# **TATA STEEL**



# Ympress<sup>®</sup> Laser

For world-class laser cutting and processing efficiency



# YMPRESS® LASER A CUT ABOVE THE REST



Ympress Laser is tailor-made for efficient, high-speed laser cutting. This homogeneous, hot-rolled steel combines exceptional flatness with an excellent surface. It delivers improved end product quality and trouble-free laser cutting for improved productivity and yield. Manufactured and supplied to consistently high standards, Ympress Laser products are available from stock and backed by expert technical support.

# Optimised for laser cutting and processing

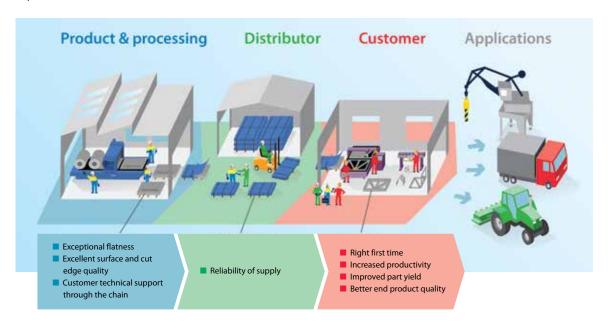
We developed Ympress Laser from the successful Ympress family of consistent and highly formable hot-rolled, high-strength, low-alloy (HSLA) steels.

Working with laser cutting machine manufacturers, partners and customers, we have optimised the Ympress Laser range for efficient, high-speed laser cutting. Manufactured with precision, Ympress Laser steels are ultra flat and ideal for part nesting.



## **Ympress Laser supply chain**

Tata Steel carefully controls every step in the supply chain – from manufacturing at our mill, through decoiling and sheet delivery via distributor to end customer. Our dedicated supply chain ensures that Ympress Laser is always readily available in prime condition.



# Quality you can rely on

Stringent control of our manufacturing process means you can rely on Ympress Laser to perform.



#### The process offers:

- refined chemical composition with tighter tolerances
- enhanced process control at hot strip mill to provide a well-adhered oxide layer
- controlled storage to keep our steel in prime condition

#### The product offers:

- minimal residual stress
   for a flatness variation of no more than
   3mm per metre in cut parts
- high levels of homogeneity for excellent surface and cut edge quality
- a dross-free surface
   after cutting for easy part extraction

# YMPRESS® LASER IN ACTION

Ympress Laser delivers high part yield and enables reliable component manufacturing at lower cost.

Ympress Laser steels are suitable for a wide range of demanding end user applications. These include applications where components must be cut accurately – often with no post-machining – and be tough in service. Its reliably excellent steel surface also makes Ympress Laser the ideal choice for premium products where good aesthetics are vital.



"Our high-quality, elegant stoves require an excellent steel surface finish for a bespoke product that is right first time. The output from the laser machine is what the customer sees - with no further rework. That's why we rely on top-quality Ympress Laser from Tata Steel and top service from their distributors for timely supply on demand and to specification."

Joost van Geloven, Strategic Purchaser, Barbas Bellfires

## Benefits you can count on

The sheet-to-sheet consistency of Ympress Laser makes it ideal for unmanned cutting machines. It can be delivered to you fast through our dedicated supply chain which operates to stringent, audited service level standards.

#### Multiple benefits of Ympress Laser include:

time and minimal operator intervention

- increased productivity
   Reliable quality including a consistent oxide layer
   allows faster, continuous cutting with reduced set-up
- improved part yield
   Flexible part nesting, more conforming parts and reliable extraction combine to boost yield

#### better end products

Ympress Laser delivers reliable flatness, surface and cut edge quality for improved product quality

- reliability of supply
   Available from stock through
   our dedicated supply chain
   in standardised, recyclable
   packaging for product
   protection and brand
   recognition
- proactive technical support
  Our technical experts are
  always ready to assist you –
  helping you to optimise and
  maintain laser cutting efficiency



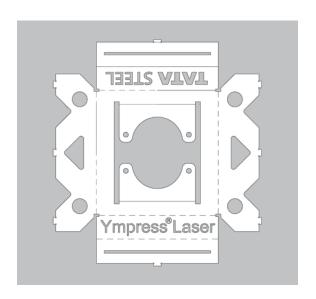
# Meeting your customers' demands

Ympress Laser steels are highly formable and suitable for a wide range of demanding applications.

- Ympress® Laser E250C
  - A structural grade available with CE certification. Used where strength and good formability are important.

    Typical applications include construction profiles, machine frames, racking and shelving
- Ympress® Laser S355MC

  HSLA steel for use when high strength and toughness are paramount. Applications include excavating and agricultural machinery, trailer parts and chassis members
- Ympress® Laser S420MC
  This HSLA steel offers a high strength-to-weight ratio.
  Applications include automotive safety-critical parts, lifting equipment and structural members



# YMPRESS® LASER Trouble free, repeatable processing for: Precise laser cutting at higher speed Easy bending Smooth welding Efficient galvanising



### A brand that delivers value

We developed Ympress Laser to deliver excellent value to you

#### Tailor-made

Ympress Laser is tailor-made for fast and efficient laser cutting – in grades suitable for your cut part applications. Technical support is also tailored to your needs. With knowledge and expertise in laser cutting and product applications, our Customer Technical Services team is available at short notice to help you and your customers to resolve issues and:

- optimise productivity
- optimise end product performance

#### Consistent

You can rely on the consistent quality of our highly homogeneous steel for trouble-free, repeatable processing and parts that perform. The manufacture of Ympress Laser utilises modern and reliable steelmaking techniques and decoiling facilities. Ongoing investment in process technology enables:

- stringent control and monitoring of steel chemistry and process settings
- steel production to consistently tight dimensional tolerances and flatness

#### Convenient

For your convenience, our dedicated supply chain ensures that Ympress Laser is always readily available from stock and recognisable in standardised, protective packaging. With a reliable supply from a proven source, you can:

- maintain efficient and timely laser cutting operations
- be confident in the quality of your cut parts

#### Ympress® Laser product range

Steel grades:	Ympress Laser: E250C / S355MC / S420MC
Thickness range:	1.5 - 20mm (grade specific)
Width range:	900 - 2070mm (grade specific)
Surface treatment:	Hot-rolled dry, pickled and oiled

## A sustainable choice

Ympress Laser is a sustainable choice. Its consistency delivers reliable plate processing – cutting waste and improving yield per tonne. Ympress Laser HSLA grades reduce the amount of steel required to manufacture strong, load-bearing components.

At Tata Steel, we are committed to making the products society needs and to making them in the most responsible way possible. Our steel enables our customers to make safer cars, more energy-efficient buildings and infrastructure, easily-recoverable and recyclable packaging and many other products which help to move society towards our vision of a sustainable future.

#### **Tata Steel**

Tata Steel Group is one of the world's most geographically diversified steel producers, with operations in 26 countries and commercial offices in over 50 countries. In Europe, we are one of the largest steel producers. We serve many different and demanding markets worldwide including Automotive, Construction, Engineering, and Packaging.

Our approach to business is unique. We focus on market sectors to allow us to better recognise the individual needs of our customers. We believe our strength is in how we build collaborative relationships that create new success for our customers, adding value to their business and helping them to perform in their markets.





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