## DEFENSE SECTOR



PROTECTION PERFORMANCE

PAYLOAD

## TUBULAR SOLUTIONS TO MAKE YOUR MISSION POSSIBLE

- LAND, AIR & SEA APPLICATIONS
- CUSTOMIZED DESIGNS
- COMPLETE SERVICE OFFER



### DESIGN TO DEFEND WITH OUR SEAMLESS TUBES & HOLLOW SECTIONS

#### COMMITTED TO MEETING YOUR NEEDS

We've been developing tubular solutions for a wide range of industrial applications for more than 100 years.

With a proven track record supplying leaders in the defense industry, we provide seamless tubes and hollow sections for land, sea and air equipment needs to deliver high performance and secure protection.

"We offer a unique range of seamless tubular solutions for your defense equipment."

# AMUNITION • LANDING

■ AXLES ■ CHASSIS & FRAME PARTS ■ ROLL OVER PROTECTION SYSTEMS ■ TORSION BARS

#### PRODUCT RANGE

We have the largest range available – sizes, shapes and grades...

#### SHAPES & SIZES:

 Round

 ob: 25 mm - 1,500 mm (1"- 59")

 wm: 3 mm - 250 mm (0.12"- 10")

Square 40 x 40 mm - 400 x 400 mm wt: 3 mm - 25 mm

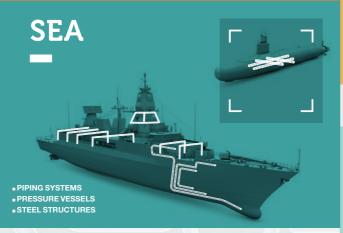
wt: 3 mm - 25 mm Rectangular

Rectangular 30 x 50 mm - 300 x 500 mm wt: 3 mm - 25 mm

#### Other specialties:



Hexagonal Shaped Pipes



#### **GRADES**:



for ballistic applications.

We offer a wide range of carbon steel grades as well as specially developed proprietary



FineXcell®

High strength with hardness to meet defined specifications.

High strength and easy to weld with low temperature toughness.

YOUR CHALLENGES	OUR SOLUTION
PROTECTION	<ul> <li>Wide range of steel grades in material properties for streng Durascilt<sup>®</sup> ballistic proven acc</li> <li>Quality you can rely on - all ou ISO 9001 et ISO 45001.</li> </ul>
PERFORMANCE	<ul> <li>Fine grain, high strength steel toughness even at low tempe</li> <li>Quenched &amp; tempered grade classes such as 330-380 HB,</li> </ul>
PAYLOAD	• Load bearing capacity is optim properties of seamless tubes. S provide superior static values the

• Excellent strength to weig for equal weight.



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including proprietary grades with specific igth, hardness and toughness, such as ccording to STANAG levels\*.

our production facilites are certified

el grades up to 960 Mpa (140 ksi) provide peratures, down to -60°C.

les to meet the most demanded hardness B, 380-430 HB and 480-530 HB.

mized thanks to the mechanical S Square and rectangular hollow sections S thanks to their tight corner radii.

• Excellent strength to weight ratio means higher load capacity

\* NATO STANDARDIZATION AGREEMENT

#### SERVICES

TECHNICAL SUPPORT	Testing, machining and welding; whatever your requirements, our experts can help you select the right products and solutions to meet your specifications.
TAILOR-MADE SOLUTIONS	We can create shaped tubing with geometry variations along the pipe length thanks to our unique production mills. We can work with you at the design stage of your project to produce made-to-measure solutions.
PROTOTYPE DEVELOPMENT	Our R&D engineers can support you with design, samples and prototypes.



#### NEED MORE INFORMATION?

Information is available online on solutions.vallourec.com or by scanning the following QR code.





solutions.vallourec.com

