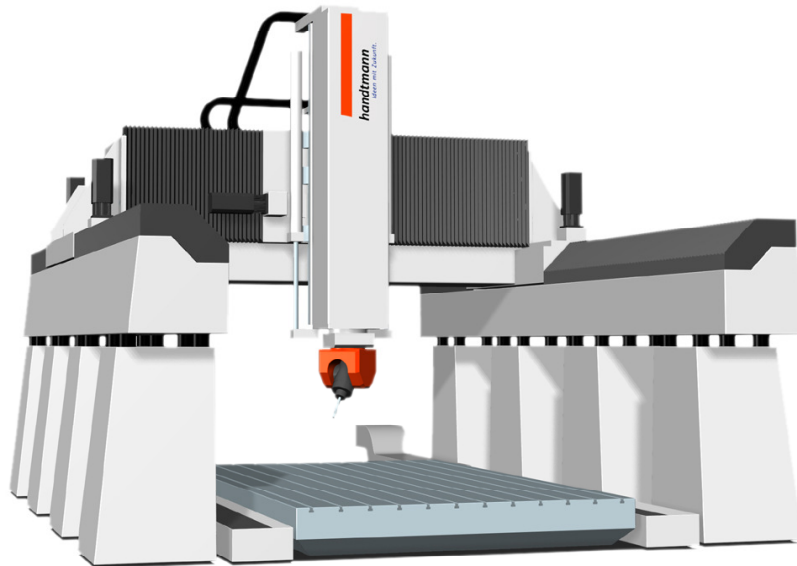


Development
Dynamic gantry
machine with 5
axes

Handtmann
A-Punkt Auto-
mation
Baienfurt

2001/2002



... Marketing Mix....Product Development....QFD....FMEA....Target Costing....

Problem The economic for production of greater parts tolls and moulds and in the aircraft industry as well as require the application of high speed cutting technology with high speed machine tools to satisfy the demands of high surface quality and high cutting performance.

The enterprise "handtmann A-Punkt Automation" is a successful producer of gantry machine tools for 5-axes manufacturing of work pieces and cubic parts of steel and light metal.

With a new high dynamic gantry milling machine the existing portfolio of table-machines will be supplemented for the machining of heavy work pieces.

Project description and result

Product development is a core competence of the company. Here the development process with its steps

- Product concept – finding ideas and market requirements
- Product design – design and calculation
- Product realisation – manufacturing and first tests
- Market introduction – monitoring and continuous improvement

was planned together with the customer and has been managed in a professional project. The methods – optimisation of the product mix, quality function deployment and design FMEA – helped to shorten the development process dramatically. The cost and schedule targets were realized without any major problems.

Technical data

Table size	3000 mm x 4000 mm
Width	3200 mm
Height	2000 mm
Weight	35.000 Kg
Milling head with A- and C axes	
Power	25 kW
Spindle speed	up to 25.000 rpm
Automatic spindle change	
Max. speed	32 m/min
Acceleration	4 m/s ²

Project manager

Dr.-Ing. Joachim Schmidt