Product sizes

Non rolled / Semi-fini	shed products			
PRODUCTS	PLANT	FEASIBILITY	LENGTH	TOLERANCES
Continuous cast products	Dunes	180 to 325 mm CC rounds (170 mm on request)	From 6 to 12.5 m	± 0.5 % to ± 1.5 % of diameter depending on diameter
	Hagondange	240 ² CC blooms		
Ingots	Fos-sur-Mer	To 7.5 t		

Hot rolled products				
PRODUCTS	PLANT	FEASIBILITY	LENGTH	TOLERANCES
Rolled blooms and billets	Fos-sur-Mer	80 to 400 mm	From 3 to 12 m	± 1 % to ± 3 % of diameter
Rectangular rolled bloom	Fos-sur-Mer	70 to 600 mm	From 3 to 12 m depending on diameter	
Bars	Dunes	80 to 300 mm	From 4 to 12 m (> 12 m on request)	± 0.3 % to ± 1 % of diameter depending on diameter
	Hagondange	16 to 100 mm	From 3 to 12 m	
	Fos-sur-Mer	80 to 325 mm	From 3 to 12 m	
Wire rod	Fos-sur-Mer	5 to 32 mm		+0.20 /-0.20 mm or ± 1 %

Cold finished products				
PRODUCTS	PLANT	FEASIBILITY	LENGTH	TOLERANCES
Peeled bars	Dunes	76 to 300 mm	From 4 to 13 m	Classes 10
	Hagondange	20 to 80 mm	From 2 to 9 m	Classes 11 to 9
	Le Marais	20 to 78 mm	From 3.5 to 7.5 m	Classes 9
	Custines	15 to 85 mm		Classes 10 to 9
Ground bars	Custines	10 to 100 mm		Classes 8 to 7
Cold drawn wire rod	Fos-sur-Mer	1 to 22 mm		
Semi-finished parts	Le Marais		Sawn parts:	

- Ø 18 140 mm
- Sawn and beveled parts:
 - Ø 15 80 mm
- Drilled parts:
- Ø 5 20 mm
- Machined parts:
- Ø 8 40 mm
- Ground cut-to-length bars:
- Ø 18 30 mm
- (and over on request)
- Centerless ground cut-to-length bars: Ø 20 – 50 mm
- Machined cut-to-length bars: Ø 10 – 40 mm



Custines

Standard grades

Ascometal® offers a full range of carbon and alloy steels compliant with the national and international standards requirements. In addition to these conventional grades, which can be tailored to better suit individual customer specifications, Ascometal® offers also a wide range of specialty products, fulfilling the most severe requirements of each market and stemming from its R&D work.

Specialties

Metasco®: steels suitable for hot forging treatment (bainitic and AFP steels).

- Metasco® HC: ferrito-pearlitic; Re > 750 MPa; Rm > 1000 MPa;
- Metasco® 30, 38 et 44: ferrito-pearlitic up to Rm = 1000 MPa:
- Metasco® BA: bainitic; Rm < 1000 MPa;
- Metasco® MC, MC2, 1200: bainitic up to Rm = 1200 MPa;
- Metasco® VBI: bainitic for induction heat treatment up to Rm = 1150 MPa.

Ascowell®: steels for oil and gas drilling and well completion.

- Ascowell® C: for sour service conditions;
- Ascowell® TJC: for forged corrosion resistant tool joints.

Endurasco®: high-endurance bearing steels.

Jomasco®: case-hardening steels with optimized Jominy and enhanced quenchability, low nickel alloyed.

To manufacture transmission parts

- Jomasco® 23 (20 23MnCrMo5): steel with optimized Jominy quenching and for technical gains in case-hardening;
- Jomasco® 23 Mod (23MnCrMo5 mod.): adapted to replace Ni grades, improved Jominy quenching and case-hardening, compatible with low pressure casehardening/gas quenching.

To manufacture cones and drilling parts

 Jomasco® DB: no Ni, improved Jominy quenching and case-hardening.

Ascoroc®: steels for the mining industry.

Nitrasco®: nitriding steels.

Ascoflex®: steels for helicoïdal suspension springs.

Vitac®, Supervitac®: steels with improved machinability and proven levels of performance.

Splitasco®: steels for splitable connecting rods.

- Splitasco® 70: C70S6 grade with improved machinability;
- Splitasco® 50: grade with higher machinability performance;

- Splitasco® 38: high fatigue resistance;
- **Splitasco® HC:** very high mechanical properties: Re > 750 MPa et Rm 1000 1150 MPa.

Standard grades

- Alloy and carbon steels;
- Through and surface hardening steels;
- Case-hardening steels;
- Induction hardening steels;
- Spring steels;
- Bearing steels;
- Nitriding steels.

Finishing and control

Ascometal® ensures a wide range of finishing operations, including:

Heat treatments

Several quenching facilities (water, polymer, oil) and furnaces intended to **several treatments**: annealing, stress relieving, spheroidizing, isothermal, normalizing, pearlitic.

Cold finishing operations

- Straightening;
- Peeling;
- Shearing ;
- Cutting to length;
- End finishing, beveling, end machining, drilling, boring.

Inspection and Control

As soon as a grade of steel is produced, it undergoes numerous checks and inspections to guarantee its conformity with specifications (cleanliness, machinability, geometry, ...).

Ascometal® ensures a wide range of inspection operations, including:

- Internal soundness (ultrasonic inspection at 100% of volume);
- Internal cleanliness inspections (ultrasonic inspection in tank, wide field image analysis, ...);
- Surface quality inspections (eddy currents, magnetic dispersion leakage flux, magnetic particle inspection, ...);
- Conventional laboratory tests (analysis, mechanical tests, metallographic examinations);
- Dimensional and anti-mix inspections.

