



HSR-4 Hydraulic Ring Rolling Machine 415v

The Morgan Rushworth HSR-4 represents a groundbreaking advance in section bending technology, integrating the powerful 4-roll design traditionally seen in plate bending into section bending applications. This innovation results in reduced flat ends, thanks to the double-pinch process, which provides greater uniformity and precision compared to the 3-roll approach.

The machine's optional touch-screen NC Control further enhances functionality, offering user-friendly programming and enabling operators to save configurations for improved accuracy and repeatability across multiple runs.



**HSR-4 110/320
with NC Controller**

Machine Features

- Unique 4 Roll Design
- 2 rolls driven
- Hydraulic adjustment of lower pinch roll
- Hydraulic adjustment of two bending rolls
- Hardened and ground high tensile roll shafts
- Induction hardened and ground rolls
- Smooth rolls ensure minimum material marking
- Manual lateral guide rolls with adjustment in one axis
- Mobile control panel

Optional Equipment

- 3 rolls driven
- Manual lateral guide rolls with adjustment in one axis
- 4-axis NC control unit; controls position of lower pinch roll, both bending rolls and the feeding of the material. Includes 100 program memories

TECHNICAL SPECIFICATIONS

MODEL		HSR-4 70/200	HSR-4 90/260	HSR-4 110/320
Shaft Diameter	mm	70	90	110
Roll Diameter	mm	200	260	320
Bending Speed	rpm	8	6.37	4.98
Power	kW	5	5.5	7.5
Length	mm	1200	1700	2000
Width	mm	1100	1450	1700
Height	mm	800	1200	1250
Weight	kg	1400	2800	4500

CAPACITIES

MODEL		HSR-4 70/200		HSR-4 90/260		HSR-4 110/320	
PROFILE	Size	Min. Dia.	Size	Min. Dia.	Size	Min. Dia.	
1. 	60x10 20x5	500 250	100 x 20 80 x 20 30 x 10	2000 800 300	100 x 20 30 x 10	800 400	
2. 	80 x 20 50 x 5	500 250	125 x 25 60 x 5	600 300	200 x 30 160 x 35 80 x 5	1200 800 400	
3. 	32 x 32 12 x 12	400 250	45 x 45 15 x 15	500 380	60 x 60 15 x 15	750 400	
4. 	Ø 35 Ø 10	350 250	Ø 50 Ø 15	500 380	Ø 75 Ø 15	800 450	
5. 	Ø 60 x 2 Ø 15 x 1.5	600 200	Ø 100 x 2.5 Ø 15 x 1	1200 380	Ø 125 x 25 Ø 15 x 1	1400 450	
6. 	Ø 2" x 3.91 Ø 1/2" x 2.77	400 200	Ø 3" x 5.48 Ø 1/2" x 2.77	800 380	Ø 4" x 6.02 Ø 1/2" x 2.77	1000 450	
7. 	50 x 25 x 3 20 x 15 x 2	450 250	80 x 25 x 3 25 x 15 x 2	800 350	100 x 40 x 4 25 x 15 x 2	1300 450	
8. 	45 x 3 20 x 2	600 300	70 x 3 25 x 2	1300 400	80 x 5 25 x 2	1500 450	
9. 	60 x 60 x 6 30 x 30 x 4	650 350	80 x 80 x 8 30 x 30 x 3	800 450	100 x 100 x 12 40 x 40 x 4	1000 700	
10. 	50 x 50 x 5 30 x 30 x 4	550 350	70 x 70 x 7 30 x 30 x 3	700 450	100 x 100 x 10 40 x 40 x 4	1000 550	
11. 	60 x 7 20 x 3	550 250	80 x 9 25 x 3.5	800 280	100 x 11 30 x 4	1000 400	
12. 	50 x 6 20 x 3	500 250	70 x 8 25 x 3.5	800 280	90 x 10 30 x 4	1000 400	
13. 	60 x 70 20 x 3	500 250	80 x 9 30 x 4	800 300	100 x 11 30 x 4	1000 400	
14.	UPN 80 UPN 30	600 250	UPN 140 UPN 120 UPN 100	1600 900 600	UPN 180 UPN 30	900 400	
15.	UPN 65 UPN 30	600 250	UPN 140 UPN 120 UPN 100	1600 1000 800	UPN 180 UPN 30	1000 400	
16.	IPN 80	600	IPN 120 IPN 80	600 400	IPN 180 IPN 80	1000 400	

Capacities are given for 260 N/mm² plate yielding strength | * Specialist tooling recommended | ** Specialist tooling required



OPTIONAL NYLON ROLLS ARE AVAILABLE FOR MATERIALS LIKE STAINLESS STEEL, OFFERING ENHANCED PROTECTION AND PREVENTING SURFACE DAMAGE DURING THE BENDING PROCESS.