



HSR Hydraulic Ring Rolling Machine 415v

The Morgan Rushworth HSR range of hydraulic section bending machines are designed to roll various material sections and are available with shaft diameters from 50mm up to 120mm. All models are supplied with a single hydraulic ram to adjust the top roll, which on the larger machines includes a digital read out to indicate position. All of the HSR machines can be operated in either vertical or horizontal plane. The standard rolls supplied with the machine are hardened and have been designed to bend most sections, with the exception of round tube which are available as an option. Lateral guide rolls ensure straight and true bending, or if required can be adjusted in order to spiral the material.



HSR 50/160

Machine Features

- Single pinch hydraulic top roll adjustment
- Pointer and scale to indicate top roll position
- All three rolls driven
- Hardened rolls
- Standard modular rolls able to bend a wide range of profiles
- Smooth rolls ensure minimal material marking
- Manually adjusted lateral guide rolls
- Horizontal or vertical working position
- Mobile control panel
- Forward and reverse foot pedal
- Digital read out of top roll position

Optional Equipment

- Tube rolls and other specialist tooling
- NC control system



BENDING TUBE



BENDING BOX SECTION



STANDARD ROLLS



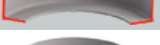
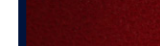
DIGITAL READOUT OF TOP ROLL POSITION

TECHNICAL SPECIFICATIONS

MODEL		PSR 35/140	PSR 50/155	HSR 50/116	HSR 60/215	HSR-3 80/245	HSR-3 100/315	HSR-3 120/390
STOCK CODE		M6012	M6014	M6000	M6001	M6017	M6018	M6019
Shaft Diameter	mm	35	50	50	60	80	100	120
Roll Diameter	mm	137	155	162	215	245	315	390
Rolling Speed	m/min	2.1	4.3	4.5	4	6	7	7.5
Power	kW	0.75	1.5	1.1	1.5	4	7.5	15
Length	mm	670	730	810	1000	1450	2000	2000
Width	mm	530	830	950	1400	1000	1450	1650
Height	mm	1350	1350	1500	1650	1400	1700	1900
Weight	kg	195	400	500	950	1700	3650	4450

See overleaf for full capacity chart

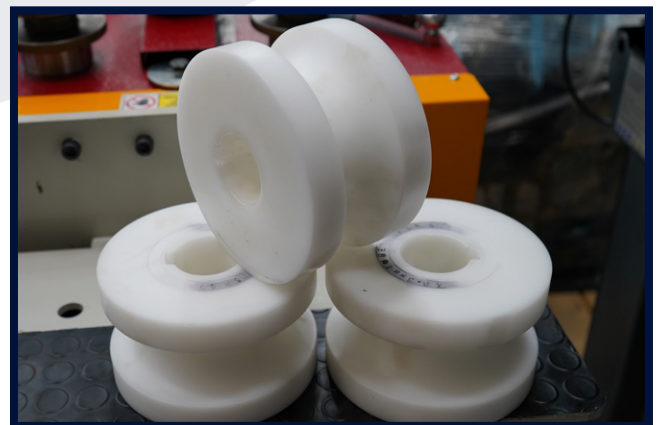
CAPACITIES

MODEL	PSR 35/140			PSR 50/155			HSR 50/116			HSR 60/215			HSR-3 80/245			HSR-3 100/315			HSR-3 120/390		
PROFILE	Size	Min. Dia.		Size	Min. Dia.		Size	Min. Dia.		Size	Min. Dia.		Size	Min. Dia.		Size	Min. Dia.		Size	Min. Dia.	
	50 x 10 20 x 6	1800 300		60 x 10 40 x 10	500 400		60 x 10 20 x 10	600 300		80 x 20 40 x 10	1200 400		100 x 20* 80 x 20 30 x 10	2000 800 300		100 x 20 30 x 10	800 400		125 x 25 30 x 10	1200 500	
	80 x 15 30 x 6	700 400		100 x 15 60 x 10	450 350		100 x 15 50 x 10	600 300		120 x 25 50 x 10	600 400		125 x 25 60 x 5	600 300		200 x 30 160 x 35 80 x 5	1200 800 400		200 x 50 100 x 10	1000 500	
	30 x 30 10 x 10	900 200		35 x 35 20 x 20	900 300		35 x 35 15 x 15	600 300		50 x 50 20 x 20	800 400		45 x 45 15 x 15	500 380		60 x 60 15 x 15	750 400		65 x 65 20 x 20	750 500	
	Ø 30 Ø 10	900 200	*	Ø 35 Ø 30	600 400		Ø 35 Ø 20	600 300		Ø 50 Ø 20	800 400		Ø 50 Ø 15	500 380		Ø 75 Ø 15	800 450		Ø 80 Ø 20	850 500	
	Ø 60 x 1.5 Ø 25 x 1.5	1000 600	*	Ø 70 x 2 Ø 30 x 2	1000 500		Ø 70 x 2 Ø 25 x 1.5	1200 400		Ø 100 x 2 Ø 60 x 2	1600 500		Ø 100 x 2.5 Ø 15 x 1	1200 380		Ø 125 x 2.5 Ø 15 x 1	1400 450		Ø 160 x 4 Ø 140 x 3 Ø 50 x 2	2800 1500 500	
	48.3 x 2.9	600	*	60.3 x 2.9 33.7 x 2.3	1000 350		60.3 x 2.9 21.3 x 2.3	1000 300		88.9 x 3.2 33.7 x 2.6	1600 500		88.9 x 5.48 21.3 x 2.77	800 380		114.3 x 4.5 21.3 x 2.77	1000 500		139.7 x 6.35 26.9 x 2.87	1500 500	
	50 x 30 x 3 40 x 20 x 3	1200 800	*	70 x 30 x 2 50 x 40 x 3	1200 1200		70 x 30 x 3 30 x 15 x 2	1500 400		80 x 40 x 3 40 x 20 x 2	1400 500		80 x 25 x 3 25 x 15 x 2	800 350		100 x 40 x 4 25 x 15 x 2	1300 450		120 x 40 x 4 30 x 20 x 3	1800 500	
	40 x 3 30 x 2	1200 800	*	50 x 3 40 x 3	1700 600		50 x 3 20 x 2	1600 400		70 x 3 40 x 2	1600 500		70 x 3 25 x 2	1300 350		80 x 5 25 x 2	1500 450		90 x 5 30 x 3	1800 500	
	40 x 40 x 5 30 x 30 x 4	600 300	*	50 x 50 x 5 40 x 40 x 5	800 600		50 x 50 x 6 30 x 30 x 3	600 400		70 x 70 x 7 40 x 40 x 5	1000 500		80 x 80 x 8 30 x 30 x 3	800 400		100 x 100 x 12 40 x 40 x 4	1000 700		120 x 120 x 12 40 x 40 x 4	1200 600	
	35 x 35 x 5 30 x 30 x 4	600 400	*	50 x 50 x 6 30 x 30 x 3	1000 500		50 x 50 x 6 30 x 30 x 3	600 400		70 x 70 x 7 40 x 40 x 5	1200 600		70 x 70 x 7 30 x 30 x 3	700 450		100 x 100 x 10 40 x 40 x 4	1500 550		100 x 100 x 10 40 x 40 x 4	1200 600	
	50 x 6 20 x 3	600 400		60 x 7 30 x 4	700 400		60 x 7 30 x 4	600 400		80 x 9 40 x 5	1000 400		80 x 9 30 x 4	800 450		100 x 11 30 x 4	1000 400		100 x 11 30 x 4	800 500	
	50 x 6 20 x 3	600 400		60 x 7 30 x 4	800 500		60 x 7 30 x 4	700 400		80 x 9 40 x 5	1200 400		70 x 8 25 x 3.5	800 280		90 x 10 30 x 4	1000 400		100 x 11 30 x 4	1000 500	
	50 x 6 20 x 3	600 400	*	60 x 7 30 x 4	700 500		60 x 7 30 x 4	700 400		80 x 9 40 x 5	1000 400		80 x 9 30 x 4	800 280		100 x 11 30 x 4	1000 400		100 x 11 30 x 4	800 500	
	N/A			UPN 80 UPN 30	1000 500		UPN 80 UPN 30	800 400		UPN 100 UPN 60	800 500		UPN 140 UPN 120 UPN 100	1600 900 800		UPN 180 UPN 30	1000 400		UPN 220 UPN 180 UPN 40	1000 800 500	
	N/A			UPN 80 UPN 30	1200 800		UPN 80 UPN 30	1200 600		UPN 100 UPN 60	1200 600		UPN 140 UPN 120 UPN 100	1600 1000 800		UPN 180 UPN 30	1000 400		UPN 220 UPN 180 UPN 40	1200 900 600	
	N/A			N/A			N/A			N/A			IPN 120 IPN 80	600 400		IPN 180 IPN 80	1000 400		IPN 220 IPN 80	1000 500	
	N/A			N/A			N/A			N/A			N/A			HEA 120 HEB 100	1000 1200		HEB 120 HEA 140	1200 1200	
	N/A		**	N/A			N/A			N/A			N/A			N/A			UPN 120 UPN 50	10000 1000	
	N/A		**	N/A			N/A			N/A			N/A			N/A			IPN 160 IPN 140 IPN 80	5000 4000 1200	
	N/A		**	N/A			N/A			N/A			N/A			N/A			HEA 120 HEB 100	4500 1600	

Capacities are given for 260 N/mm² plate yielding strength | * Specialist tooling required | ** Only with special Beam Bending Attachment



HYDRAULIC PRESSURE GAUGE



OPTIONAL NYLON ROLLS FOR STAINLESS STEEL ETC