

COMMON SCREW MATERIALS

	O.D. Wear Resist.	Root Wear Resist.	Corrosion Resistance	Toughness	Ease of Machining	Weldability
Alloy Steel						
AISI 4140	Fair ¹	Fair ³	Poor ²	Good	Fair	Very Good
Nit. 135 M	Fair ¹	Fair ³	Poor ²	Good	Fair	Very Good
Stainless						
304	Poor	Poor	Very Good	Poor	Fair-Poor	Very Good
17-4PH	Poor ¹	Fair	Very Good	Good	Fair-Poor	Very Good
CPM-10V	Excellent	Excellent	Good	Fair	Fair	Poor – Fair
CPM-9V	Excellent	Excellent	Good	Very Good	Fair	Good
CPM M4	Excellent	Excellent	Good	Fair	Fair	Poor
D-2	Very Good	Very Good	Fair-Good	Fair	Fair	Fair
Lescowear	Excellent	Excellent	Fair-Good	Fair	Fair	Poor
C-17	Very Good	Very Good	Very Good	Very Good	Fair	Good
20CV	Very Good	Very Good	Very Good	Very Good	Fair	Good
S90V	Very Good	Very Good	Very Good	Very Good	Fair	Good
CPM3V	Very Good	Very Good	Good	Very Good	Fair	Good
Specialty Materials						
Duranickel 301	Poor-Fair	Poor-Fair	Excellent	Good	Very Poor	Good
Hastelloy C-276	Poor	Poor-Fair	Excellent	Fair-Good	Fair-Good	Good

1) Usually improved by hardsurfacing. 2) Usually improved by chrome plating. 3) Usually improved by ion nitriding.

COMMON BARREL MATERIALS

	Wear Resistance	Corrosive Resistance
Nitrided		
4140	Fair	Poor
NIT 135M	Fair	Poor
Tool Steels		
D2	Good	Good
PM M4	Excellent	Good
CPM 10V	Excellent	Good
Lescowear	Excellent	Good
20CV	Very Good	Very Good
Vanadis 23	Excellent	Good
S90V	Very Good	Very Good
Bimetallic		
Reiloy 121	Very Good	Very Good
Reiloy 215	Excellent	Very Good
Wexco 777	Excellent	Very Good
Wexco 666	Good	Good
Wexco 555	Fair	Very Good – No Inconel Protection
Wexco B022	Poor	Best (Fluoropolymers Only) w/Inconel Protection