

Raex[®] ABRASION
RESISTANT STEEL

Unique opportunities with Raex CTL sheets



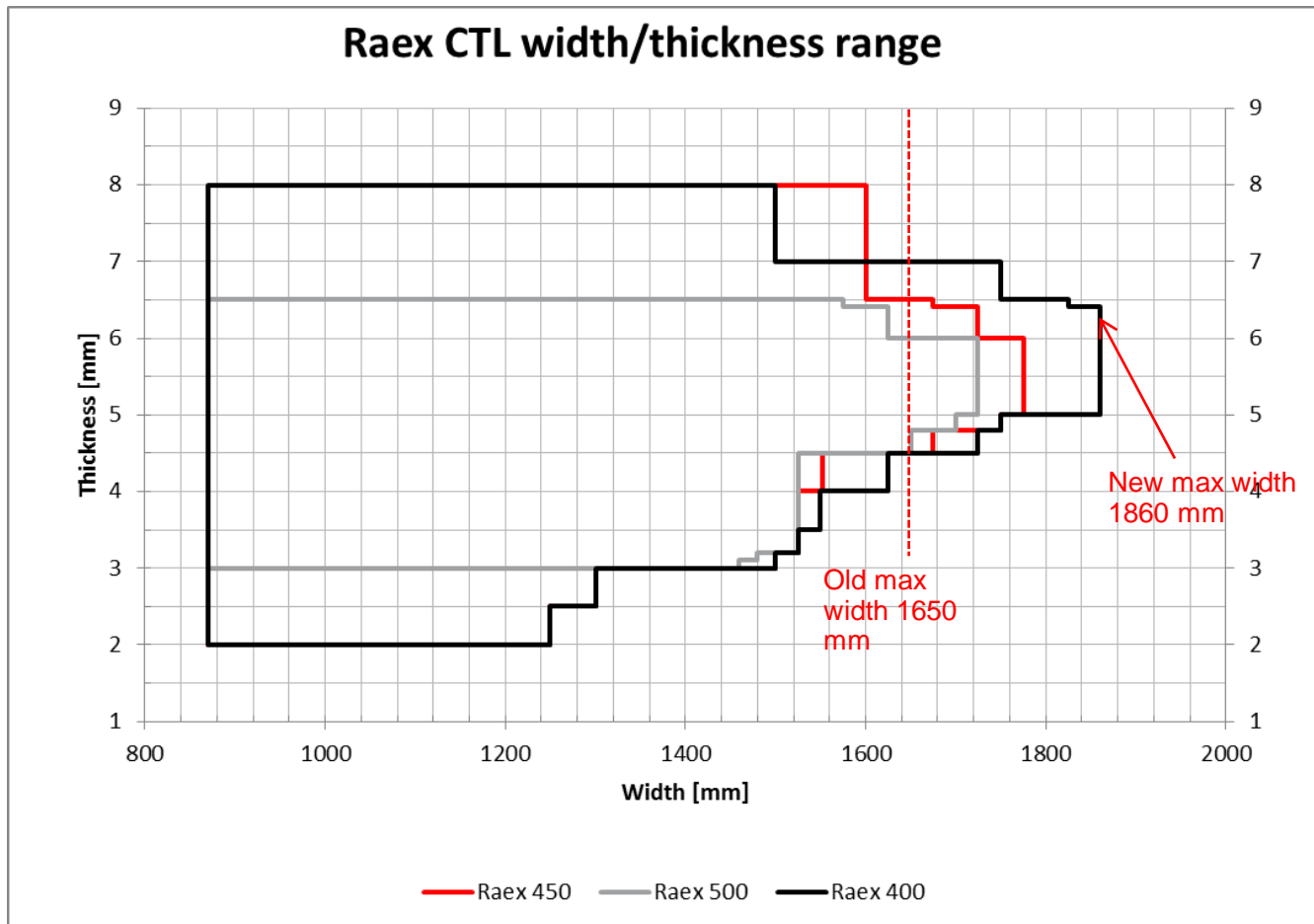
Content

1. Wide dimensional program
2. New application opportunities
3. Strip benefits
4. Laser welded wide sheets
5. Summary



15 years
experience of
producing DQ
strip

Raex CTL Sheets now available up to 1860mm width

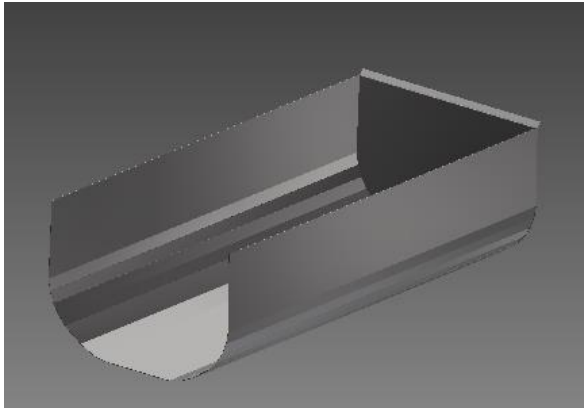


Even wider with trial dimensions

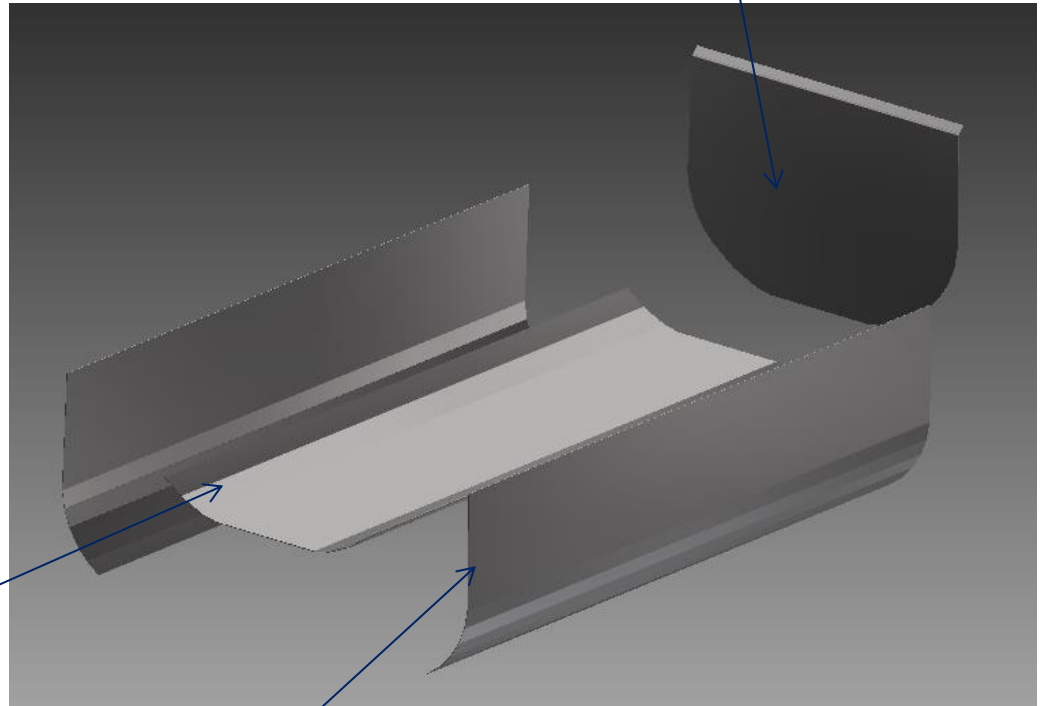
Cut Length Sheets with Mill Edges					
Nominal thickness [mm]		Minimum width	Raex 400	Raex 450	Raex 500
			Maximum width [mm]	Maximum width [mm]	Maximum width [mm]
Min	Max	Minimum width	Maximum width [mm]	Maximum width [mm]	Maximum width [mm]
2.00	2.19	870	1250		
2.20	2.49	870	1250		
2.50	2.99	870	1300	1300	
3.00	3.09	870	1500	1500	1460
3.10	3.19	870	1500 (1525*)	1500	1480
3.20	3.49	870	1525 (1550*)	1525	1525
3.50	3.99	870	1550 (1575*)	1525	1525
4.00	4.49	870	1625 (1675*)	1600 (1650*)	1525 (1575*)
4.50	4.79	870	1725 (1750*)	1675 (1700*)	1650 (1675*)
4.80	4.99	870	1750 (1775*)	1750 (1775*)	1700 (1725*)
5.00	5.99	870	1860	1775 (1800*)	1725 (1750*)
6.00	6.40	870	1860	1725 (1860*)	1625 (1860*)
6.41	6.50	870	1825 (1860*)	1675 (1860*)	1575 (1860*)
6.51	6.99	870	1750 (1800*)	1600 (1800*)	
7.00	8.00	870	1600 (1675*)	1600 (1675*)	

* Trials
needed to be agreed with mill

Where to benefit of increased dimensional range?



Front panel,
4x1625x2300,
Raex 400, strip



Bottom sheet,
6x1850x5000,
Raex 400, strip

Side panel,
4x1500x5000,
Raex 400, strip

Other applications

- ▶ Containers
- ▶ Recycling



Strip applications in agriculture



Cut to length sheet instead of quarto plate

Easier processing

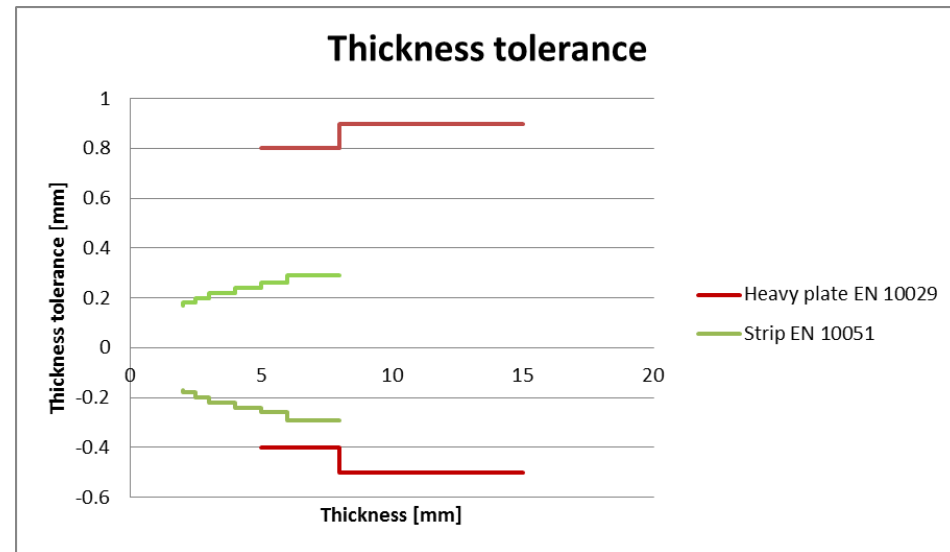
- ▶ Tighter dimensional tolerances
- ▶ Better flatness
- ▶ Tighter bending radius

Better outlook

- ▶ Better surface quality and flatness

Cost effectiveness

- ▶ Savings in processing and finishing
- ▶ Strip price relative stable over thickness range, compared to plate where typically sharp increase with low thicknesses

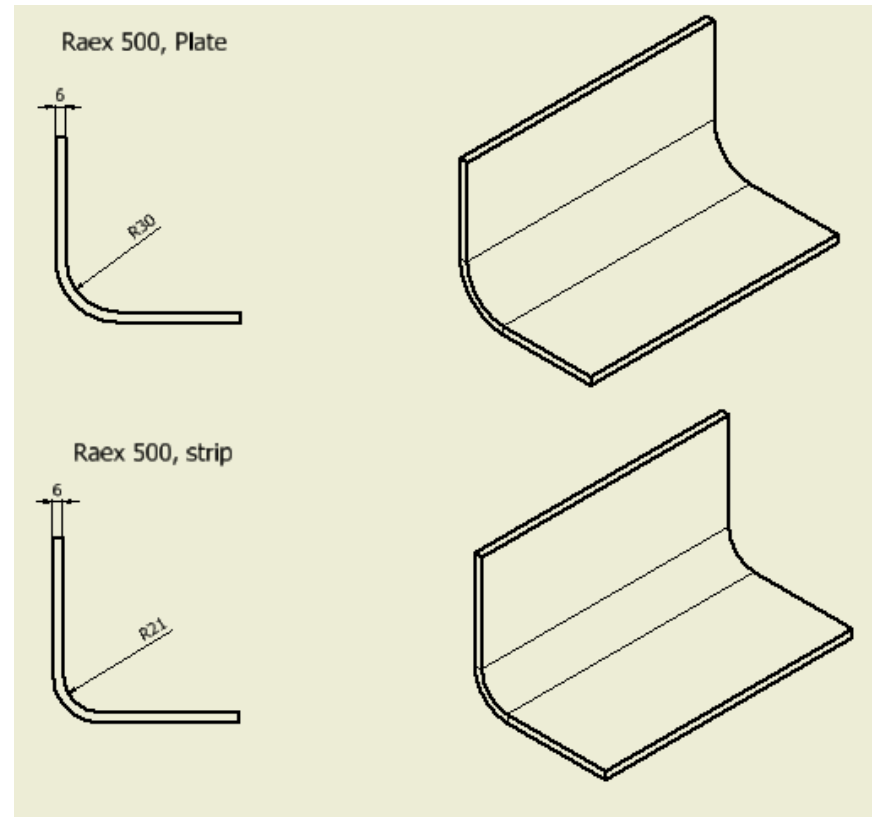


Tighter bending radius

		Direction [x t]	
		Transverse	Longitudinal
Raex 400	Plate	3	4
	Strip	3	4
Raex 450	Plate	4	5
	Strip	3	4
Raex 500	Plate	5	6
	Strip	3.5	4



Enables innovative shapes



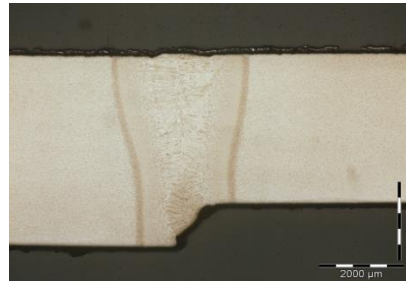
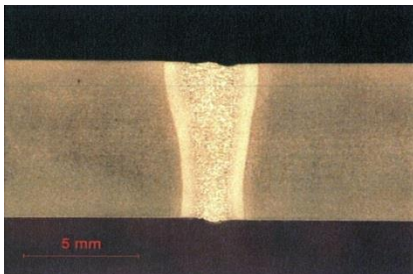
Excellent outlook

- ▶ Excellent surface quality reduces significantly the pre-work needed before surface finishing

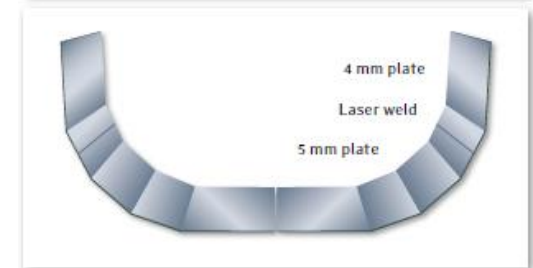
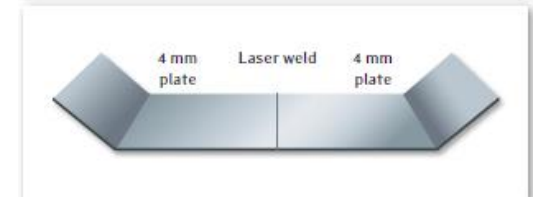
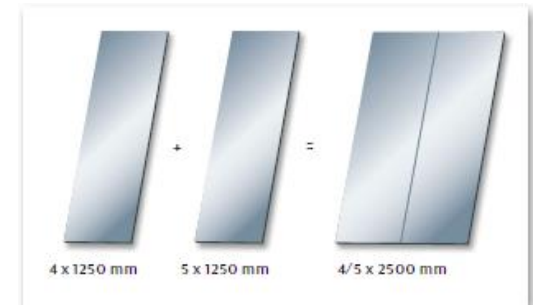
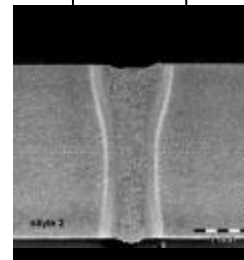


Laser welded thin and wide sheets

- ▶ Thickness range of 2–6 (8)mm, width max 4500 mm, length max 18000 mm
- ▶ Sheets can be same or different thicknesses and different widths, for example 1500 + 1000 mm widths and 3+5mm thicknesses.
- ▶ The difference in thicknesses can be max. 2 mm
- ▶ Enables joining of steels of various steel grades and strengths, i.e. Strenx 700 MC + Raex 450



weld + HAZ ~ 0.5 x t



Summary

- ▶ Widest strip width in the market
- ▶ Opens up opportunities to use strip especially in tipper bottom sheet and front wall
- ▶ Other applications can be containers and recycling.
- ▶ Generally strip steels have many benefits compared to quarto plates
 - Easier processing
 - Better outlook
 - Cost efficiency
- ▶ Laser welding enables even up to 4500 mm width

