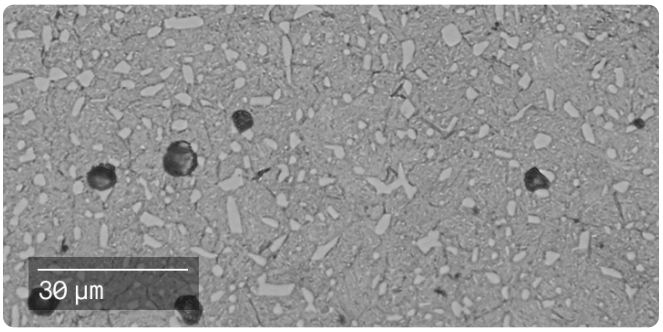
[Material Data Sheet]

D2
Corrosion Resistant Tool Steel



COMPOSITION %

Fe	Balance
Cr	11.00 – 13.00
C	1.40 – 1.60
Mo	0.70 – 1.20
V	0.00 – 1.10
Mn	0.00 – 0.60
Si	0.00 – 0.60
Ni	0.00 – 0.30
Cu	0.00 – 0.25
P	0.00 – 0.03
S	0.00 – 0.03

MECHANICAL PROPERTIES

	Standard	Studio System 2 [2] After quench and temper
Compressive Yield Strength - xy (MPa)	ASTM E9	1840
Young's Modulus - xy (GPa)	ASTM E9	205
Transverse Rupture Strength (GPa)	ASTM B528	3.1
Hardness (HRC)	ASTM E18	56.5
Density (g/cc)	ASTM B311	7.53

OTHER STANDARD DESIGNATIONS [1]

UNS T30402

AMTS A681

DIN 1.2379

ATTRIBUTES & APPLICATIONS

Excellent wear resistance, toughness coupled with corrosion resistance

Good flexibility through heat treatment

Conformally cooled cores and cavities

Tool components for press & sintering powder metallurgy (punches & dies)

Shear cutters

Stamping die tool members

1. Listed designations are for reference purposes only. Composition and mechanical properties may vary.
2. Heat treated samples were solutionized at 1025 °C for 30 minutes, air cooled, and then double tempered at 450 °C for 1 hour per temper.
End-use material performance is impacted (+/-) by certain factors including but not limited to part geometry and design, application and evaluation conditions, etc.
Hardness, TRS and density data reported are mean values minus 1 sigma.