

U.S.A. MADE

SINCE 1929

PARKER



MAJESTIC

A PENN UNITED COMPANY



THE LIBERTY III
UNIVERSAL CNC ID/OD GRINDER

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SPECIFICATIONS

GENERAL SPECIFICATIONS

OVERALL DIMENSIONS (WXDXH)	120 X 130 X 80 IN
MACHINE WEIGHT	15,000 LB (+/-1000 LB)
MAX PART DIAMETER	14 IN (17 IN OPTIONAL)
DISTANCE BETWEEN CENTERS	10-12 IN
WORKTABLE SIZE	7.25 X 38 IN

POWER

POWER REQUIREMENT	208, 230, OR 480 VAC - 60 HZ
POWER CONSUMPTION	39.5 KVA
MAX. CURRENT	100A

CNC CONTROL/PROGRAMMING

SIEMENS 840D SOLUTION LINE	
INPUT FORMAT	ETHERNET OR USB
POSITION COMMAND	INCREMENTAL AND ABSOLUTE
PROGRAMMING FORMAT	INCH OR METRIC
MINIMUM PROGRAM INCREMENT	0.00001"
HANDWHEEL CONTROL	REMOTE HANDWHEEL PENDANT
OPTIONAL NON-CIRCULAR GRINDING AVAILABLE	

Z-AXIS (TABLEFEED)

SERVO MOTOR DRIVEN BALLSCREW	
HAND SCRAPED TURCITE COATED VEE & FLAT WAY SYSTEM	
HEIDENHAIN ABSOLUTE LINEAR GLASS SCALE	
SERVO POWER RATING	2.28 HP
TOTAL TRAVEL	18 IN

X-AXIS (CROSSFEED)

SERVO MOTOR DRIVEN BALLSCREW	
PRECISION ROLLING ELEMENT LINEAR MOTION BEARINGS	
HEIDENHAIN ABSOLUTE LINEAR GLASS SCALE	
SERVO POWER RATING	2.28 HP
TOTAL TRAVEL	13 IN

WORKHEAD SPINDLE

WORKPIECE MOUNTING INTERFACE	A2-5 (A2-8 OPTIONAL) W/INTEGRAL 5C COLLET TAPER
C-AXIS SPEED	0 - 1000 RPM
TORQUE RATING, CONTINUOUS	54.6 NM (79.6 OR 119 NM OPTIONAL)
HEIDENHAIN ANGULAR SCALE	STANDARD: INCREMENTAL, 5000 COUNT NON-CIRCULAR OPTION: ABSOLUTE, HIGH RESOLUTION

MANUAL B-AXIS PIVOT

PIVOT RANGE	95° TOWARD GRINDING WHEEL, 22° AWAY FROM GRINDING WHEEL
ACCURACY	+/-0.0005°

WHEEL DRESSING SPINDLE (OPTIONAL)

GII SOLUTIONS DTS 3300	
MOUNTED TO TABLE TOP OR BACK SIDE OF WORKHEAD	
DRESSING ROLL SIZE	UP TO Ø5 IN X 1 IN

WHEEL HEAD

AUTOMATIC SWIVEL (1° INCREMENTS) OTHER OPTIONS AVAILABLE

WHEEL HEAD SWIVEL ACCURACY	+/-1.5 ARC SECONDS
DIAMETER (X-DIRECTION)	+/-0.0001 IN
AXIAL LOCATION (Z-DIRECTION)	+/-0.00016 IN

3 SPINDLE MOUNTING LOCATIONS AVAILABLE IN FOLLOWING CONFIGURATIONS:
OD-OD-ID, OD-ID-ID, ID-ID-ID, OD-OD, ID-ID, OD-ID, ANY SINGLE SPINDLE

OPTIONS

MARPOSS PROBING
WHEEL BALANCING
ACOUSTIC GAP REDUCTION / CRASH PREVENTION

PARKER-MAJESTIC EXTERNAL GRINDING SPINDLES

DIRECT DRIVE	
SPEED	500 - 3600 RPM
POWER RATING	7, 12, OR 18 HP
WHEEL DIAMETER	11 - 16 IN
WHEEL WIDTH	0.5 - 2 IN

PARKER-MAJESTIC INTERNAL GRINDING SPINDLES

PS-SA00011	
SPEED	5,000 - 15,000 RPM
POWER RATING	3.4 HP (2.5 KW)
TOOL INTERFACE	1IN QUILL SERIES OR ER-20 COLLETS
PS-SA00012	
SPEED	5,000 - 30,000 RPM
POWER RATING	3.4 HP (2.5 KW)
TOOL INTERFACE	5/8IN QUILL SERIES OR ER-16 COLLETS
PS-SA00013	
SPEED	15,000 - 40,000 RPM
POWER RATING	2 HP (1.5 KW)
TOOL INTERFACE	7/16IN QUILL SERIES OR ER-11 COLLETS
PS-SA00017	
SPEED	35,000 - 75,000 RPM
POWER RATING	0.37 HP (0.28 KW)
TOOL INTERFACE	ER-8 COLLETS

FISCHER INTERNAL GRINDING SPINDLES

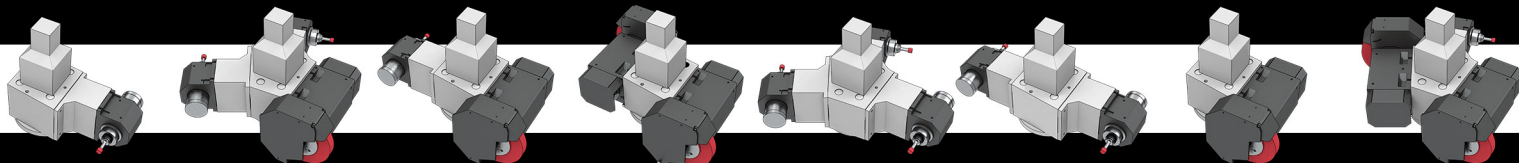
ALL FISCHER ID SPINDLES AND OPTIONS ARE AVAILABLE UPON REQUEST

MFM-1224/42	
SPEED	1,000 - 42,000 RPM
POWER RATING	20 HP @ 24,000+ RPM, 9 HP @ 10,000 RPM

MFM-1406/12	
SPEED	1,000 - 12,000 RPM
POWER RATING	13 HP @ 6,000+ RPM

MFM-1418/36	
SPEED	1,000 - 36,000 RPM
POWER RATING	24 HP @ 16,000+ RPM, 16 HP @ 10,000 RPM

MFM-1709/15	
SPEED	1,000 - 15,000 RPM
POWER RATING	27 HP @ 9,000+ RPM



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