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Werkzeugmaschinen

Technical Datasheet

CNC-Hypoid Cutting Machine

Gleason Phoenix®II 600HC

TECHNICAL DATASHEET

CNC-Hypoid Cutting Machine

Manufacturer GLEASON

Type Phoenix 600HC Control FANUC 160i-MB

Built **2006**



With the GLEASON PhoenixII® 600HC bevel gear cutting machine, manufacturers of medium-sized spiral and hypoid-toothed bevel gears can achieve faster cycle times and higher accuracies at lower workpiece costs.

Designed as a monolithic cast iron column, there is no need for a separate machine bed compared to other machine manufacturers. The machine is therefore much more compact and saves valuable floor space. By eliminating the machine bed, the 600HC can be set up independently of a foundation. Only three positioning elements are required for installation. This significantly reduces the installation time.

Both the cutter head and the workpiece face the operator and are in close proximity to each other. This enables attractive working conditions and an ergonomic working method. Loading and unloading the workpiece and changing the cutter head are faster and reduce the set-up time.

Direct-drive spindle motors, combined with inherently shorter linear movements and faster acceleration/deceleration rates, further reduce non-productive times considerably.



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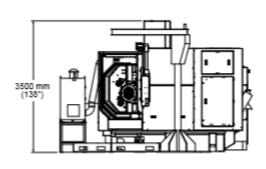
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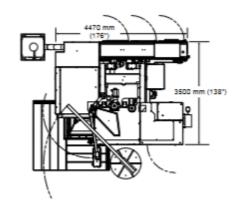
Working range			
Max. workpiece diameter	Ø 600	mm	23.6"
Max. Tooth depth	24,6	mm	0.97"
Max. Tooth width	110	mm	4.3"
Number of teeth	1 - 300		
Cutter head size Face milling (FM)	18	"	Diameter
Cutterhead size Face Hobbing (FH)	210	mm	Radius
Max. speed of cutter spindle	600	1/min	

Work spindle			
Diameter of taper front	Ø 203	mm	8.0"
Diameter of taper bore	Ø 181	mm	7.1"
Depth of bore	884	mm	34.8"
Max. speed of work spindle	600	1/min	

Dimensions and weight

Space needed L x B x H	4,4 x 3,5 x 3,5	m	Incl. auxiliaries
Machine weight	26.000	kg	





Connection Data

Total connected load	139	kVA
Back-up fuse	200	Α
Operating voltage	400	V
Operating frequency	50	Hz
Control voltage	24	V DC

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Equipment and accessories

Basic machine GLEASON PHOENIX 600HC with control FANUC 160i series incl.

- Hydraulic unit
- Electrical safety devices
- Automatic operator doors
- · Chip conveyor, designed for dry machining
- Swivel control panel for the operator
- Powerful Tebaron extraction and filter unit
- Foot switch for hydraulic chuck clamping
- Spindle cooling unit
- Electronic emergency retraction
- Gleason HMI user interface for easy input of gearing values and correction values
- Fully CNC-controlled machine design, designed for the shortest set-up and changeover times and maximum gear cutting accuracy
- All axes and spindles in FANUC digital drive technology, main spindles by KOLLMORGEN
- Central lubrication
- Electronic centering device with touch probe for precise rotary positioning of the workpiece
- · Full enclosure of the work area
- Work seating safety bore/shank inspection device
- Machine light
- Machine network-compatible for the use of data from GEMS (G-AGE and Summary Manager)
- Machine documentation







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