



### ESR CNC Folding Machine

The Morgan Rushworth ESR range of CNC folders are designed to produce fast, accurate and consistent folded parts. Available from 2M to 4.2M bending lengths, all models are supplied with a minimum of 0.75M powered back gauge, with optional longer backgauges including U and L shaped configurations. The backgauge is integral to the rear support table, which is ideal for the folding of large sheets as the weight of the material is supported, resulting in a traditionally two operator job, being able to be performed with just one.

The advanced 2D touch screen CNC, controls all upper beam clamping, folding beam and back gauge movements, with programming carried on the machine or on office PC. Once the operator has drawn the job onto the screen, entered the angles and dimensions, selected the tooling from the library, the CNC then firstly calculates whether the job is possible or not, the developed length and the bending sequence including whether to turn material over or around. All ESR models are supplied with a straight rail with optional high divided tools for the production of box and panel type operations.



**ESR 3200.20**

**WATCH THE  
MACHINE IN  
ACTION**





**20 DEGREE 1MM SHARP NOSE CLAMPING BEAM**



**BRUSH TABLE (OPTIONAL)**

## Machine Features

- Bending angle from 0 - 150 degrees
- 20 degree 1mm sharp nose clamping beam rail with 25mm clearance
- 10mm and 25mm wide folding beam rails
- Fast 0.75 -1.5 metre powered backgauge integral to rear table with roller balls
- Flat lower beam with feather style backgauge fingers
- 15.6" 2D touch screen control on swinging arm for front and rear operation
- High speed and high pressure clamping
- Virtually no marking on material
- Safe edge can be achieved without tool change
- Very quiet with low energy consumption as motors only run when machine is working
- Manual folding beam adjustment
- Manual crowning system
- Front light guards barriers for use with rear operation

## Optional Equipment

- 3D CNC touch screen controller
- Longer length back gauges with U and L shape configurations
- Squaring arm for rear backgauge table
- Stainless steel backgauge table
- Brush table to protect material
- 60mm, 90mm and 120mm high divided tooling with 30 degree feet and 25mm clearance (according to model)
- Motorised folding beam adjustment

## TECHNICAL SPECIFICATIONS

MODEL		ESR 2050.25	ESR 2050.30	ESR 2050.50	ESR 2550.15	ESR 2550.20	ESR 2550.45	ESR 3200.15	ESR 3200.20	ESR 3200.40	ESR 4200.15	ESR 4200.30
SKU		M2073	M2074	M2075	M2076	M2077	M2068	M2079	M2080	M2081	M2082	M2084
Bending Width	mm	2050			2550			3200			4200	
Bending Thickness - Mild Steel	mm	2.5	3	5	2	2.5	4.5	1.5	1	2	1.5	3
Bending Thickness - Stainless Steel	mm	1.5	2	3.5	1.2	1.5	2.5	1	1.2	2.5	1	2
Bending Thickness - Aluminium	mm	3.5	4	6.5	3	3.5	6	2	3	3	2	4
Stroke Depth	mm	120	160	250	120	160	250	120	160	250	160	250
Back Gauge	mm	750	1000	1500	750	1000	1500	750	1000	1500	1000	1500
Clamping Beam Axis Speed	mm/sec	70	60	60	70	60	60	70	60	60	60	60
Folding Beam Axis Speed	mm/sec	85	85	75	85	85	75	85	85	75	85	75
Back Gauge Axis Speed	mm/sec	200	200	200	200	200	200	200	200	200	200	200
Clamping Beam Motor	kW	2.2	1.1	2 x 3	2.2	3	2 x 3	2.2	3	2 x 3	3	2 x 3
Folding Beam Motor	kW	1.5	1.5	2 x 5.5	1.1	1.5	2 x 5.5	1.1	1.5	2 x 5.5	1.5	2 x 5.5
Back Gauge Motor	kW	0.4	0.4	0.7	0.4	0.4	0.7	0.4	0.4	0.7	0.4	0.7
Length	mm	1900	2300	2300	1900	2300	2300	1900	2300	2300	2300	2300
Width	mm	3300	3250	3600	3300	3850	4100	3300	4450	4750	5750	5750
Height	mm	1850	2100	2100	1700	1700	2100	1700	2300	2300	2100	2100
Weight	kg	2550	3500	5900	2700	4350	6600	3000	4700	7400	5250	8100