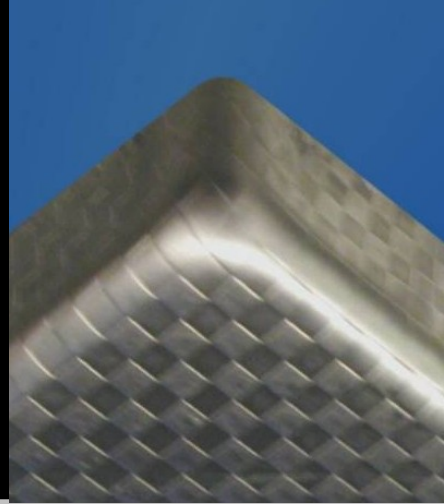


M100/M100

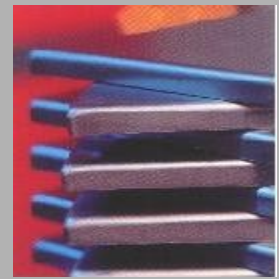
AUTOMATIC CORNER FORMING IN ONE PASS



MASTER[®]

EDGE

THE TECHNICAL CONCEPT



The **M100** forms high quality closed corners from a pre-bent flat blank from various Materials such as Mild Steel, Stainless Steel, Aluminum, Brass etc.

All that in just seconds!

- ▶ no welding
- ▶ less grinding
- ▶ no expensive manual operations
- ▶ improved appearance
- ▶ consistent quality
- ▶ reduced manual labor
- ▶ faster production rates
- ▶ competitive component costs



1st Step: Preparation of the blank

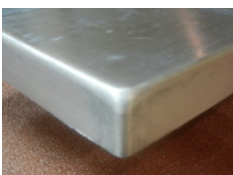
The rectangular blank is formed up on a press brake with a tool segment provided by you and modified by us.

Relieved tool segment for pre-bending



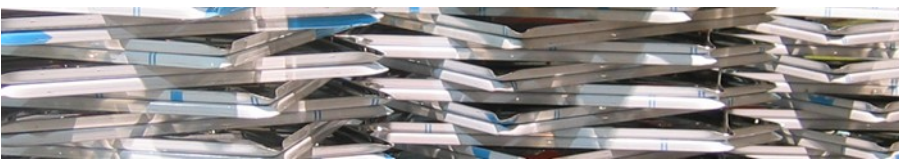
2nd Step: Cold forming

The corner is formed by a stress free rolling process.



3rd Step: Cut-off operation of the corner

After rolling the surplus material is automatically cut-off intern in the **M100** machine or can be done extern in the **C 100** machine in accordance to the bend height.



THE APPLICATION—M100



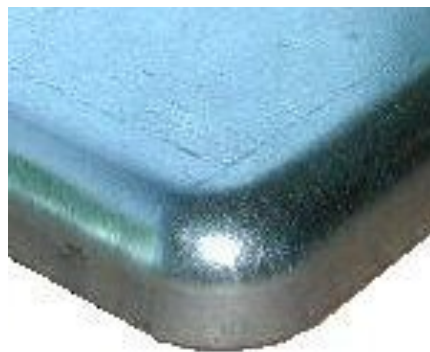
A variety of materials can be formed to corners of varying radii. The main limitation is the flange height: with our standard machine up to **15 times material thickness** can be formed into a flange. **With our extended height machine we can also achieve larger ratios.** You can combine differed dimension corner radii with bending radii.

For extreme ratios of material thickness to flange height we have custom wipe systems achieving ratios up to 35. These are limited to materials up to 18 gauge steel and stainless steel.



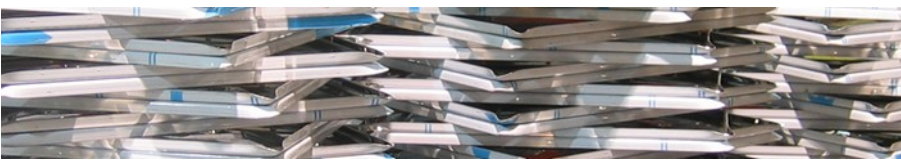
Any bending radius can be combined with any corner radius. Whether you like a large radius rounded corner with a tight bending radius or a miter on a part with a larger bending radius or a bull nose. The design is up to you. We have also build tools for beveled corners.

Corner radii up to 2" are possible with the standard machine. We can build a custom machine for larger radii.



Call us with your application and we can give you information on the spot whether yours will work. We also pride ourselves in giving advice on how to change designs for better suitability to corner form your part.

Special attention must be placed on parts with inside and return flanges and large openings close to the corner area. We have solutions for this as well.



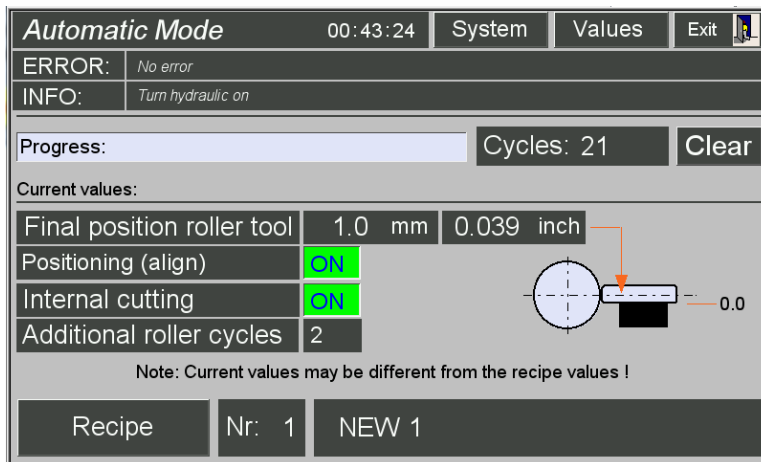
THE CONTROLS



We have given the **M100** all new controls which really make the process easier and allow you more flexibility in the application.

Choices and a clear picture!

- ▶ pick your number of additional roll cycles
- ▶ pick your pressures and forces for forming
- ▶ pick your internal or external trimming process
- ▶ pick your roll end position



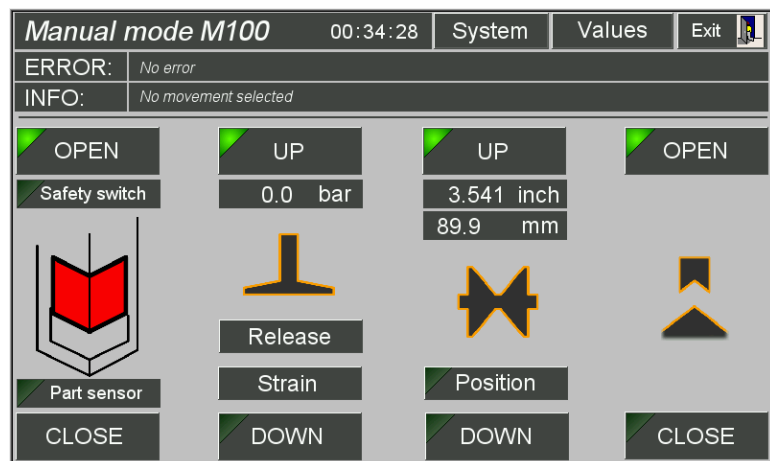
The control surface of the **M100** gives you a clear overview of the status of the process and the parameters picked for the forming.

The all touch screen operated functions are clearly visible and the control is intuitive to use with helpful graphics.

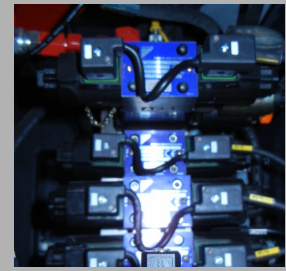
Lights and ascends inform you of the actual position of each movable component.

Powerful diagnostics help troubleshoot errors and malfunctions should they occur.

The most advanced control in corner forming is now available to ease your learning curve and make you more productive



NEW FEATURES—ADVANCED HYDRAULICS

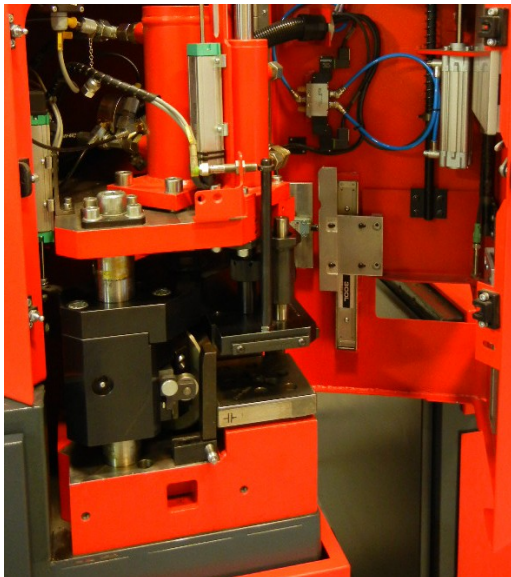


Besides the new control the key feature of the new **M100** is the frequency driven new hydraulic unit.

Variable hydraulic motor RPM saves you energy when the hydraulic is not required to run at full speed and at the same time speeds up the forming process in return stroke acceleration and positioning movement.

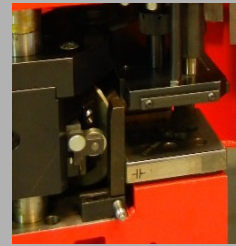
The best of both worlds: higher speed—lower energy consumption

- ▶ Frequency drive reduces RPM during idle
- ▶ increases RPM during positioning moves
- ▶ optimizes RPM for positioning accuracy at the target points
- ▶ increases motor life
- ▶ Reduces hydraulic wear and tear
- ▶ Reduces noise by 33%



- ▶ Enhanced safety with double door switch and intelligent safety check
- ▶ positions of Roll and pressure foot recorded by proximity switches and linear encoder
- ▶ Solid 50mm guides for forming roll more stable than any other former in the industry
- ▶ Advanced positioning for the preformed blank over the die

Specification **M** 100

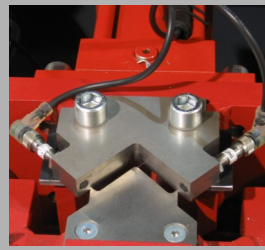


The **M100** controls all functions via its control of the external unit, which is optional. With the Edgemaster the user can truly choose between internal cutting in one process and external cutting for reduced set-up in different parts and higher cutting strengths for stainless material.

The external cutting unit **C100** is fully plug and play and can be added at any time later per customer's request. It connects with all quick connects to the main unit.

Technical Data	
Cycle Time per Corner	< 10 Seconds
Materials and Thickness Range	
CRS / HRS	0.032" - 0.188"
SS	0.032" - 0.080"
Al	0.040" - 0.200"
Other Materials	On Request
Dimension of Workpieces	
Min	6" X 6"
Max	No Limitation
Control	Siemens S7 - 300
Operator Interface	HD Color TouchPanel with Memory Storage for Programs Programmable Positions Programmable Speeds Programmable # of Roll Cycles
Hydraulic System	VFD Hydraulic Pump 120 Bar Operating Pressure 17 Gallons VG46
Electrical Data	480 V 3 Phase, 60 Hz, 16 Amp
Dimensions	
Working Height	38"
Height	64"
Length X Width	42" X 42"
Weight	1420 lbs
Conformity	CE

Specification **C** 100



External cutting machine **C** 100

The recently developed **C** 100 cutting device will allow the user to cut same corner radii parts with varying flange height in one tool setup.

It further extends the application range for high tensile alloys such as stainless steel.

And it will speed up the overall process as you can now process a part in each machine in approximately 5 seconds, given additional manpower.

Technical Data	
Cycle Time per Trim	< 1 Second
Materials and Thickness Range	
CRS / HRS	0.032" – 0.188"
SS	0.032" – 0.080"
Al	0.040" – 0.200"
Other Materials	On Request
Dimension of Workpieces	
Min	6" X 6"
Max	No Limitation
Control	from M 100
Operator Interface	from M 100
Hydraulic System	from M 100
Electrical Data	from M 100
Dimensions	
Working Height	38"
Height	51"
Length X Width	24" X 38"
Weight	615 lbs
Conformity	CE



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