

## Material: KS D 3592 SWRCH12K

### Standard Specification for Carbon Steel Wire Rods for Cold Heading and Cold Forging

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** KS D 3592 SWRCH12K Carbon Steel Wire Rods for Cold Heading and Cold Forging

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries

**Grade Belongs to the Industry:** Wire Rod and Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.100 - 0.150	As Raw or Normalizing or Annealing or Hardening and Tempering	
Silicon	Si %	0.100 - 0.350		
Manganese	Mn %	0.300 - 0.600		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Chromium	Cr %	0.200 max.		
Copper	Cu %	0.300 max.		
Nickel	Ni %	0.200 max.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	506 max.
-	-	-	Yield Strength in Mpa	-
-	-	-	Elongation in %	-
-	-	-	Reduction of Area in %	53 min.
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
SWRCH 12K	JIS	Japan	Wire Rod and Forging
SWCH 12K	JIS	Japan	Wire Rod and Forging
SWRCH12K	MS	Malaysia	Wire Rod and Forging
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