

## Bearing Steels

## AMS 6490/6491 (M50)

Datasheet Updated  
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### SPECIFICATIONS

Commercial	M50
Aerospace	AMS 6490/6491

A bearing steel suitable for use within the missile and bearing industry.

### CHEMICAL COMPOSITION

#### AMS 6490/6491

Element	% Present
Carbon (C)	0.00 - 0.85
Manganese (Mn)	0.00 - 0.30
Silicon (Si)	0.00 - 0.20
Molybdenum (Mo)	0.00 - 4.25
Vanadium (V)	0.00 - 1.00
Chromium (Cr)	0.00 - 4.10
Iron (Fe)	Balance

### ALLOY DESIGNATIONS

- AMS 6490
- AMS 6491
- ASTM A600 (M 50)
- ASTM A600 (M50)
- DIN 1.3551

### SUPPLIED FORMS

- Bar
- Wire
- Forgings

### APPLICATIONS

- Aircraft engine bearings
- Helicopter rotor bearings
- Gas turbines (requiring hot hardness)
- High performance racing engines
- Tooling applications

### CHARACTERISTICS

- Exhibits excellent resistance to multi-axial stresses and softening at high service temperatures as well as good resistance to oxidation
- Characteristic of a high-speed tool steel, it possesses high compressive strength
- Due to the alloy's high degree of cleanliness, parts are capable of being finished to a high lustre
- Used in a wide variety of applications for components which require high wear resistance and strength at elevated temperatures

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