

SPECIFICATIONS		
Gleason No. 118 Hypoid Generator		
CAPACITY		
Diametral pitch (coarsest)	2	12.7 Mod
Cone distance, maximum (30° spiral angle and 12° cutter)	9'	230mm
Work Head angle	12° to 90°	
Extreme ratio	Any practical ratio	
Minimum ratio for pinions to operate with formate gears	2 to 1	
Maximum gear pitch diameter (30° spiral angle)		
10 to 1 ratio	184"	460mm
2 to 1 ratio	164"	406mm
1 to 1 ratio	124"	324mm
Face width (maximum)	24 1/2"	70mm
Number of teeth	6-150	
WORK SPINDLE		
Diameter of taper hole at large end	3 1/2"	100mm
Taper	14° (per ft)	1:20
Depth of taper	3 1/2"	150mm
Diameter of hole through spindle	3 1/4"	78mm
Diameter of spindle nose	5 1/2"	140mm
CUTTER DIAMETER		
6", 7 1/2", 9", 12", 150mm, 190mm, 250mm, and 305mm		
WORK HEAD SETTINGS		
Maximum offset above center	1 1/4"	114mm
Maximum offset below center	1 1/2"	114mm
Maximum distance from machine center to nose of spindle	13 1/2"	343mm
Minimum distance from machine center to nose of spindle	2 1/2"	63mm
FEEDS AND SPEEDS		
Cutter speeds	17 to 115 R.P.M.	
Feed (sec./tooth)	9 to 80 seconds	
ELECTRICAL EQUIPMENT		
Feed Motor	5 H.P. 1800 R.P.M.	
Hydraulic Motor	1/2 H.P. 1800 R.P.M.	
Coolant Motor	1/2 H.P. 3600 R.P.M.	
MISCELLANEOUS		
Floor Space	75 1/2" x 114" x 190 cm x 290 cm	
Net Weight	23,700 lbs.	10,750 Kg
Shipping Weight, boxed for export	25,300 lbs.	
1 case 10 1/2" x 11 1/2" x 13 1/2"		
1 case 320 cm x 240 cm x 100 cm		11,750 Kg
* Limited by cutter diameter and number of blades, sum of pinions		

space, the cradle and work reverse direction, the work is withdrawn and indexing takes place. The work head moves forward and the sequence of motions is repeated until every tooth has been cut. The machine stops automatically when the work is finished.

The special high production cams produce the same sequence of motions, except that the rate of roll varies so that the blades remove equal amounts of stock during all portions of the generating roll.

When the straight infeed path is employed, the rolling motion of the gear and cradle is locked and the tooth space is cut by a depth feed of the work directly into the cutter. After each tooth space is cut the work is withdrawn and the gear blank is indexed to the next tooth space. This sequence of motion is repeated until the gear is completed.

STANDARD EQUIPMENT

Index, ratio of roll, speed and feed change gears for one part
Double-acting hydraulic chuck
Motors and controls

EXTRA EQUIPMENT

Cutters and fixtures
Work spindle clamp and cradle yoke
Additional change gears to make complete set with cabinet
Work holding equipment for one part
Modified roll attachment
Index positioning arrangement
Universal stock dividing gage



GLEASON WORKS

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