



Fastener Comparison

FASTENER ATTRIBUTES TESTS	UNITS	CADMIUM	HOT DIP ZINC	ZINC PLATING	ZINC PLATING + PTFE TOP COAT	CERAMIC + PTFE TOP COAT	ZINC NICKEL PLATING	DOXSTEEL
Coatings Evaluation Salt Fog Test ASTM B117	Hours with less than 15% of Red Rust	1,500	1,500	1,000	3,000	5,000	1,500	25,000
Coatings Evaluations Salt & Acid Fog Test ASTM B368 (CASS)	Hours with less than 15% of Red Rust	60	40	40	125	100	200	1,300
Coatings Evaluations Cyclical Salt Fog Test ASTM G85	Hours with less than 15% of Red Rust	150	120	120	100	210	120	1,200
Coatings Evaluations Electrochemical Test ASTM G59	μ/year	5	50	50	1.9	1.8	7	0.16
Acid Immersion Test ASTM G31	grams	2.382	2.025	2.025	0.093	0.126	1.121	0.0037
FELT TEST in (CASS)	Maximum Hours to Seize	2,500	2,000	2,000	3,750	5,300	2,300	13,500
Corrosion Protection after Torque		No	No	No	No	No	No	Yes
Temperature Range of Coating	Fahrenheit (F)	-40 - 300	-10 - 390	-10 - 390	-50 - 150	-50 - 150	-10 - 390	-300 - 1300
Subsea Application API 20E	Compliance	No	No	No	No	No	No	Yes
BSEE & API 20E	Compliance	Toxic	No	No	No	No	Yes	Yes
K Factor	Consistent	Yes	No	Yes	No	No	Yes	Yes
Fit & Function ASME PCC1-1	Consistent	No	No	No	No	No	No	Yes
Packaging to Protect K Factor	Consistent	No	No	No	No	No	No	Yes