

Grade :	P355QH1
Number:	1,0571
Classification:	Non-alloy steel
Standard:	EN 10222-4: 1999 Steel forgings for pressure purposes. Weldable fine-grain steels with high proof strength
Equivalent grades:	No information

Chemical composition % of steel P355QH1 (1.0571): EN 10222-4-1999

C	Si	Mn	Ni	P	S	Cr
max 0.2	0.1 - 0.5	0.9 - 1.65	max 0.3	max 0.025	max 0.015	max 0.3

Mo	V	N	Nb	Al	Cu	-
max 0.08	max 0.1	max 0.02	max 0.05	0.02 - 0.06	max 0.2	Nb+V < 0.12

Mechanical properties of steel P355QH1 (1.0571)

Rm - Tensile strength (MPa)	470-630
------------------------------------	----------------

ReH - Minimum yield strength (MPa)	275-355
---	----------------

KV - Impact energy (J) longitud., (+QT)	+20°	0°	-20°	-40°
	63	55	47	34

KV - Impact energy (J) transverse, (+QT)	+20°	0°	-20°
	40	34	27

A - Min. elongation at fracture (%) longitud.,	21-23
---	--------------

A - Min. elongation at fracture (%) transverse,	19-21
--	--------------

Mechanical properties

P_{eH}	Minimum yield strength / Mindestwert der oberen Streckgrenze / Limite d elasticite minimale
P_m	Tensile strength / Zugfestigkeit / Resistance a la traction
A	Minimum elongation / Mindestwert der Bruchdehnung / Allongement minimal
J	Notch impact test / Kerbschlagbiegeversuch / Essai de flexion par choc

Heat treatment conditions

+A	Soft annealed	+P	Precipitation hardened
+AC	Annealed to achieve spheroidization of the carbides	+PE	Peeled
+AR	As rolled	+QA	Air quenched and tempered
+AT	Solution annealed	+QL	Liquid quenched and tempered
+C	Cold drawn / hard	+QT	Quenched and tempered
+CR	Cold rolled	+S	Treated to improve shearability
+FP	Treated to ferrite-pearlite structure and hardness range	+SH	As rolled and turned

+I	Isothermal annealing	+SR	Cold drawn and stress relieved
+LC	Cold drawn / soft	+T	Tempered
+M	Thermo mechanical rolling	+TH	Treated to hardness range
+N	Normalized	+WW	Warm worked
+NT	Normalized and tempered	+U	Untreated

Non-alloy steel

Chemical composition of steel P355QH1 (1.0571), Standards of steel P355QH1 (1.0571)

Mechanical Properties of steel P355QH1 (1.0571)

steel P355QH1 (1.0571) Tensile Strength, Elongation, Proof strength , Hardness

