



**A high
performance
product
with improved
profiling and
processing
properties.**

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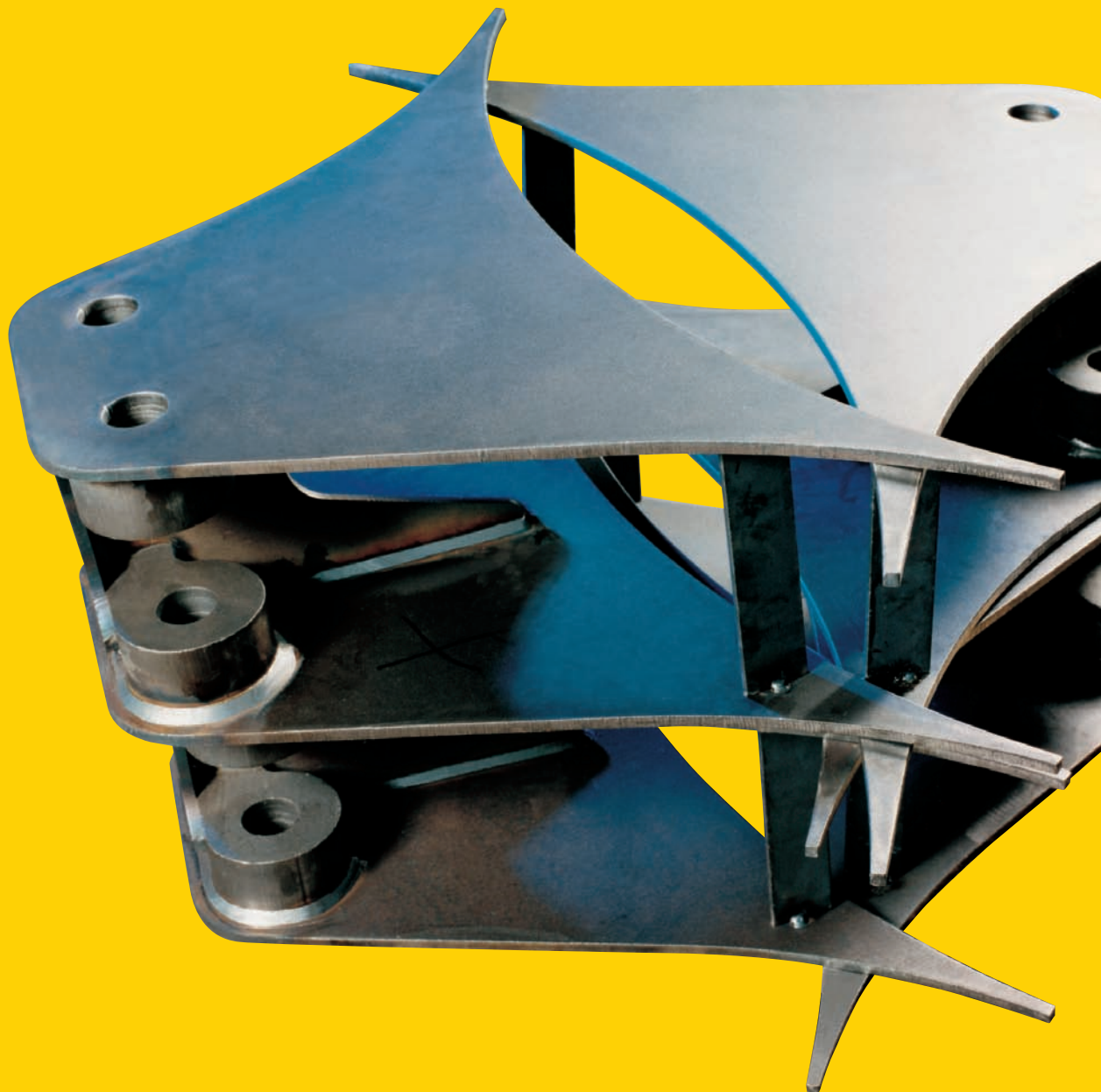
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Product profile

ACTIS™ 240/280/360 reversing mill plate.
A proven product with improved profiling
and processing properties



What is ACTIS?TM

Corus' own brand of reversing mill plate with enhanced flatness and profiling properties.

What are its features and benefits?

Improved profiling and processing characteristics

Low Silicon makes ACTISTM particularly suitable for Laser profiling

Improved flatness during and after profiling

Fewer machine adjustments, reduced rework and increased yield

Increased cutting speeds

Better forming characteristics with less springback

Dimensions - sizes have been designed to suit our customer processes.

Improved surface quality

High pressure descaling

Reduced mill scale.

Improved metallurgical consistency

Tighter control of chemistry than required by base specifications such as EN 10025 grades

S235, S275 and S355

Controlled rolling practice

Hot levelling control

Optimised programmes used on SMS cold leveller to evenly distribute residual stress within the plate.

Weldability and galvanising

ACTISTM grades are as weldable as common structural steels, lower distortion can give better fit up and low silicon makes it suitable for galvanising.

During cutting, the low silicon content (0.03% max.) of ACTISTM reduces the surface tension of the molten pool allowing gas to clear kerf easily to provide a 'cleaner' cut. Lower silicon is particularly beneficial to Laser profiling. As a further aid to cutting and where surface quality is critical the normal mill scale will be thin and uniform.

The application of modern plate levelling technology is used to ensure a consistent distribution of internal stresses thereby minimising spring back and distortion.

These metallurgical and process improvements combine to produce a plate that cuts easily and stays flat even after profiling. Low sulphur steelmaking practices also make ACTISTM suitable for cold forming.



What are its applications?

A high performance product that can meet the demands of modern industrial applications.

ACTIS™ is ideal for:

- Laser processing
- Plasma cutting
- Press Brake forming

Automatic precision process applications (eg. cassette plate handling, rotating beds, multi-head) and where surface aesthetics are important.

Typical end-use applications

- Automotive, precision profiled shapes
- Yellow goods
- *Shipbuilding
- Complex component fabrication

*ACTIS Marine - ACTIS RMP is available by prior arrangement in the form of ACTIS marine, which meets the technical requirements of Lloyds Register of Shipping rules and carries and endorsement of third party inspection.



For further details please contact
the Corus Plates Technical team on 01724 402106
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What are its mechanical properties?

ACTIS™ 240

Gauge (mm) (MPa)		Yield strength (MPa)		Tensile strength (5.65 $\sqrt{S_0}$)		Elongation (%)	*Charpy V impacts (Longitudinal)	EN10025 Equivalent Grade
Min	Max	Min	Min	Max	Min	Min		
6	16	235	340	470	24	27J's @+20°C	S235JR	
16.01	25	225						

ACTIS™ 280

Gauge (mm) (MPa)		Yield strength (MPa)		Tensile strength (5.65 $\sqrt{S_0}$)		Elongation (%)	*Charpy V impacts (Longitudinal)	EN10025 Equivalent Grade
Min	Max	Min	Min	Max	Min	Min		
6	16	275	410	560	20	27J's @+20°C	S275JR	
16.01	25	265						

ACTIS™ 360

Gauge (mm) (MPa)		Yield strength (MPa)		Tensile strength (5.65 $\sqrt{S_0}$)		Elongation (%)	*Charpy V impacts (Longitudinal)	EN10025 Equivalent Grade
Min	Max	Min	Min	Max	Min	Min		
6	16	355	490	630	20	27J's @+20°C	S355JR	
16.01	20	345						

*Charpy impact toughness

Chemical composition

All ACTIS™ plate products comply with the equivalent grades of EN10025 eg. S235, S275 and S355.
Please note the following: 1) Si + 2.5P is controlled at 0.50 max. 2) Max silicon 0.03%. 3) Max sulphur 0.01%.

Flatness tolerance

Delivered plate - max 3mm per metre. Components cut by controlled techniques - 3mm per metre.

Plate dimensions

ACTIS™ can be supplied in widths up to 3.5m and lengths of 15m or longer by agreement. Dimensional and surface tolerances are in accordance with EN10029 and EN10163 or the prevailing Ship Society rules.