

## Bearing Steels

## AMS 6440/6444 (4340)

Datasheet Updated  
05 August 2021

### SPECIFICATIONS

Commercial	4340
Aerospace	AMS 6440/6444

Low alloy steel used in the aerospace and defence industries.

### CHEMICAL COMPOSITION

#### AMS 6440/6444

Element	% Present
Manganese (Mn)	0.00 - 0.75
Silicon (Si)	0.00 - 0.30
Molybdenum (Mo)	0.00 - 0.25
Nickel (Ni)	0.00 - 1.80
Carbon (C)	Balance
Chromium (Cr)	Balance
Iron (Fe)	Balance

### ALLOY DESIGNATIONS

- AMS 6414
- AMS 6415

### SUPPLIED FORMS

- Bar
- Wire
- Forgings
- Rod
- Plate

### APPLICATIONS

- Heavy machinery, specifically for the manufacturing of transmission parts, such as heavy-duty shafts, gears, and axles
- Ground vehicles and military aircraft
- Commercial aircraft industry (landing gear)
- Rocket motor cases
- Pressure vessels
- Fasteners

### CHARACTERISTICS

- Excellent tensile strength, toughness & fatigue resistance
- Additional heat treatments can produce parts with even high strength & fatigue resistance
- Wear-resistant material Good abrasion resistance, shock and impact resistance
- Excellent atmospheric corrosion resistance
- Very good ductility, especially in the annealed condition, where it can be easily formed and machined

### MECHANICAL PROPERTIES

Property	Value
Tensile Strength	1905 MPa
Elongation A50 mm	11 %

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