

Abbreviations and symbols

Below you will find an explanation of all the abbreviations and symbols mentioned in this product catalogue.

A	Elongation
A 5.65 $\sqrt{S_0}$	Elongation on proportional basis
A ₈₀	Elongation on 80 mm basis
AC	Alternative Current
Ac ₁	Austenitic start transformation temperature during heating
Ac ₃	Austenitic end transformation temperature during heating
Al	Aluminium
AM FCE	This abbreviation stands for "ArcelorMittal Flat Carbon Europe" and is added to the name of a steel grade for which ArcelorMittal offers more than what is required by the standard.
API	American Petroleum Institute
AR	As Rolled
AS	Aluminium-silicon
AZ	Aluminium-zinc
B	Boron
BH	Bake-hardening
C	Carbon
CAD	Computer Aided Design
CCT	Continuous-cooling transformation
C _{eq}	Carbon equivalent
CERN	The European Organisation for Nuclear Research
CLP	Classification Labelling and Packaging
CMT	Cold Metal Transfer
Cr	Chrome
Cu	Copper
DC	Direct Current
DWTT	Drop Weight Tear Tests
ΔE	Colour differences
ERW	Electric Resistance Welding
ETE	Elektro-Tauch-Emallierung, electrostatic dip enamelling, or electrophoresis
FCAW	Flux Core Arc Welding
FLC	Forming Limit Curve
GCS	General Conditions of Sale
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
GMAW	Gas Metal Arc Welding
GTAW	Gas Tungsten Arc Welding
GU	Gloss Unit
HAZ	Heat Affected Zone
HB	Brinell hardness
HBS	Brinell hardness steel ball indenter
HBW	Brinell hardness tungsten carbide ball indenter
HFI	High Frequency Induction welding



HIC	Hydrogen-induced cracking
HR	Rockwell hardness
HRB	Rockwell hardness Scale B
HRC	Rockwell hardness Scale C
HSE	Health, Safety & the Environment
HSLA	High Strength Low Alloy steels
HV	Vickers hardness
HVAC	Heating, Ventilating and Air Conditioning
IFS	Interstitial Free Steel
IPS	Improved Processed Surface
KCV-test	Charpy V impact test
KV	Notch toughness
L	Longitudinal
LCA	Life Cycle Analysis
LCI	Life Cycle Inventory
LDR	Limiting Drawing Ratio
LHC	Large Hadron Collider
M	Martensite
MAG	Metal Active Gas welding
MIG	Metal Inactive Gas welding
MMA	Manual Metal Arc welding
Mn	Manganese
Mo	Molybdenum
MP	Mechanical properties
M_s	Martensitic start transformation temperature
n	Strain hardening exponent
N	Nitrogen
Nb	Niobium
Ni	Nickel
P	Phosphorus
PAW	Plasma Arc Welding
PET	Polyethylene terephthalate
PP	Polypropylene
PS	Proof Stress
PVDF	Polyvinylidene Fluoride
PWHT	Post Weld Heat Treatment
PWM	Pulse-width modulation
r	Plastic strain ratio
\bar{r}	Normal strain ratio
Δr	Planar strain ratio
Ra	Roughness
RB	Batch annealing
RC	Continuous annealing
R_e	Yield strength
R_e/R_m	Yield to strength ratio

REACH	European Regulation EC 1907/2006 on Registration, Evaluation, Authorisation and Restriction of Chemicals
RH	Relative Humidity
R_m	Tensile strength
R.o.H.S.	Restriction of the use of Hazardous Substances
$R_{p0.2}$	Proportional elastic limit with an elongation of 0.2% (0.2% PS)
R_s	Stress ratio
RSEW	Resistance Seam Welding
Rw	Acoustic insulation ratio
SAW	Submerged Arc Welding
S	Sulphur
SDS	Safety Data Sheet
Si	Silicon
SMAW	Shielded Metal Arc Welding
SST	Single Sheet Tester
T	Transversal
th	Thickness
TH	$15 T_0/d^2$ (T_0 = the hydrogen permeation time (minutes) and d = thickness (mm))
Ti	Titanium
TIG	Tungsten Inert Gas
TK	Transition temperature
TM	Thermomechanically rolled
TOC	Thin Organic Coating
V	Vanadium
VOC	Volatile Organic Compounds
w	Width
W.E.E.E.	Waste Electrical and Electronic Equipment
WH	Work-hardening
Z	Zinc
ZA	Zinc-aluminium
ZE	Electrogalvanised

