

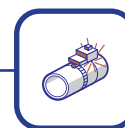
AGRICULTURAL MACHINERY



EXTRA
RESISTANCE



STRONG
PERFORMANCE
STEEL



GREAT
WELDABILITY

INDUSTRY



HARVEST THE BENEFITS OF DURABILITY AND STRENGTH

— ONE-STOP SHOP: EXTENSIVE
RANGE OF SIZES, SHAPES
& SPECIAL GEOMETRIES

— STANDARD AND PREMIUM
GRADES TO MEET TOUGHEST
REQUIREMENTS

— STRONG LOCAL PRESENCE
AND TECHNICAL SUPPORT

EMPOWERING FARM TECHNOLOGIES TO REACH THEIR FULL POTENTIAL

Vallourec makes seamless hollow sections and steel tubes for agricultural machinery components. Thanks to the quality of our steel products, and our commitment to working closely together with our customers, we are able to optimize machine components to push farm technologies to reach their full potential irrespective of soil conditions. Each application has a set of unique requirements and we partner with you to develop the right tubing solution for the specific challenges you face. Our products offer solutions to cope with the latest technical trends:

■ STANDARDIZATION OF FABRICATION PROCESSES AND DESIGN

- Constant steel quality and dimensional tolerances, also suitable for automated processing
- Wide dimensional range with outstanding flexibility in wall thickness variety
- Supply of low minimum quantities

■ MACHINE WEIGHT REDUCTION

- Excellent strength-weight ratios of mechanical or structural elements

■ INCREASING REQUIREMENTS IN SAFETY

- Improved impact and elongation requirements
- High-strength steels combined with excellent weldability

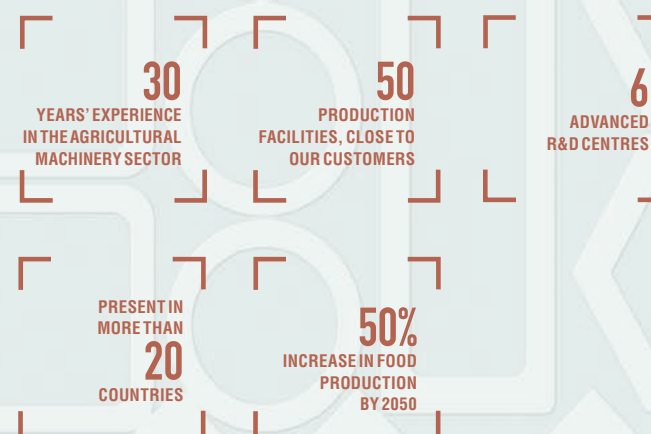


"Vallourec took the time to understand our products. Their teams partnered closely with us to find the solution for optimizing our equipment productivity."

INTERNATIONAL MANUFACTURER



" TOGETHER WITH
AGRICULTURAL SPECIALISTS
WE CONSTANTLY WORK ON
INTENSIFYING DEVELOPMENT TO
INCREASE THE PERFORMANCE
AND SAFETY OF AGRICULTURAL
MACHINERY. "



DUE TO LONG-STANDING EXPERTISE, OUR CUSTOMER-CENTRED APPROACH AND PRODUCTION FLEXIBILITY, OUR OFFER WILL MEET THE CHALLENGES OF YOUR PROJECT.

BRINGING INNOVATIVE SOLUTIONS TO MECHANICAL ENGINEERING & STRUCTURAL APPLICATIONS

Our high quality hollow sections provide added value to all types of agricultural machinery applications, including frames, axles, and cabin structures and Roll Over Protections (ROPs). Recognized for their best-in-class surface quality, our seamless tubes are capable of meeting rigorous specifications, tolerances and properties. Along with a wide range of sizes and steel grades, in standard and premium qualities, we provide different internal and external shapes.

Partnering with our customers allows us to develop effective customized solutions. We also adapt to different supply chain concepts, offering machined tubes just-in-time via distribution partners, or delivering complete components to OEMs.

SERVICES



PROTOTYPE ASSISTANCE

Due to our manufacturing process we can support customers with low minimum quantities. For dedicated dimensions and grades, availability is even provided in single lengths.



MATERIAL SELECTION

Thanks to a wide steel portfolio, we offer advice and recommendations on engineering, grades, dimensions, and technical issues such as fatigue.

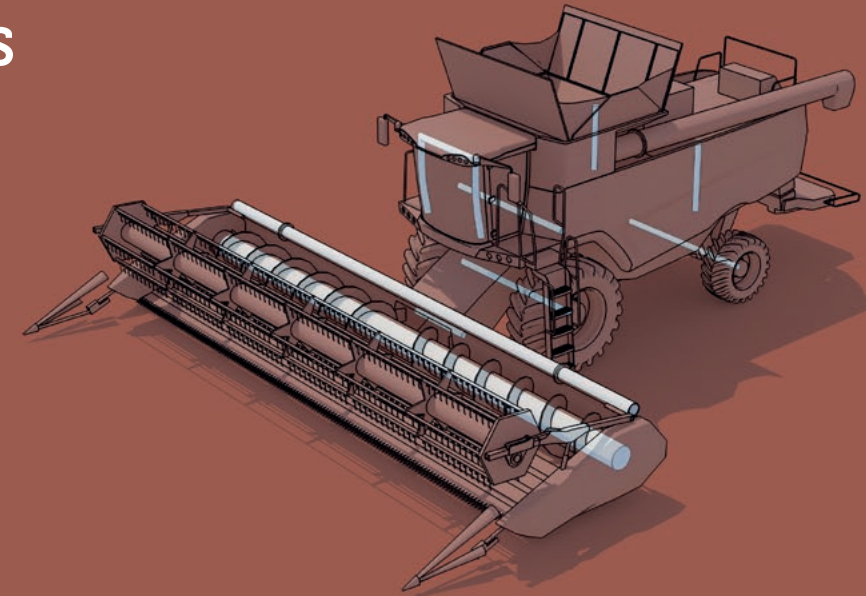


WELDING SUPPORT

We provide customized support on welding.

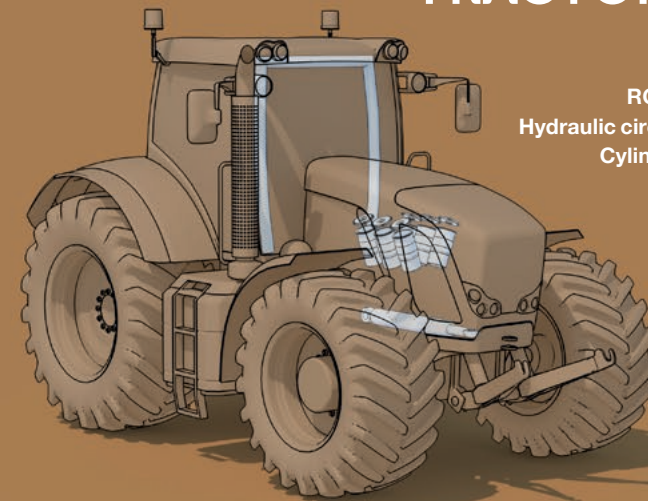
HARVESTERS

- Axles
- Cabin frame
- Transport and treatments rolls
- Frame parts
- Main frame
- Attachments parts



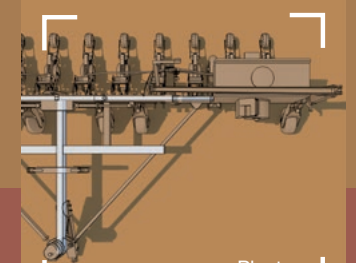
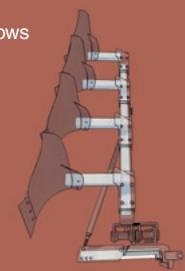
TRACTORS

- ROPs -
- Hydraulic circuit -
- Cylinder -



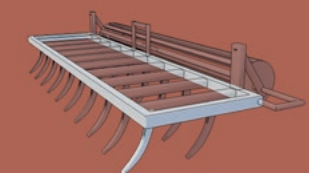
TILLAGE EQUIPMENT

Plows



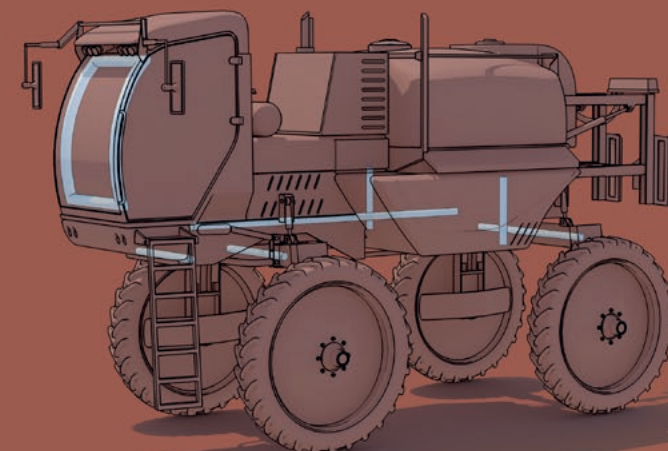
Planters

Harrows



SPRAYERS

- Axles
- Frame parts
- Cabins & ROPs



VALLOUREC TEAM STRENGTH IN THE FIELD

Vallourec supplies the agricultural machinery market from two production regions: one in Europe with mills in France and Germany and another in South America with mills in Brazil. Committed to bringing excellence to your projects, our units are among the best-equipped steel complexes in the international market, with capabilities to cover a wide range of dimensions and grades using various manufacturing processes to meet all challenges. With a proven track record in the field, key players trust us as their partner of choice for efficient sourcing, fast project delivery and enhanced operations.

TYPICAL STEELS ACCORDING TO EN 10210

OUR OFFER FROM EUROPE

Vallourec Designation	Standard nomination ¹	Yield Strength Re Min. [MPa] ²	Tensile Strength R _m [Mpa] ²	Elongation A _{min} [%]		Impact-properties ¹ KV min. [J] ³	Delivery condition
				Long.	Trans.		
S355J2H	S355J2H	355	470-630	22	20	27 at -20°C	+AR /+N ⁴
S460NH	S460NH	460	540-720	17	15	40 at -20°C	+N ⁴
Forterior®500	-	500	Min. 610	17	-	-	+AR
Forterior®500	S500QH	500	590-770	17	15	30 at -20°C	+QT
Forterior®550	S550QH	550	640-820	16	14	30 at -20°C	
Forterior®620	S620QH	620	700-890	16	14	30 at -20°C	
FineXcell®690	S690QLH	690	770-940	16	14	30 at -40°C	
FineXcell®770	S770QLH	770	820-1000	15	13	30 at -40°C	
FineXcell®890	S890QLH	890	960-1110	14	12	30 at -40°C	+QT
FineXcell®960	S960QLH	960	980-1150	10	8	30 at -40°C	

¹ Further nominations for other impact requirements are available but not focused here; ² Values valid up to and including 16 mm wall thickness; ³ Samples in longitudinal direction; ⁴ Including normalized rolled.

WIDEST DIMENSIONAL RANGE FOR GREATEST FLEXIBILITY

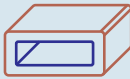
From 76.1 to 711 mm, our diversified mills ensure the widest available dimensional range in seamless tubes and hollow sections. Our offer of different wall thicknesses for the same static value enable lighter structures and higher load capabilities.

SHAPES & SIZES:

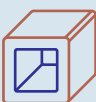
Hot-rolled seamless



Round
OD: 76.1 mm – 711 mm
WT: 3.2 mm – 100 mm



Rectangular
UP TO 400 x 200 mm
WT: 2.9 mm – 25 mm



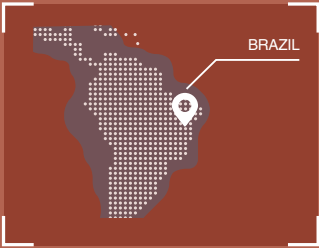
Square
UP TO 304.8 x 304.8 mm
WT: 2.9 mm – 25 mm



Special geometry /
shaped components

OUR CUSTOMERS CLAIM WE DRIVE THEIR SUCCESS

Vallourec provides innovative agricultural technology that appeals to manufacturers worldwide. Our global production facilities and sales offices with local supports supply our customers anywhere around the world. Partnering closely with customers, our knowledge of local market needs bring direct benefits. For example, when supplying components for planter frame structures, our mills know to adapt its design according to the region's standard planter size. Customers appreciate our offer of tight tolerances and high range of flexible wall thicknesses, recognized as the best on the market. Homogeneous material properties due to hot forming add strength and durability, and provide stability and longer product life-cycle.



FOR MORE INFORMATION ON
SECTIONAL PROPERTIES VISIT
[EXPERTISE.VALLOUREC.COM](https://www.expertise.vallourec.com)



TYPICAL STEEL GRADES ACCORDING TO ASTM A500 AND ASTM A501

OUR OFFER FROM BRAZIL

Vallourec Designation	Standard nomination	Yield Strength Re Min. [MPa]	Tensile Strength R _m [Mpa]	Elongation A _{min} [%]		Impact-properties KV min. [J]	Delivery condition
				Long.	Trans.		
	A500 GrB	315	400	23	-	-	RHS: Cold formed or +SR
	A500 GrC	345	425	21	-	-	RHS: Cold formed or +SR
	A501 GrB	345	483	23	-	-	CHS: Hot rolled
VMB250	VMB250	250	400	23	-	-	CHS: Hot rolled RHS: Cold formed or +SR
VMB300	VMB300	300	415	21	-	-	CHS: Hot rolled RHS: Cold formed or +SR
VMB350	VMB350	350	485	20	-	-	CHS: Hot rolled RHS: Cold formed or +SR
FB70	FB70	460	608	20	-	-	CHS: Hot rolled RHS: +SR
	S355 J2H	355	470 - 630	22	-	27 at -20°	CHS: Hot rolled RHS: +SR

+SR = additional stress relief; RHS = rectangular hollow section; CHS = circular hollow section.

WIDEST DIMENSIONAL RANGE FOR GREATEST FLEXIBILITY

From 33.4 to 355.6 mm, our diversified mills ensure the widest available dimensional range in seamless tubes and hollow sections. Our offer of different wall thicknesses for the same static value enable lighter structures and higher load capabilities.

SHAPES & SIZES:

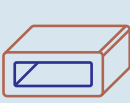
Hot-rolled seamless



Round
OD: 33.4 up to 355.6 mm
WT: 3.2 mm – 30 mm



Square
50 x 50 mm UP TO 300 x 300 mm
WT: 3.6 mm – 16 mm



Rectangular
60 x 40 mm UP TO 400 x 200 mm
WT: 3.6 mm – 16 mm

YOUR INDUSTRIAL
PARTNER, SETTING THE
PACE FOR INNOVATION
AND PERFORMANCE
EVOLUTION

6 INTERNATIONAL
R&D CENTERS

50 PRODUCTION
SITES

WORLDWIDE
SALES AND
SERVICES



Agricultural
Machinery



Civil Construction



Automotive



Cranes & Lifting
equipment



Offshore
Construction

NEED MORE INFORMATION?

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



solutions.vallourec.com



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