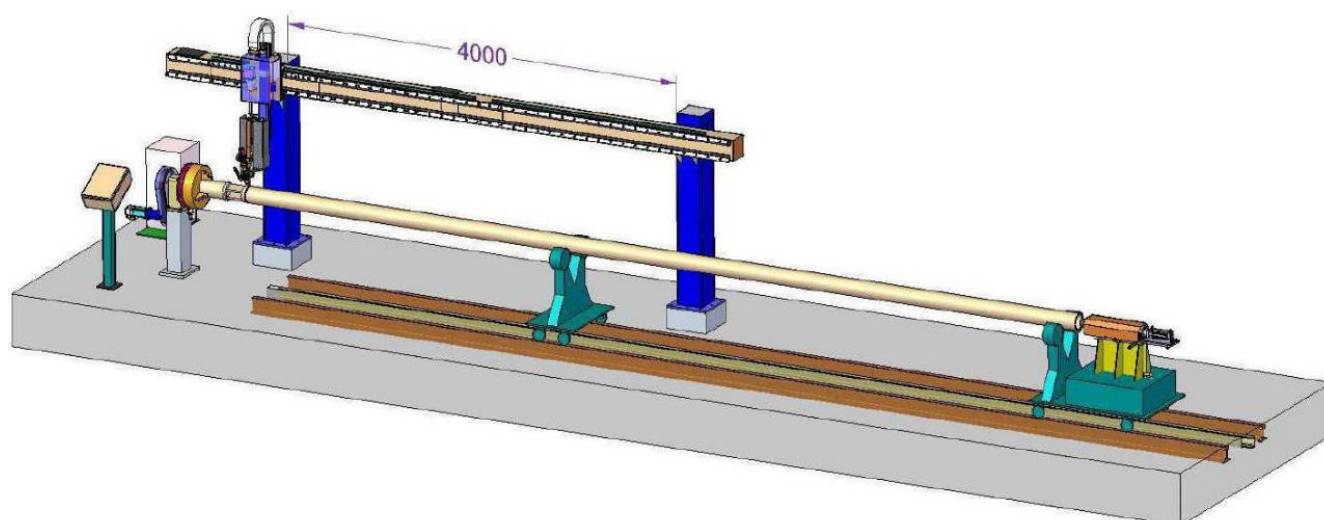
Welded cylinder length range 100 mm-9500 mm

Weight of welded cylinders up to 2000 kg

Range of welded cylinder length 4000 mm

We have DNV approved procedure and welding authorization for repairing shafts of material grade 1. 2 and 3. 1 with MT250HB wire.

Workplace drawing:



WELDING POSSIBILITIES

Workplace photo:



2. Welding Manipulator

Welded diameter range up to 1500 mm
Weight of welded elements up to 4,500 kg

3. Welding equipment

We have welding equipment that is regularly validated, which allows us to maintain the high quality of the welding process, we have the following welding equipment:

FASTMIG BASIC KM500
Kemppi FASTMIG M420
REHM MP530
MAGOMIG 500W

CONTACT

PRODUCTION DEPARTMENT IN PRABUTY

Daszyńskiego 23
82-550 Prabuty
tel. +48 604 054 832
hydromega.com.pl

Grzegorz Schulz
V-CE COMMERCIAL DIRECTOR
tel. +48 58 664 77 04 int. 117
mob. +48 601 350 383
grzegorz.schulz@hydromega.com.pl