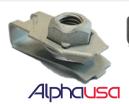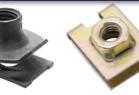# Engineered U-Nut Clips Comparison

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	5000 Series Hex Flange Nut Clip	6000 Series Pierce Nut Clip	Extruded & Threaded Barrel Type Clip	Weld Nut Style Clip	Cage Nut Style Clip	Spring Nut Style #1 Clip	Spring Nut Style #2 Clip
Installation - self wrenching	✓	✓	✓	✓	✓	✓	✓
Metric sizes available - M8 thru M12 sizes available	✓	✓	✓	✓	✓	✓	✓
Metric sizes available - M4 thru M8 sizes available		✓	✓	✓	✓	✓	✓
Ergonomic standard - meets 45N installation maximum requirements	✓	✓				✓	✓
Fastener standard - meets published property class 10 proof load requirements	✓	✓					
Fastener standard - meets published property class 10 clamp load requirements	✓	✓					
Fastener standard - meets published property class 10 first on & third off requirements	✓	✓					
Fastener standard - maintains published joint clamp load in extreme vibration environments	✓	✓					
Fastener standard - maintains published fastener standard joint clamp load in extreme thermal cycling environments	✓	✓					
Thread integrity - resistant to joint threads seizing due to rust	✓	✓	✓	✓	✓		
Thread integrity - nut thread lead-in to bolt at installation for anti-cross threading	✓	✓	✓				
Thread integrity - nut self-aligns to bolt at installation for anti-cross threading	✓	✓					
Rigid connection - zero panel movement under load/unload cyclical events - no squeak & rattle	✓	✓					
Coating and finishing - available in all customer specific fastener coatings	✓	✓	✓	✓	✓	✓	✓
Hydrogen embrittlement resistant - manufactured using embrittlement resistant pre-heat-treated material	✓	✓					
Serviceability - joint disassembly using common box / open style wrench or socket	✓	✓		✓	✓		
Manufacturing efficiency - designed for minimization of material waste in product manufacture	✓	✓		✓		✓	✓
Manufacturing efficiency - designed for simplification of part production tooling and infrastructure	✓	✓					