BESS STEEL
FORGE THE FUTURE

STEEL CATALOG

Edition 2025 - 2026

PRESENTATION

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Bess Steel, the steel of your ambitions!

Do you build, you produce, do you innovate? Bess Steel powers your projects.

As a specialist in metallurgy, trading and the production of metallurgical products, we offer demanding professionals a high-performance and reliable solution.

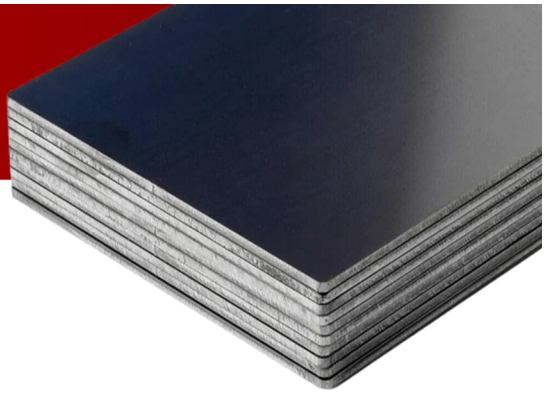
Expertise carried by a solid group.

Bess Steel was born out of the success of Run Pro Log, a transport and logistics company founded in 2016. With this diversification, the group is accelerating and strengthening its development.

Located in Bratislava, Slovakia, in the heart of Europe, our warehouse ensures proximity, responsiveness and optimized distribution to Europe and the Maghreb.

SUMMARY

HOT-ROLLED SHEET



WHAT IS IT ABOUT?

Hot-rolled sheet is characterized by the fact that the minimum value of the yield strength* and the breaking strength are guaranteed.
Their surface appearance can be black (raw, uncoated) or pickled.
The applications of hot-rolled sheets are boilermaking, steel construction, the automotive sector, etc.

DESIGNATION

Hot rolled sheets are available in different grades:

- **S 235:** folding
- **S 275:** Light stamping
- **S 355:** Deep drawing

- **JR:** 27 Joules at +20 °C
- **D0 :** 27 Joules at + 0 °C
- **Day 2:** 27 Joules at -20 °C
- **K2:** 40 Joules at -20 °C

***** "S" stands for structural steel.
***** The number that follows denoting the minimum yield strength in N/mm^2.
***** The terminology "JR" stands for the resistance test.

STANDARDS

Hot-rolled sheet is governed by the following standards:

EN 10025: which governs the general technical conditions of delivery**.**
EN 10029 and EN 10051: which govern dimensional tolerances.

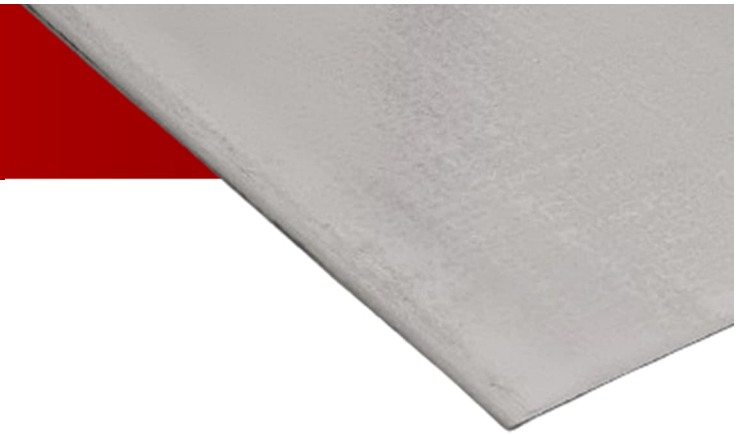
FORMATS AND WEIGHTS

Plate S235 / S275 / S355

Thickness in mm	1.5	2	2.5	3	4	5	6	8	10	12	15
Format in mm	Weight in kg										
1000 X 2000	24	32	40	48	64	80	96	128	160	192	240
1250 X2500	37.5	50	62.5	75	100	125	150	200	250	300	375
1500 X 3000	54	72	90	108	144	180	216	288	360	432	540
2000 X 4000	96	128	160	192	256	320	384	512	640	768	960
2000 X 6000	144	192	240	288	384	480	576	768	960	1152	1440
Format coils in mm	Weight in kg										
1000											
1250											
1500	Weight on request										
2000											

***** Weights given as a guide subject to factory tolerances. Other formats are available upon request**.**

DKP SHEETS



WHAT IS IT ABOUT?

Pickled sheets (DKP) are hot-rolled sheets for which the surface finish is stripped with an oiled finish.
The purpose of pickling is to remove the scale formed on the surface by immersion in an acid bath.
These plates are used when ductility characteristics* are more important than strength.
The applications of DKP sheets are sheet metal, cutting or stamping.

DESIGNATION

DKP sheets are available in different qualities:

- **DD 11**
- **DD 12**
- **DD 13**
- **DD 14**

***** The first "D" stands for steel for forming**.**
***** The second "D" stands for hot-rolled sheet for direct forming.
***** The number between 11 and 14 is the stamping index, the higher the index, the more suitable the sheet is for stamping.
***** DKP sheets are available in grades S 235 and S 355.

STANDARDS

DKP sheets are governed by the following standards:

EN 10111: which governs the general technical conditions of delivery.
EN 10051: which governs dimensional tolerances.

FORMATS AND WEIGHTS

DD 11 / DD 12 / DD 13 / DD 14

Thickness in mm	1.5	2	2.5	3	4	5	6	8	10	12	15
Format in mm	Weight in kg										
1000 X 2000	24	32	40	48	64	80	96	128	160	192	240
1250 X2500	38	50	63	75	100	125	150	200	250	300	375
1500 X 3000	54	72	90	108	144	180	216	288	360	432	540

***** Weights given as a guide subject to factory tolerances. Other formats are available upon request**.**

RELIEF SHEETS

WHAT IS IT ABOUT?

Relief sheets are hot-rolled sheets with surface roughness.
There are two surface aesthetics: tear plates and ribbed sheets.
Relief sheets have the advantage of being virtually wear-free and have excellent abrasion and impact resistance.
Because of their anti-slip properties, these sheets are used wherever there is traffic of people or vehicles on high-risk surfaces (walkways, floors, platforms, etc.)
The applications of DKP sheets are sheet metal, cutting or stamping.

DESIGNATION

Embossed sheets are available in the following quality:

- **S 235 JR**

* "S" stands for structural steel.
* The number that follows denoting the minimum yield strength in N/mm^2.
* The terminology "JR" stands for the resistance test, 27 joules at + 20 °C

FORMATS AND WEIGHTS

Sheet Metal Rolling

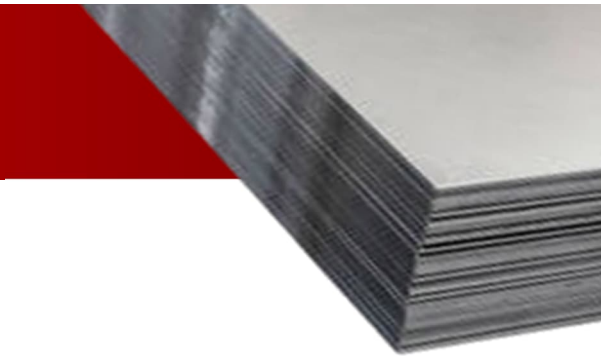
Thickness in mm	3/5	4/6	5/7	6/8	8/10	10/12
Format in mm	Weight in kg					
1000 X 2000	54	72	86	101	133	172
1250 X2500	84	113	135	158	208	269
1500 X 3000	121	162	194	227	299	387

* Weights given as a guide subject to factory tolerances. Other formats are available upon request.

Ribbed Sheet Metal

Thickness in mm	3/5	4/6	5/7	6/8	7/9	8/10
Format in mm	Weight in kg					
1000 X 2000	57	78	94	110	125	142
1250 X2500	89	122	147	172	195	221
1500 X 3000	128	176	212	248	281	318

HIGH STRENGTH PLATES



WHAT IS IT ABOUT?

High-strength steels are characterized by a low content of carbon and alloying elements, which give them excellent functional properties such as suitability for cold forming, profiling, welding or coating.
Their hardening obtained by precipitation and refinement of the grain size makes it possible to achieve high levels of mechanical strength.
They combine improved weldability due to the very low carbon level with good formability. Their mechanical characteristics facilitate forming on presses and automated lines. They are also characterized by good fatigue resistance and impact resistance.
Thanks to their high yield strength (Re), they are particularly suitable when weight reduction is sought, which is why these steels are frequently used as a replacement for structural steels.
HLE sheets are used in the automotive, agricultural, lifting or handling sectors.

DESIGNATION

HLE sheets are available in different qualities:

- **S 355 MC**
- **S 420 MC**
- **S 500 MC**
- **S 700 MC**

***** "S" stands for structural steel.
***** The number that follows denoting the minimum yield strength in N/mm^2.
***** The terminology "MC" stands for thermomechanical rolling.

STANDARDS

HLE sheets are governed by the following standards:

EN 10149.2: which governs the nuances and qualities.
EN 10051: which governs dimensional and flatness tolerances

STEEL SHEETS FOR LASER CUTTING

WHAT IS IT ABOUT?

Laser-cut steels are designed to meet the stringent requirements for thermal and automated cutting. They have been specially developed to ensure perfect laser cutting.
Thanks to their chemical composition, optimised surface quality and improved flatness, laser cutting steels offer cost advantages (speed increases by up to 40%, excellent cutting quality, easy to shape with a press).
Laser-capable steels are suitable for galvanizing. Their weldability is excellent, regardless of the technology used.

DESIGNATION

The sheets suitable for laser cutting are the hot-rolled sheets presented above.

- **LAC S 235 JR / S 275 / S 355 J0 sheets**
- **DKP DD 11 sheets**
- **HLE S 355 MC / S4 20 MC / S 500 MC / S 700 MC sheets**

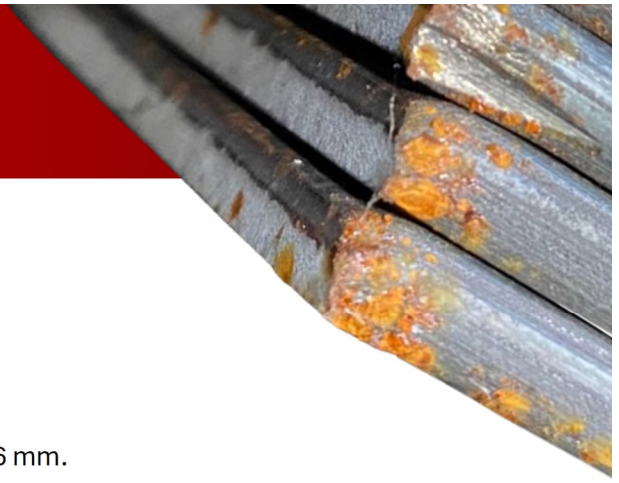
***** For the meaning of the designations, please refer to the previous sections.

STANDARDS

These sheets are governed by the following standards:

EN 10025 : which governs structural steels
EN 10149 : which governs high strength steels (HLE)
EN 10111 : which governs cold forming steels

PLATES



WHAT IS IT ABOUT?

The plates are hot-rolled sheets with a thickness of more than 16 mm.
The applications of the plates are diverse, they can be used in heavy boilermaking, shipbuilding, metal construction...

DESIGNATION

The plates are available in quality:

- **S 235**
- **S 235 JR**
- **S 275**
- **S 275 JR**
- **S 355**

* "S" stands for structural steel.
* The number that follows denoting the minimum yield strength in N/mm^2.
* The terminology "JR" stands for the resistance test, 27 joules at + 20 °C.
* When the quality is followed by "N", it means that the rolling is normalized.
* When the grade is followed by "AR", it means that the plate is raw to roll.

STANDARDS

These plates are governed by the following standards:

EN 10025 : which governs the general technical conditions of delivery.
EN 10029 : which governs dimensional tolerances and flatness tolerances.

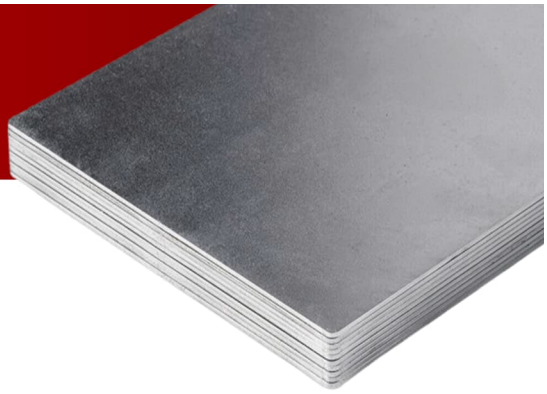
FORMATS AND WEIGHTS

Heavy Plate S235 / S275 / S355

Thickness in mm	16	18	20	25	30	35	40	45	50	60	70	80	90	100
Format in mm	Weight in kg													
1000 X 2000	256	288	320	400	480	560	640	720	800	900	1120	1280	1440	1600
1250 X 2500	400	450	500	625	750	875	1000	1125	1250	1500	1750	2000	2250	2500
1500 X 3000	576	648	720	900	1080	1260	1440	1620	1800	2160	2520	2880	3240	3600
1500 X 6000	1152	1296	1440	1800	2160	2520	2880	3240	3600	4320	5040	5760	6480	7200
2000 X 4000	1024	1152	1280	1600	1920	2240	2560	2880	3200	3840	4480	5120	5760	6400
2000 X 6000	1536	1728	1920	2400	2880	3360	3840	4320	4800	5760	6720	7680	8640	9600
2000 X 12000	3072	3456	3840	4800	5760	6720	7680	8640	9600	11520	13440	15360	17280	19200
2500 X 6000	1920	2160	2400	3000	3600	4200	4800	5400	6000	7200	8400	9600	10800	12000
2500 X 12000	3840	4320	4800	6000	7200	8400	9600	10800	12000	14400	16800	19200	21600	24000
3000 X 12000	4608	5184	5760	7200	8640	10080	11520	12960	14400	17280	20160	23040	25920	28800

***** Weights given as a guide subject to factory tolerances. Other formats are available upon request**.**

COLD-ROLLED SHEET



WHAT IS IT ABOUT?

Cold-rolled sheet comes in the same shapes as hot-rolled sheet but has a different finish. Indeed, they are obtained by cold finishing: generally pickling, cold rolling, annealing followed by a light relamination pass (Skin Pass).
They are used when deformation and ductility characteristics* are more important than strength characteristics. These steels are also suitable for a wide range of surface finishes such as phosphating, lacquering, electroplating and often serve as a support for coated steels.
The applications of these sheets are metal furniture, sheet metal work and locksmithing...

DESIGNATION

Cold-rolled sheets are available in different grades:

- **DC 01:** Folding – C (XC) quality
- **DC 03:** Light Stamping – Grade E (XE)
- **DC 04:** Deep drawing – ES quality (XES)
- **DC 05:** Extra deep drawing – SES quality

***** "DC" means cold-rolled product.
***** 01 to 05 designating the stamping index (the ability of a sheet metal to undergo deformation). The higher the index, the more likely the sheet metal is to undergo deformation.

STANDARDS

Cold-rolled sheet is governed by the following standards:

EN 10130 : which governs the general technical conditions of delivery.
EN 10131 : which governs dimensional tolerances and flatness tolerances.

ASPECTS DE SURFACE

There are 2 surface aspects:

- **A**: Clean surface that may have some defects. (This aspect is the standard).
- **B**: Very clean surface with virtually no defects, visible parts.

The 4 surface finishes are:

- **b**: glossy
- **G**: Semi Glossy
- **M**: Normal (this finish is the standard)
- **A**: Rough

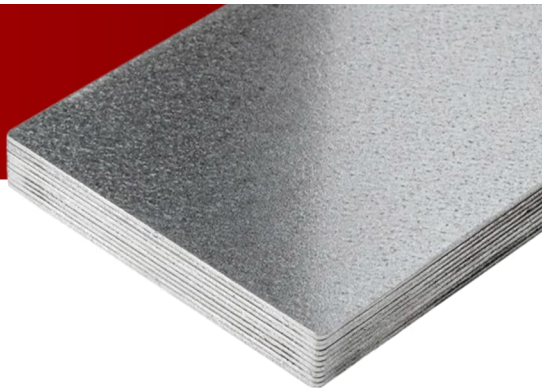
FORMATS AND WEIGHTS

DC 01 / DC 03 / DC 04 / DC 05

Thickness in mm	0.5	0.63	0.75	8	1	1.2	1.25	1.5	2	2.5	3
Format in mm	Weight in kg										
1000 X 2000	8	10	12	13	16	19.2	20	24	32	40	48
1250 X2500	12.5	15	18.8	20	25	30	31	38	50	63	75
1500 X 3000	18	22.5	27	29	36	43	45	54	72	90	108
1500 X 4000	24	30	36	38	48	58	60	72	96	120	144
Format coils in mm	Weight in kg										
1000	Weight on request										
1250											
1500											
2000											

***** Weights given as a guide subject to factory tolerances. Other formats are available upon request**.**

GALVANIZED SHEETS



WHAT IS IT ABOUT?

Galvanized sheets are cold-rolled sheets that are continuously coated by immersion in a bath of molten zinc.
The applications of these sheets are: building, ventilation, any application requiring corrosion resistance, etc.

DESIGNATION

Galvanized sheets are available in different qualities:

- **DX 51:** Folding
- **DX 52:** Light Stamping
- **DX 53:** Deep drawing
- **DX 54:** Extra deep drawing

***** DX stands for continuous hot-dipped coating.
***** 51 to 54 designating the stamping index (the ability of a sheet metal to undergo deformation). The higher the index, the more likely the sheet metal is to undergo deformation.
***** The "Z" specifying the zinc coating. The following number gives the zinc load in grams
For both sides.
E.g. Z 275 = 275 g/m^2 - double-sided - 137.5 g per side.

STANDARDS

Galvanized sheets are governed by the following standards:

EN 10142 : which governs the nuances and qualities.
EN 10143 : which governs dimensional tolerances and flatness tolerances.

ASPECTS DE SURFACE

There are 2 surface aspects:

- **N**: Normal
- **M**: Minimized

The 3 surface finishes are:

- **A**: Normal surface
- **B**: Surface improved by skin pass
- **C**: Upper surface by skin pass

The 4 possible surface treatments are:

- **C**: chemical passivation*
- **O** : oiling
- **CO**: passivation* + oiling
- **V**: Untreated state

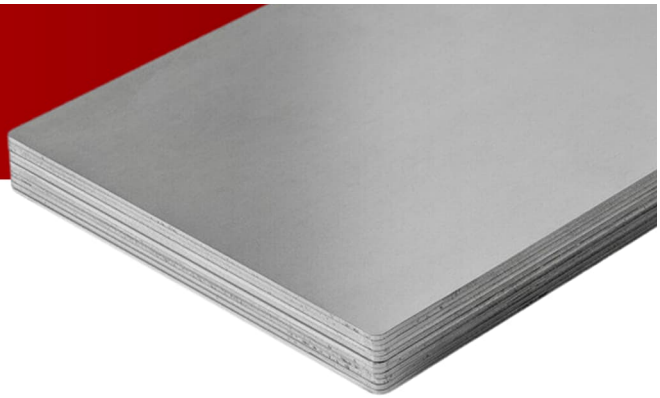
FORMATS AND WEIGHTS

DX 51 / DX 52 / DX 53 / DX 54

Thickness in mm	0.5	0.63	0.75	8	1	1.2	1.25	1.5	2	2.5	3	4
Format in mm	Weight in kg											
1000 X 2000	8	10	12	13	16	19.2	20	24	32	40	48	64
1250 X2500	12.5	15	18.8	20	25	30	31	38	50	63	75	100
1500 X 3000	18	22.5	27	29	36	43	45	54	72	90	108	144
1500 X 4000	24	30	36	38	48	58	60	72	96	120	144	192
Format coils in mm	Weight in kg											
1000	Weight in request											
1250												
1500												
2000												

***** Weights given as a guide subject to factory tolerances. Other formats are available upon request**.**

ELECTROGALVANIZED SHEETS



WHAT IS IT ABOUT?

Electrogalvanized sheet is cold-rolled sheet that is electrolytically coated with zinc.
The electro-galvanized coating is intended to protect the steel sheet against corrosion. It is recommended for all applications related to the automotive and general industrial sectors for its sacrificial effect.

The advantages of electrogalvanized steels are:

- Superior stamping and profiling behaviour to the standard offer thanks to the in-line supply of a layer of zinc hydroxysulphate.
- Quality of surface appearances after painting (bodywork, visible panels).
- Mastery of coatings to 0.1 microns from 2.5 to 20 microns.
- All coating thicknesses can be applied to LAF and LAC substrates without changing the initial mechanical characteristics.
- Differential coating is possible per side.

The applications of these sheets are: the production of visible parts, the great aptitude for painting, locksmithing, sheet metal work...

DESIGNATION

Electrogalvanized sheets are available in DC 01 to DC 05 ZE:

- **DC 01:** Folding
- **DC 03:** Light stamping
- **DC 04:** Deep drawing
- **DC 05:** Extra deep drawing

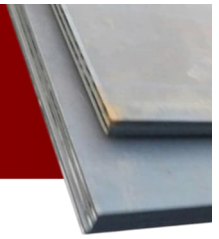
***** "DC" means cold-rolled product.
***** 01 to 05 designating the stamping index (the ability of a sheet metal to undergo deformation). The higher the index, the more likely the sheet metal is to undergo deformation.
***** The "ZE" stands for zinc coating by electrolysis. The 25/25 indication is the thickness of zinc in µ per side x10.

ASPECTS DE SURFACE

There are 6 possible surface treatments:

- **P**: Phosphating
- **PC:** Phosphating and chromating
- **C**: Chemical passivation*
- **PCO:** Phosphating + chromating + oiling
- **CO**: Passivation* + oiling
- **PO**: Phosphating + oiling.

SHEET METAL, BOILERS AND PRESSURE VESSELS



WHAT IS IT ABOUT?

Pressure vessel steels differ from carbon and manganese structural steels in that they have a high resistance to pressure at any temperature (ambient, low or high).
The steel grades are characterized by a minimum yield strength of between a minimum of 235 N/mm^2 and a maximum of 460 N/mm^2 as well as good weldability.
The essential property of pressure vessel steels is their resistance to high pressures at different operating temperatures. These steels have good weldability and high resilience*. They are suitable for normalizing annealing or stress relief annealing that neutralizes the hardening following welding.
These steels are mainly used in the manufacture of boilers, pressure or steam tube mills, thermal appliances, compressors and heat recovery units. They are suitable for mechanical forming and welding.

DESIGNATION

Pressure vessel plates are available in different qualities:

- **P 265 GH**
- **P 265 S**
- **P 275 NL**
- **P 295 GHP 355 GH**

***** "P" stands for steel for pressure vessels
***** The number that follows denoting the minimum yield strength in N/mm^2.

The termination conditions the use:

- **GH** : High temperature.
- **S** : Simple pressure vessel.
- **NH** : Normalized high temperature.
- **N** : Normalized room temperature.
- **NL1** : Low temperature normalized.
- **NL2** : Normalized very low temperature.

STANDARDS

Plates for pressure vessels are governed by the following standards:

NF EN 10028-2 : for high-temperature boiler sheets.
NF EN 10207 : for single pressure boiler sheets.
NF EN 10028-3 : for standardised boiler sheets.

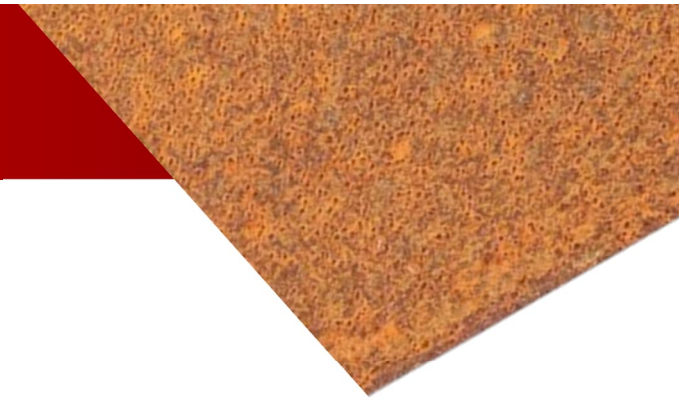
COMMON FORMATS

Common formats of pressure vessel sheets :

- **2500 x 1250**
- **3000 x 1500**
- **4000 x 2000**

***** Common thicknesses are 5 to 50 mm.
***** Other sizes are available upon request**.**

"CORTEN" SHEETS



WHAT IS IT ABOUT?

Anti-corrosion plates of the "corten" type are sheets offering improved resistance to atmospheric corrosion. When this steel is used in its raw state (uncoated) and exposed to the weather, a highly adherent layer of protective oxide forms on its surface. As soon as the phenomenon stabilizes, this "patina" presents a purple-brown color and a finely grained appearance.
This oxidation layer protects the underlying material on which further oxidation is significantly delayed.
If this patina breaks, the oxidation phenomenon resumes and generates a new protection of the steel. The difference with "standard" structural steel is the addition of copper, chromium and nickel alloys which makes it possible to obtain a weather-resistant steel. Due to its chemical composition, when used unprotected, there is greater resistance to atmospheric corrosion compared to non-alloy steel.
It is important to note that its low-carbon chemical composition and fine-grained structure give it good weldability by conventional processes.
The field of application of anti-corrosion sheets is very broad: architecture, sculpture, engineering structures, industrial chimneys, transport wagons, silos, containers, etc.

DESIGNATION

Corten sheets are available in different qualities:

- **S 235 J0 WP**
- **S 355 J0 WP**
- **S 355 J2 WP**

* "S" stands for structural steel.
* The number that follows denoting the minimum yield strength in N/mm^2.
* The mention "J0" stands for the resistance test.
* The terminology "WP" means that steel is resistant to atmospheric corrosion.

STANDARDS

Plates for pressure vessels are governed by the following standards:

NF EN 10025-5.
NF EN 10155.

COMMON FORMATS

Common sizes of anti-corrosion sheets are:

- **1000 x 2000**
- **1250 x 2500**
- **3000 x 1500**
- **2000 x 4000**

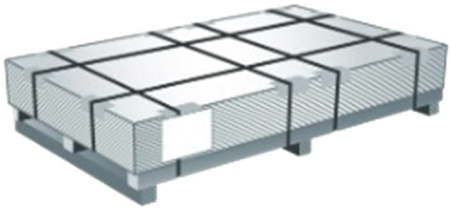
***** Common thicknesses are 2-10mm.
***** Other sizes are available upon request**.**

CONDITIONING

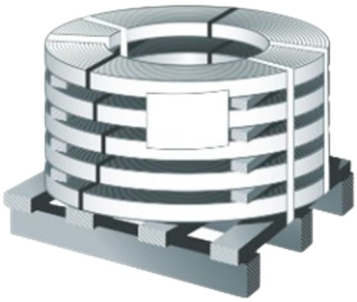
PACKAGING CONDITIONS

Our packaging has been carefully designed to prevent damage during the handling and transport phases.
On specific request, special, non-standardised packaging can be accepted and produced.

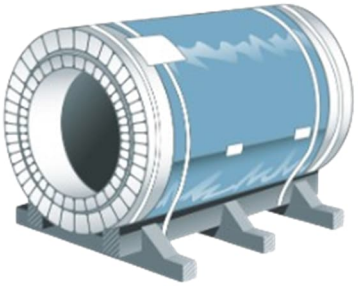
A product identification label is affixed to each package, containing the following information: supplier, customer, material characteristic, dimensions, quantity and weight, to ensure easy traceability.



Packaging of sheet metal on pallets with metal corners to protect the edges



Packaging of the narrow-width rollers vertically on pallets with separating wood and metal corners to protect the edges



Packaging of large rolls horizontally on pallets with a protective film as well as metal crowns to protect the inner and outer edges

• Elongation (A%):
Elongation at break or elongation % defines the ability of a material to elongate before breaking when it is stressed in tension.

•Calamine:
A film of iron oxide that forms on the surface of bars or sheets during hot rolling. After cooling, the scale comes off more or less in the form of thin scales.

•Ductility:
It is the ability of a material to deform without cracking before breaking
(= malleability).

•Hardness:
The hardness of a metal is its ability to resist deformation. It is determined by means of standard tests (Brinell, Meyer, Vickers, Rockwell) by measuring the depth, diameter or other parameter of the impression made by an awl.

• Yield Strength (Rp):
Property of a body to return to its initial geometry after having been subjected to the action of external force(s) that have caused a non-permanent deformation and therefore This is called elastic deformation.

•Normalization:
It is the result of thermal transformation (heating) followed by cooling to room temperature.
It restores the initial qualities of steel.

•Passivation:
It is the result of the transformation of a surface in the process of corrosion into an inactive surface by the formation of an oxide insulating layer.

• Tensile strength (Rm):
This is the next phase of the yield limit, the specimen deforms uniformly and irreversibly, beyond this limit the fracture is reached.

•Resilience:
Energy related to the unit area, absorbed by the rupture on a pendulum sheep of a specimen notched in the middle and resting on two supports.
It is expressed in joules per square centimeter and symbol KVC or KCU, depending on the type of specimen used.

• RoHS:
This stands for "Restriction of the use of certain Hazardous Substances in electrical and electronic equipment".
The substances mainly concerned are lead, mercury and chromium VI. The maximum accepted concentration is 0.1%. This standard came into force on 01/07/2006