**SIDEX**

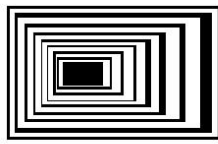
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UNI EN ISO 9001:2015
IQ-0120-01**Additional symbols following the steel grade (UNI 10440/00 - EN 10027-1/05)**

symbol	other	definition
+A	TC	Annealed
+AC		Globular annealed
+AR		As rolled - natural
+AT		Annealed solubilized
+BC		Cold formed and sandblasted
+BG		Spheroidal annealed
+BK		No heat treatment after drawing
+C		Cold drawn
+CC		Semi product from continuous casting not formed afterwards
+Cnnn		Cold drawn in order to obtain nnn N/mm ²
+CH		Core Hardened
+CR		Cold rolled
+DC		Delivery condition according to supplier
+FP		Heat treated for a structure ferrite-perlite and hardness
+GBK		Annealed under protected atmosphere (white annealing)
+GKZ		Spheroidal globular annealing
+H		Normal hardenability at the max excursion
+HH		Restricted hardenability towards the top of the scale
+HL		Restricted hardenability towards the bottom of the scale
+HC		Hot rolled and cold drawn
+HR		Heat treated for a pre determined range of hardness
+HW		Natural state of hot forming
+I		Isothermal annealing
+LC		Skin passed (flattened or cold drawn)
+M		Rolled thermo mechanically
+MA		Machine worked
+N	TD	Normalized, normalization rolling
+NBK		Normalized under controlled atmosphere
+NT		Normalized and tempered
+P		Hardened for precipitation
+PE		Peeled
+PI		Hot formed then pickled
+PL		Brightened (smoothed)
+Q		Quenched
+QA		Quenched in air



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+QO		Quenched in oil
+QT	+HT	Quenched and tempered (hardened and tempered)
+QW		Quenched in water
+RA		Annealing of re-crystallization
+S		Annealed shearable
+SH		Peeled rolled
+SL		Ground
+SR		Stress relieved
+T		Tempered
+TH		Treated in order to obtain a certain range of hardness
+U		Not treated (untreated) es. St 52.3 U
+WW		Hot deformed
+V		(Vergüten) hardened and tempered
+Z15		Property guaranteed in the direction of the thickness, reduction of area min 15%
+Z25		Property guaranteed in the direction of the thickness, reduction of area min 25%
+Z35		Property guaranteed in the direction of the thickness, reduction of area min 35%
J2		Impact strength guarantee at $-20^{\circ}\text{C} > 27\text{J}$ (drawn bars excluded)
J0		Impact strength guarantee at $0^{\circ}\text{C} > 27\text{J}$ (drawn bars excluded)
JR		Upon request, Impact strength guarantee at $+20^{\circ}\text{C} > 27\text{J}$ (drawn bars excluded)
K2		Impact strength guarantee at $-20^{\circ}\text{C} > 40\text{J}$ (drawn bars excluded)
L		Impact strength guarantee at $-50^{\circ}\text{C} > 27\text{J}$ (drawn bars excluded)
G1	FU	Effervescent steel allowed
G2	FN	Effervescent steel not allowed
G3	FF	Steel totally calmed
G4		Delivery state at the discretion of the producer
...E		ex. C45E with a percentage of Sulphur indicated
...R		ex. C45R with a variation range of Sulphur indicated
R....		ex. RSt 52.3 calmed steel
RR....		ex. RRSt44-3 special steel calmed
U....		ex. USt 52.3 effervescent steel
X....		ex. X 6Cr17 indicates the steel grades with at least one alloying elements greater than 5%
BS		Base steel grades
QS		Special Steels
H		Hollow profile
KG	N	Used at room temperature
KT	NL	Used at low temperatures
KW	NH	Used at high temperatures

R		Room temperature
GC		Apt for cold drawing
+A	coating	Aluminum coating by hot dipping
+AS		Coating of alloy Aluminum-silicon
+AZ		Coating of alloy Aluminum-zinc (>50% Al)
+CE		Electrolytic coating chrome/chrome oxide ECCS
+CU		Coating of copper
+IC		Inorganic coating
+OC		Organic coating
+S	coating	Tin coating by hot dipping
+SE		Electrolytic coating of tin
+T	coating	Coating of alloy lead-tin by hot dipping
+TE		Electrolytic coating of alloy lead-tin
+Z		Zinc coating by hot dipping
+ZA		Coating of zinc-aluminum (>50%Zn) by hot dipping
+ZE		Electrolytic coating of zinc
+ZF		Coating of zinc-iron by hot dipping
+ZN		Electrolytic coating of alloy zinc-nickel
m		ex. Cm 55 steel with sulfur 0.020-0.040%
....K		ex. St 37-3 K = kaltgezogen, cold straightened or cold drawn,
....K		ex. CK 15 = Killed, calmed
P	BS 970 pt. 1 1991	Tensile Strength N/mm ² 550-700
Q	BS 970 pt. 1 1991	Tensile Strength N/mm ² 625-775
R	BS 970 pt. 1 1991	Tensile Strength N/mm ² 700-850
S	BS 970 pt. 1 1991	Tensile Strength N/mm ² 775-925
T	BS 970 pt. 1 1991	Tensile Strength N/mm ² 850-1000
U	BS 970 pt. 1 1991	Tensile Strength N/mm ² 925-1075
V	BS 970 pt. 1 1991	Tensile Strength N/mm ² 1000-1150
W	BS 970 pt. 1 1991	Tensile Strength N/mm ² 1075-1225
X	BS 970 pt. 1 1991	Tensile Strength N/mm ² 1150-1300
Y	BS 970 pt. 1 1991	Tensile Strength N/mm ² 1225-1375
Z	BS 970 pt. 1 1991	Tensile Strength N/mm ² =1550