

CHEMICAL COMPOSITIONS OF STEELS REFERRED TO IN THIS CATALOGUE

CS 70 and C67	Carbon steel which, after hardening and tempering, has excellent strength and fatigue resistance which makes them ideal for spring pins, both coiled and slotted.
AISI 304 and WS 1.4310	Austenitic stainless steel, unhardenable and with low magnetic permeability, used for both coiled and slotted spring pins where corrosion resistance is needed.
WS 1.3505	Hardenable high carbon steel with chrome content used for through-hardened dowels in the metric range.
WS 1.4305 and 303S31 (A2)	Unhardenable austenitic stainless steel with low magnetic permeability used for dowels, grooved pins, taper pins and threaded spacers where corrosion resistant properties are required.
WS 1.4571 and 316S11 (A4)	Unhardenable austenitic stainless steel with low magnetic permeability, but with very high corrosion resistance used for dowels.
431S29 (C1)	A hardenable martensitic stainless steel used for dowels requiring the maximum shear strength, combined with corrosion resistance.
WS 1.0718 (9SMnPb28)	Leaded mild steel used for dowels, taper pins and grooved pins.
S300 Pb	Leaded mild steel used for threaded spacers.
AISI 1010	Low carbon steel used for roll-formed clearance spacers.
WS 1.0503 (C45k)	Standard Key steel with a minimum tensile strength of 60 Kg/mm .
Silver Steel to BS 1407	A through-hardenable high carbon steel used for dowels and small turned parts.

Type of Steel	Carbon C	Manganese Mn	Phosphorous P	Sulphur S	Silicon Si	Chrome Cr	Vanadium V	Lead Pb	Nickel Ni	Molybdenum Mo	Titanium Ti
CS 70	0.65-0.75	0.5-0.9	0.045 Max	0.045 Max	0.35-0.50						
AISI 304	0.08 Max	2.0 Max	0.045 Max	0.030 Max	1.00 Max	18.0-20.0			8.0-10.5		
WS 1.4301	0.07 Max	2.0 Max	0.045 Max	0.030 Max	1.0 Max	17.0-19.0			8.5-10.5		
303S31	0.12 Max	2.0 Max	0.060 Max	0.15-0.35	1.0 Max	17.0-19.0			8.0-10.0	1.0 Max	
WS 1.3505	0.90-1.05	0.25-0.45	0.030 Max	0.025 Max	0.15-0.35	1.35-1.65			0.30 Max		
WS 1.4305	0.12 Max	2.0 Max	0.060 Max	0.15-0.35	1.00 Max	17.0-19.0			8.0-10.0		
WS 1.4571	0.08 Max	2.0 Max	0.045 Max	0.030 Max	1.00 Max	16.5-18.5			10.5-13.5	2.0-2.5	5xC Min 0.8 Max
316S11	0.03 Max	2.0 Max	0.045 Max	0.030 Max	1.0 Max	16.5-18.5			11.0-14.0	2.0-2.5	
431S29	0.12-0.20	1.0 Max	0.040 Max	0.030 Max	1.0 Max	15.0-18.0			2.0-3.0		
WS 1.0718	0.14 Max	0.90-1.30	0.100 Max	0.27-0.33	0.05 Max			0.15-0.35			
S300 Pb	0.14 Max	1.00-1.50	0.100	0.32-0.40	0.05 Max			0.20-0.30			
AISI 1010	0.06-0.13	0.30-0.60	0.040 Max	0.05 Max	0.4 Max						
Silver Steel	0.95-1.25	0.25-0.45	0.045 Max	0.045 Max	0.4 Max	0.5 Max					
WS 1.0503	0.42-0.50	0.50-0.80	0.045 Max	0.045 Max	0.4 Max	0.4 Max			0.40 Max	0.10 Max	

NB All values are as a percentage %