

# FASTENERS + PLUS

FIND IT FAST. GET IT FAST.

**Issue Date:** 6/27/2022

**Supplier:** Fasteners Plus  
202 Blue Creek Drive  
Urbana IA, 52345

**Part Number:** TRB7-112HDG

PCS			
Item:	1 - 8 X 12'	ALL THREAD STUD	
Material Specification:	EN10204 3.1 ASTM A193(19) B7 ASTM F1554(20) GR 105 ASME SA193(20) B7 S11		HDG
LOT#:	W78364		
Heat Number:	A215495	Melt and Manufacture:	USA
Tensile Strength KSI:	140	Yield Strength KSI:	130
Elongation:	20-22	Reduction of Area:	60-62
Hardness:	28-29 HRC	Charpy Impact -20F:	90/103/87
Macro Etch:	S1/R1/C1	Tempering Temp.:	1354 F
Quenched and Tempered		Decarburization:	Pass
Carbon (C):	0.410	Chromium (CR):	0.860
Manganese (MN):	0.770	Molybdenum (MO):	0.160
Phosphorus (P):	0.009	Copper (CU):	NA
Sulfur (S):	0.023	Nitrogen (N):	NA
Silicon (SI):	0.280	Nickel (NI):	NA
Cobalt (CO):	NA	Aluminum (AL):	NA
Vanadium (V):	NA	Tin (SN):	NA
Tungsten (W):	NA	Titanium (TI):	NA
Columbium/Niobium (NB/CB):	NA	Boron (B):	NA
Calcium (CA):	NA		

**Signature** Wendi Kafer

**Date:** 6/27/2022

**Title:** Quality Specialist

The certificate of conformity is based on an evaluation of a sample of the above-mentioned product. Technical report and documentation are at applicant's disposal. This is to certify that the tested sample is in conformity.

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