

- engineering your visions -



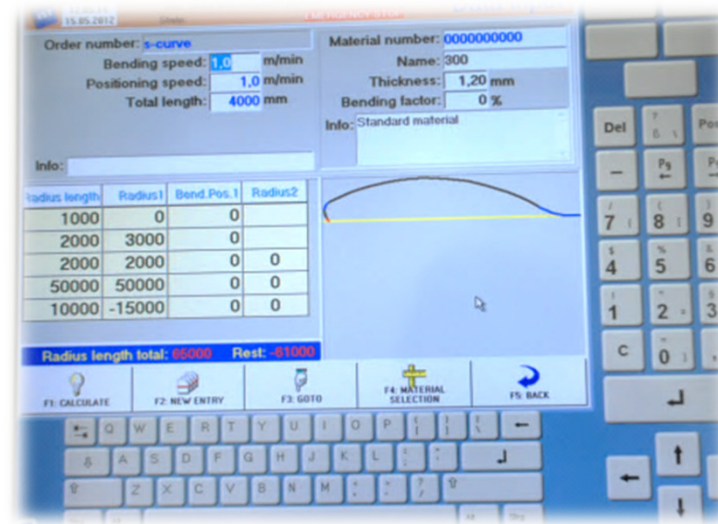
## Roll Bending Machine For Standing Seam Roof Profiles



**Maschinenfabriken**  
Kärntner Maschinenfabriken Egger GmbH

[www.kmf.at](http://www.kmf.at)

## CURVEmax Rollbending Machine for Standing Seam Profiles



- The bending machine is mounted on a solid steel frame
  - It can be worked either vertically or horizontally
    - Installed within a mobile, seaworthy container.
      - Steel and Aluminium profiles can be bent
        - Equipped with 2 fixed and 1 movable section
          - Modern Bending Processor with bending curve calculation
            - Single-pass and multi-pass bending possible

## What is a Standing Seam roof?

- Standing seam roof systems are over 30 years old and involve the 'zipping up' of a rolled side lap over supporting halters.
- The sheet side laps are closed using a Mechanical Seaming Tool to rollform the 'Fixed Seam Overlap Radius', creating attachment to the halter but still allowing free movement under thermal expansion.
- The Standing Seam outer sheet can be produced in various metals like Aluminium or Steel.





## Why Standing Seam Roofs?

- Low risk of water penetration - there are no external penetrations of the outer sheet required and no end laps
- Standing seams are lightweight roof systems, making them ideal for steel frame new build and for refurbishment
- Suitable for long roof slopes
- The finished roof system is low maintenance
- Complex shapes can be formed, including waveform curves, tapers - offering architectural appeal.
- Roof penetrations such as rooflights, access hatches and smoke vents can be incorporated without compromise to the roof system.
- They are beautiful



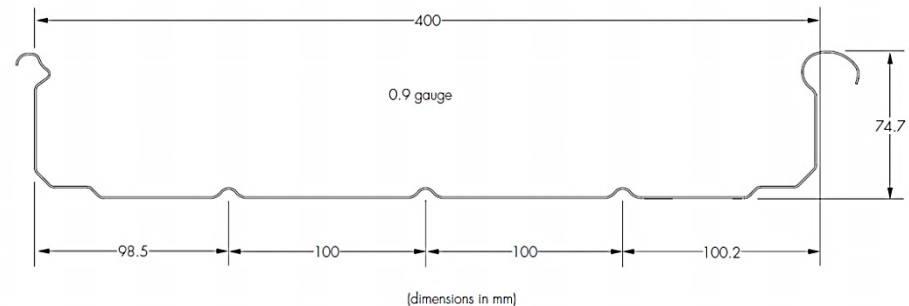
## Curving of Standing Seam Roofs on Site with CURVEmax



The CURVEmax can be located on site, it is contained inside a 20ft container and can produce single, multi and waveform curves on site down to a 1.5 metre radius. (minimum radii are depending on material specification)

## Standing Seam Profiles

e.g. Standard Euroclad Euroseam 75/400 profile



- Minimum sheet length - 500mm  
Maximum length transported by road - 18 Metres  
Maximum length rolled on the ground and lifted - 68 Metres  
Maximum length rolled at eaves height - 200 Metres
- The standard straight sheet width used is 400mm (installed at 402mm minimum) as it is the most cost effective sheet dimension when constructing a standing seam built up roof system. At a 400mm width the excellent attachment and long span performance keeps the cost low of the system halter components. The maximum frequency every 1.8 metres along the roof slope.

## Profile Data CURVEmax - Aluminium

### Minimum CONVEX Radii

Euroclad Euroseam® 75/400 Minimum Convex Radii:

0.9mm Stucco Embossed Material - 8 Metres

0.9mm Painted Material - 15 Metres

1.2mm Stucco Embossed Material - 1.5 Metres

1.2mm Painted Material - 8 Metres



### Minimum CONCAVE Radii

Euroclad Euroseam® 75/400 - Minimum Concave Radii:

0.9mm Stucco Embossed Material - 8 Metres

0.9mm Painted Material - 15 Metres

1.2mm Stucco Embossed Material - 4 Metres

1.2mm Painted Material - 8 Metres



### Minimum WAVEFORM Radii

Euroclad Euroseam® 75/400 - Minimum Waveform Radii:

Convex Radii: 8 Metres/Concave Radii: 8 Metres\*

\*based upon specific material use.



### Standing seam profile - Maximum Precurved Sheet lengths

Euroclad Euroseam® 75/400 - Maximum sheet lengths

Transported by road - 18 Metres

Rolled on the ground and lifted – 35 - 68 Metres

\*Curved sheet lengths may vary due to centre rise height of the curves or waveform height variation

Material should be bent within 12 hours after rollforming.

## Profile Data CURVEmax - Steel

### Minimum CONVEX Radii

Euroclad Euroseam® 75/400 Minimum Convex Radii:  
0.5mm IF Steel, DX52, painted - 8 Metres



### Minimum CONCAVE Radii

Euroclad Euroseam® 75/400 - Minimum Concave Radii:  
0.5mm IF Steel, DX52, painted - 11 Metres



### Minimum WAVEFORM Radii

Euroclad Euroseam® 75/400 - Minimum Waveform Radii:  
Convex Radii: 11 Metres/Concave Radii: 11 Metres\*

\*based upon specific material use.



### Standing seam profile - Maximum Precurved Sheet lengths

Euroclad Euroseam® 75/400 - Maximum sheet lengths

Transported by road - 18 Metres

Rolled on the ground and lifted – 35 - Metres

\*Curved sheet lengths may vary due to centre rise height of the curves or waveform height variation

Material should be bent within 12 hours after rollforming.



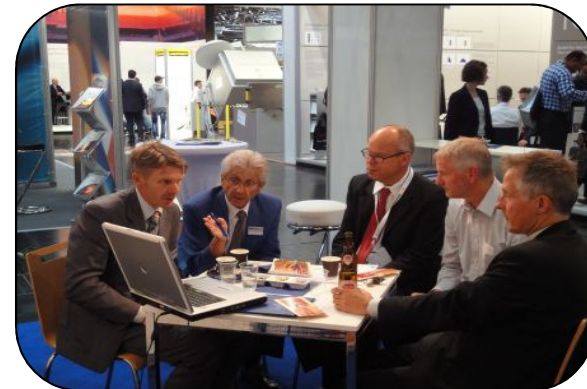


## Technical Data CURVEmax

Dimensions:	Length: 1.960 mm Width: 1.500 mm Height: 2.240 mm (including motors) Weight: approx. 5 tons Container 20 ft
Lengthwise drive:	Three 7,5 kW gear motors.
Cross drive:	One 1,85 kW crossed helical gear motor.
Speed of bending process:	Longitudinal speed up to 15 m/min. Traverse speed up to 50 mm/sec.
Material quality of rolls:	42CrMo4, surface nitrited and polished. CrNi based, flame hardened and polished. (optional)
Control system:	PL 511 with remote diagnostic control. Control unit from IST (Siemens based)
Production mode:	Batchwise

## Customer Profile

- Euroclad (UK)
- LCP Building (Singapore)
- Tata Steel (Corus) (UK)
- CA Group UK
- Steadmans UK
- Clane Cladding Ltd. UK
- Stoneflex UK
- Samesor (Fin)
- Plannja (SE)
- Lentab (SE)
- Dala (SE)
- Flexstahl (DK)
- DSStaalprofil (DK)
- Joris Ide (B)
- Color Profile (B)
- Antillia (B)
- Tegral Metal (IRE)
- SPO (F)
- Hoesch AG (A)
- Areco Sweden (SE)
- Formia (FIN)
- Feilmeier (GER)
- Laukien (GER)
- Wiegmann (GER)





## Contact



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