

Gleason 950 specifications

	English	Metric
Pinion O.D. (max.)	7.000"	177.8 mm
Pitch diameter of mate (max.)	10.500"	266.7 mm
Cone distance (max.)	5.250"	133.3 mm
Whole depth	.750"	19 mm
Face width	1.750"	44.5 mm
Tooth numbers	6-25	
Ratio Range	1.9-6	
MACHINE CAPACITY		
Tilt angle	40°	
Root angle	-12° to +12°	
Machine offset	± 3.250"	± 82.6 mm
Sliding base: advance	1.000"	25.4 mm
withdraw	2.500"	63.5 mm
Radial (max.)	5.000"	127 mm
WORK SPINDLE		
Diameter of tapered hole at large end	3 ²⁹ / ₃₂ "	
Taper per foot	3 ⁹ / ₆₄ "	
Depth of taper	6"	
NOTE: Arbor equipment for the Production Center is not interchangeable with that for prior machinery.		
SPEEDS AND FEEDS		
Cutting speeds (maximum)	600 SFPM	
Feed (fastest)	3.5 sec/tooth	
CUTTERS		
HARDAC II and WEDG-AC	5, 6, 7 ¹ / ₂ and 9" 3 ¹ / ₂ " and 4 ¹ / ₂ " with adapter	
ELECTRICAL EQUIPMENT		
	60 Cycle	50 Cycle
Hydraulic motors (2)	5 H.P. 1800 rpm	1500 rpm
Scavenger motors (2)	1 H.P. 1800 rpm	1500 rpm
Coolant motors (3)	1 H.P. 1800 rpm	1500 rpm
Rougher cutter motors (2)	5 H.P. 1200 rpm	1000 rpm
Finisher cutter motors		
(2 precision dynamic		
balanced)	3 H.P. 1800 rpm	1500 rpm
Servo pump drive motors (4)	3 H.P. 1800 rpm	1500 rpm
MISCELLANEOUS		
Floor space for complete No. 950— including Rougher, Finisher, electrical control boxes and automatic part handling system	233" x 255"	592 x 648 cm
Approx. weight (net)	115,000 lbs.	52164 Kg.
Approx. weight (gross)	126,000 lbs.	57152 Kg.

STANDARD EQUIPMENT

(1) No. 615 Hypoid Pinion Rougher
(Double Cradle)

(1) No. 616 Hypoid Pinion Finisher
(Double Cradle)

Automatic loading and unloading,
stock dividing and transfer from
roughing section to finishing section
Storage bank between roughing and
finishing sections

Chamfering device

Screw-type chip conveyors (2) with
magnetic chip separators (2)*

Power amplifiers (4)

Automatic Production Counters (2)

Complete set of cams for one part

Necessary belts, pulleys and gears for
index, ratio of roll, cradle roll, and
speed for one automotive pinion

Hydraulic chucking including drawrods
on all four workheads

Work spindle bores 3²⁹/₃₂" x 3⁹/₆₄" taper

Ratio control roughing on No. 615

Complete electrical equipment
including installation for 3 phase,
50 or 60 cycle, alternating current

*Allowance for omission of magnetic chip
separators—for central system

EXTRA EQUIPMENT

Cutter length fixture

Cutter proof fixture

Size and depth control fixture (dinging
ball fixture)

One set of belts and pulleys to arrange
each machine for one additional speed

One set of change gears to arrange
machine for a different pinion

One set of parts to arrange automatic
loader for a different pinion

Additional cams

 Roughing feed cams (2)

 Finishing feed cams (2)

 Roughing roll cams (2)

 Finishing roll cams (2)

 Index cams (4)

 Clamp on/off cam (1)

 Ratio control set-over cam (1)

Cutter lifting bail

Set of installation rollers

Load magazine

Unload magazine