



# Surface and Profile Grinding, Turning, Boring, Milling



gantryLine

## Experience the gantryLine

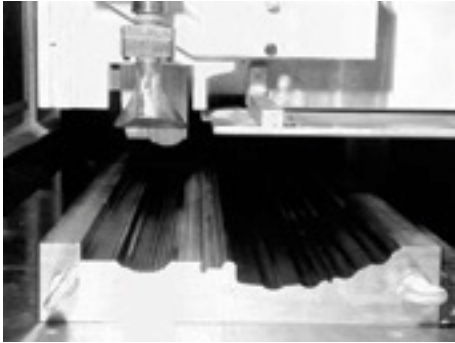
Completely manufactured in Aschaffenburg, Germany, our gantryLine models can process large, wide and heavy work pieces up to lengths of 5,000 mm and widths up to 2,000 mm with high precision. Special designs are also available to process wider and longer work pieces.

This machine line with its variety of available features is suitable for surface grinding applications all the way through complex CNC manufacturing cells.

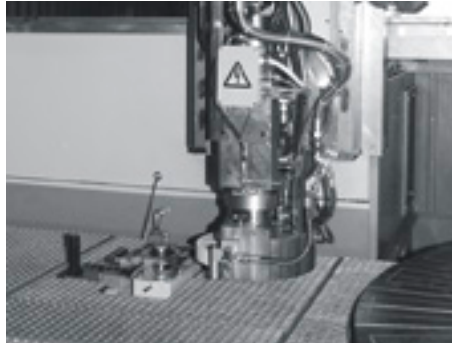


The sturdy gantry-style machine design features a modern vibration-free mechanical table drive, linear guideways in all axes, an over-sized spindle drive as well as ball screws and linear scales in vertical and cross axes. These features guarantee that today's expectations in the precision machining of large surfaces are met for rough machining and high precision machining as well. The gantryLine achieves highest work piece precision and surface quality.

The mechanical table drive consists of a rack-and-pinion gear (helical planetary gear system with precision rack). This modern drive system is most suitable for reliable movement of heavy loads and long strokes. Its main characteristics are optimal acceleration and velocity profile. In conjunction with the CNC package this drive is able to perform controlled X-axis movement and interpolation with Y-axis.



Profile grinding of large plates



Straight/profile dressing of grinding wheel with table mounted dressing unit

## Design Characteristics

### Sturdy Gantry Design

- Welded machine construction is tempered several times to achieve highest precision

### Rack and Pinion Table Drive

- Optimal acceleration and velocity profile. Controlled X-axis movement in conjunction with CNC package.

### Features

The machine system can be equipped with various options to meet application requirements and customer requests.

- Table mounted or head mounted dressing devices
- Various drive systems for grinding spindle
- Electro-permanent magnet chucks
- Coolant filtration system
- Second sliding door (with second operator pendant) in rear of machine

## Machine Concept

### Three Controls Packages

- xpressCube (surface grinding)
- xpressCube Pro (simple profile grinding)
- Sinumerik 840D (full CNC)

## Modular Design

The modular design of our gantryLine enables the addition of a second Universal Support (e.g. for tilting grinding spindle). The Universal Supports are controlled independently and can be positioned automatically. The programming of both supports allows the complete grinding of a work piece in the same set-up.

Special designs of this model can utilize up to four supports and can be equipped for other machining operations like boring, milling and turning. Different spindles and tools can be stored in an automatic tool changer. CNC indexers, CNC trunnion tables and measuring systems can be integrated as well.

## Benefit Overview

- Highest precision through gantry design
- High thermal stability
- Modular design
- Modern table drive system
- Multi-axes operation



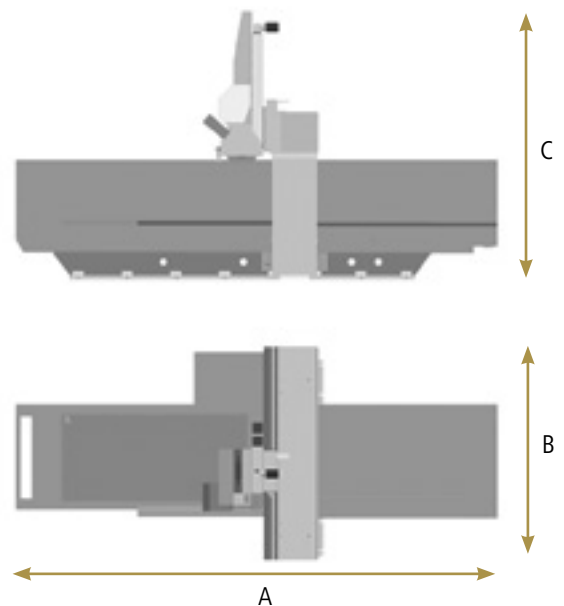
Tilting vertical grinding spindle

gantryLine	20	22	30	40	50
Grinding Width (mm)	1,000	1,250	1,500	2,000	2,000
Grinding Length (mm)	2,000	2,250	3,000	4,000	5,000
Distance Spindle Center to Table (mm)	1,050	1,050	1,300	1,300	1,300
Spindle Power (kW)	22	22	52/70/90	52/70/90	52/70/90
Spindle Cone (mm)	75	75	90	90	90
Grinding Wheel (mm)	500 x 100 x 203.2		600 x 150 x 203.2		

### Dimensions / Weight

Length A (mm)	7,400	7,400	10,000	12,500	15,000
Width B (mm)	3,055	3,055	5,500	5,500	5,500
Height C (mm)	3,950	3,950	5,200	5,200	5,200
Weight (kg)	16,000	17,000	22,000	35,000	43,000

All values are approximated and may change depending on selected options.  
All information is subject to change.



### Contact

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