



### **SUM15 - DVIGATEL REGITAL - your reliable industrial partner**

Dvigatel Regital has created a partner network of companies, which allows for an increase in production capacity, expansion of technological opportunities, better use of machine tools, coherent harnessing of engineering knowledge and more effective use of existing resources.

We have integrated international cooperation networks and projects, and we participate in the shaping of space of science and technology.

We have been certified with the ISO 9001:2008, ISO 3834-2:2005 and ISO 14001:2004 / OHSAS 18001:2007 certificates.

## **Manufacturing process and production equipment**

### **Castings by electric and induction melting furnaces**

The maximum casting mould box sizes of 1580x1200x450 mm (rectangular) and d 2500x800 (circular) weighing from 5 to 2500 kg.

Moulding type: sand moulding for casting:

carbon steel,

low and high grade alloys and stainless steel.

cast iron, grey iron, steel, iron details

### **Heat Treating Facilities**

Normalising

Annealing

Hardening

Tempering

### **Manufacturing facilities**

Manufacturing facilities located in Tallinn.

The main workshop has an area of 8000 m<sup>2</sup> and is equipped with cranes (8x10-tonne cranes and 3x5-tonne cranes; hook height: 8m

There is also a workshop with the area of 1000 m<sup>2</sup> equipped with CNC units as well as a workshop with shot-blasting and painting production facilities with an area of 1500 m<sup>2</sup>.

The company also has open space for the storage and assembly of finished products with an area of 6000 m<sup>2</sup>, which is equipped with cranes.

## Mechanical processing of metals with CNC machines

The equipment includes 6 CNC vertical milling centres and 2 CNC turning centres.

### Multi -Tasking Turning Centre MAZAK INTEGREX E-650H II 4000U

C to C distance: 4000mm

Internal holes max Ø: 1000mm

Round detail (max) Ø: 0-920mm

Flat detail height: 650mm

Machining accuracy: 20 µ pm

Hydraulic Grinding CTC Machine

Max Grinding Ø: 500mm

C to C distance: 3500mm

Machining accuracy: 3 µ pm

Max. Support weight: 1000kg

### CTC vertical machining centres

Name	Work table (mm)	Workpiece max (mm)
Mikron – VCE 500	660x356x500	500x400x500
Mikron – VCE 750	914x356x500	750x400x500
HAAS VF3	987x465x635	1016x508x635
HAAS – Mini Mill	406x305x254	406x305x254
DYNA – DM 3220	500x500x800	1200x650x800
MAHO – MH 800	760x410x600	760x410x600

## CTC turning centres

Name	Workpiece length max (mm)	Workpiece diameter max (mm)
HAAS – SL 20	508 mm	210 mm
HAAS – TL 25	864 mm	406 mm

## Universal machining

### Turning machines:

Work piece diameter (max) – 1500 mm, length (max) – 12000 mm

### Milling machines:

Work piece diameter (max) – 650 mm, length (max) – 3200 mm

### Grinding machines:

Work piece diameter (max) – 500 mm, length (max) – 3500 mm

## The welding robot MIG/MAG "MOTOMAN".

## Welding

Our welders are certified according to DIN 18800-7:2002-09 and DIN EN 729-2:1994. Technological welding procedures and instructions (WPS and WPQ) have been developed for welding processes.

At a customer's request, we carry out non-destructive particle testing of welded products (NDT): radiographic, ultrasonic or magnetic one.

- Manual arc welding
- Semi-automatic or automatic MAG-welding (Welding in protective gas with solid section wire melting electrode in active gas)

- Semi-automatic or automatic MIG-welding (welding in protective gas with solid section wire melting electrode in inert gas)
- Welding in protective gas with a flux-cored melting electrodes (semi-automatic or automatic)

## Large Scale Machining

TOS processing centres are applied for these purposes.

## Technical characteristics

### «TOS VARNSDORF WRD150Q, WRD 130, WHQ13 CNC»

Machining centres TOS with a fixed platform and the turntable, CNC							
Type	Spindle diameter, mm	Movement of the machine drives					Dimensions of the surface and load capacity of the turntable, mm/kg
		Longitudinal, X, mm	Vertical, Y, mm	Diametrical, Z, mm	Sleeve movement, V, mm	Spindle movement, W, mm	
WRD 150 (Q)	150	14000	4000	1 800	1000	800	2500x3000 25000
WRD 130	130	7000	3 500	1 300	1000	700	2500x3000 25000
WHQ 13 CNC	130	5000	3000	2000	--	800	1800x2500 12000