CANCO FASTENERS

Trusted Name in Quality Fixing System

Dated: 28-01-2025

METALLURGICAL TEST REPORT (Shoulder Bolt)

ITEM: HEXAGON SOCKET HEAD SHOULDER SCREW
SIZE: Shoulder Ø 6 mm to 25 mm (Thread M5 to M20)
MATERIAL: Alloy Steel Grade 12.9, Hardened and Tempered; SS 304 (A2); SS 316 (A4)
FINISH: Black Oxide with Ground Shoulder, Nickel or Zinc Plated on Request

DESCRIPTION OF PARTS											
PROCESS ROUTE											
% CHEMICAL COMPOSITION											
Elements	C (%)	Mn (%)	Si (%) Max	P (%) Max	S (%)	Cr (%) Min	Mo (%)	V (%)	Al (%)	Br (%)	Others Max
Minimum	-	-	-	-	0.05%	-	-	-	0.01%	-	0.10%
Maximum	0.20%	0.80%	0.30%	0.05%	0.06%	0.60%	-	-	0.035%	-	0.20%
Achieved	0.15%	0.62%	0.24%	0.03%	0.04%	0.48%	-	-	0.027%	-	0.09%

BASIC PERFORMANCE DATE		
SIZE		Shoulder Ø 6 mm to 25 mm (Thread M5 to M20)
TENSILE LOAD		
Ultimate Tensile Strength	[kN]	≥ 86.00
Yield Load	[kN]	≥ 72.00
SHEAR LOAD		
Ultimate Shear Strength	[kN]	≥ 52.00
Yield Shear Load	[kN]	≥ 40.00
HARDNESS RANGE		
Rockwell Hardness (HRB)		≤ 95
DIMENSIONAL TOLERANCE		
Diameter Tolerance	[mm]	± 0.05
Length Tolerance	[mm]	± 0.50
CORROSION PROTECTION		
Finish		Black Oxide, Zinc Plated, Nickel Plated on Request
MATERIAL SUITABILITY		
Base Material		Steel, Stainless Steel

Thanks & Regards

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