

VERTICAL LATHE FOR MACHINE WHEELS UP TO 24"

TV



DESCRIPTION

More than 30 years working together with the more demanding aluminium wheel manufacturers of the world gives us the experience and the capacities to design the most reliable lathe for the machining of cast aluminium wheels and for the machining of forged aluminium wheels.

Danobat provides both stand-alone lathes as well as complete automated cells/lines for the machining of aluminium wheels.

TV. VERTICAL LATHE FOR MACHINE WHEELS UP TO 24"

TV RANGE	TV-600	TV-620	TV-650	TV-850
Amount of turrets	1	2	2	2
Max. wheel size	24"	24"	24"	26.5"
Rotary table	NO	NO	YES	YES
Motor spindle power	50.95 hp	124.71 hp	124.71 hp	124.71 hp
Operations	OP20 DC MF	OP10 OP20 PFF	OP10+OP10 OP10+OP20 PFF	OP10+OP10 OP10+OP20

PFF. Pre-flowforming
 OP10. First turning operation
 OP20. Second turning operation
 DC. Diamond cutting
 MF. Mirror Finishing

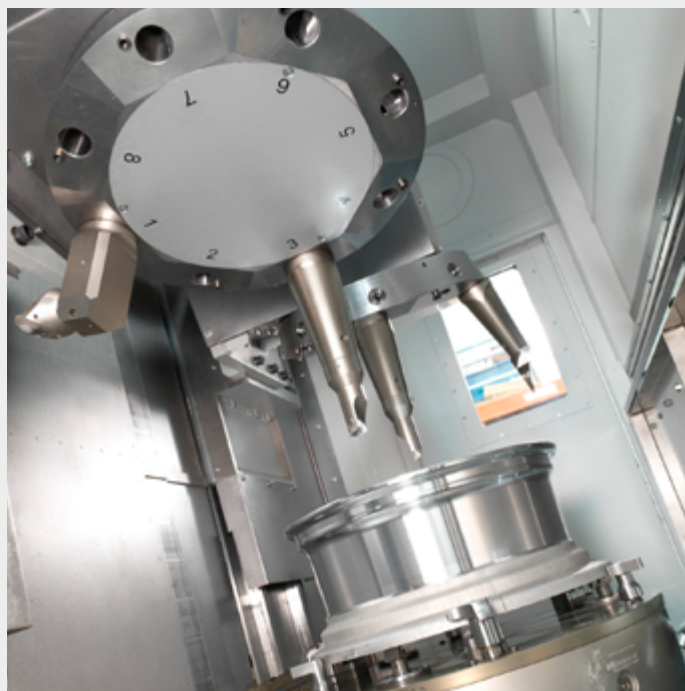
MACHINE COMPONENTS

Machine structure

- Machine bed, headstock and crossed slides made of high quality cast iron.
- The design of these components has been optimized with finite element calculation to improve material utilization.
- Stress-relieved pearlitic cast iron lends high rigidity and excellent damping power, being these elements the basis to get long-lasting high quality and accuracy in the turning operations.

X and Z axes

- The configuration of our cross slides, with the X-axes directly assembled to the machine bed, supporting the whole weight of the slide, improves the accuracy of the central bore by lowering the tilting moment and reducing the weight of the Z-axes.
- All slides are assembled with robust linear guidance systems which provide them high load carrying capacity and rigidity as well as high speed movements.



Turrets

- Vertically arranged tool revolvers. These turrets have been designed to allow fast tool change in order to reduce the idle times and improve the productivity.
- Up to 8 tools can be arranged on each disc, with VDI 40 and VDI 50 as standard interfaces.
- Touch probes can be integrated easily in the disc for pre- and postprocess measurements.

Motor spindle - Direct drive solution with built-in motor

- This high power and torque solution, which includes a built-in motor, is temperature regulated and provides higher output due to its fast acceleration and short braking times (3 seconds from 0 to 209.44 rad/sec or from 209.44 rad/sec to 0).
- The specialized precision assemblies unit of Danobat is staffed by qualified fitters team with broad experience in bearing and spindle elements. Each assembly is performed in a clean-room environment at a controlled temperature and documented to ensure traceability and interchangeability if replacements are needed.

Rotary table

- Faster loading and unloading of the wheels by means of one NC-controlled axis. The rotary system has no backlash, and allows the table positioning in any angular location, which eases the maintenance of the machine and wheel type change over.

Automatic chuck

- Integrated intermediate chucks for less vibrations and high accuracy.
- Several-size chucks for chaotic manufacturing.

Compact layout

- Large lateral doors are included for easy access to change the cutting tools or even entering the machining area.
- Most used maintenance devices have been placed in the rear side of the machine, at ergonomic height.
- Chip conveyor can be easily removed to the sides or front of the machine, reducing the total area required by the cell.