Advanced CNC Metal Flow Forming Machines

With its new 4-roller flow forming machines, MJC has developed the future within flow forming technology. This new concept has revolutionized the metal forming industry.

MJC Flow Forming Machines are specially designed for the manufacturing of rotary and shear formed precision components. The cylindrical flow forming process allows great potential for weight optimization, reduction of production steps, and control of tight tolerance wall thicknesses.

MJC customers benefit from the best service and support in the industry through locally authorized service centers.



DESIGN FEATURES

- 4-Roller Design
- Increased Feed Rate
- Better Balance in Forming Forces
- Faster Cycle Times
- Rugged Construction
- Massive Main Components
- Oversized Linear Slide Bearings
- Dual Z Axis Ball-screw Drives
- Hydraulic X Axes
- Extremely Rigid X Slide Units
- -Trouble-free Operation
- Quick Tooling Changeovers
- Simple Diagnostics
- Low Maintenance
- Siemens Sinumerik control system
- Custom programming software

"SetupPRO"© **Machine Monitoring Software**

- •Revolutionary software solutions from MJC that ease the use and setup of modern CNC flow forming machines.
- Roller Positioning and Offset Control
- •Individually and Programmable Axial Roller Force Control
- Longitudinal Axis Force Feedback
- Main Spindle Motor Load Feedback
- Actual Cycle Time Timer for Production Cycle Optimization
- Production Part Counter for counting up or down
- Programmable Machine System Temperature Monitoring

MCS V Z1 2156.8 2157.3	2106.8	Z OFFSET	CYCLE TIME
×1 -00.2	222.2	XI OFFSET	PART COUNT
x2 -45.1		-242.6 X2.0FFSET	000 PRESET
2 40.1	176.0	-318.7 -X30FFSET	
×3 -26.1	197.0	-208.9	
×4 00.1	223.1	-239.7	
	os RESET after an OFFSET or SLIDE GLE has changed	Set Offset	Setup Pro

POS	ITION	LOADS		TEMPER	ATUR	ES	
Z1	2106.8		0.00	HYDRAULIC OIL	66	SETPOINT 176	ALARM
Z2			0.00	COOLANT	65	176	0
X1	222.2		01.9	FRONT BEARING	67	176	0
X2	176.0		01.9	SPINDLE	65	176	0
×3	197.0		01.8				UPDATE
×4	223.1		0.00				
SP	00.0		00.7				
REC	DURATION DRD 250	SECONDS					
PLAY	BACK •	>					DIT

Machine Specifications

Blank/Work piece dimensions: F450.2000-4

Min/max work piece Diameter: 200 mm / 450 mm Cylindrical length in forward flow forming max. 2,000 mm Cylindrical length in reverse flow forming

Machine Data

Tool mounting main spindle as per DIN 55022:

Power main spindle drive:

Main spindle speed:

Transverse slide unit force: Transverse slide unit stroke: Longitudinal slide stroke: Longitudinal slide force:

Number of radial feed units in the slide:

Tailstock stroke:

Tailstock clamping force:

Tailstock mounting as per DIN 55022:

Ejector stroke: Eiector force:

Hydraulic drive power:

Hydraulic components:

PLC Control: CNC control:

max. 4.000 mm

size 15

190 kW AC Vector

max. 600 rpm max. 400 kN

200 mm 2.200 mm

max. 500kN 4 units

1,000 mm

max. 147 kN

Size 6 2,000 mm 200 kN

45 kW

Parker Hannifin Siemens Step 7

Siemens 840Dsl

Specifications Subject to Change Without Notice



ENGINEERING AND TECHNOLOGY, INC.

Advanced CNC Equipment for Metal Forming Technology CNC Flow-Forming Machine F450.2000-4

