

# **Hot Rolled Sheet Steel**

#### **Description**

Produced at high temperatures; rough surface with mill scale.

Cost-effective for structural and industrial use.

### **Specs**

Common standards include ASTM A1011 (general use), ASTM A36 (structural), SAE J1392 (HSLA). Available in CS, SS, and HSLA grades.

# **Appearance**

Dark, scaly surface; not aesthetic. P&O (pickled and oiled) improves finish and corrosion resistance.

# **Applications**

Structural parts, automotive frames, machinery, agriculture equipment, general fabrication.

# **Thickness Range**

Approx. 0.060" to 0.500" (varies by supplier).

#### **Formability**

Good for bending and welding. Surface roughness may affect precision work.

# Weldability

Excellent weldability; surface scale may need removal.

#### **Paintability**

Requires cleaning or pickling to remove scale and allow adhesion.

#### **Protection**

Available as as-rolled (mill scale) base metal temporary corrosion protection or P&O (pickled and oiled).

#### **Pros**

Cost-effective, good strength, readily available in various sizes.

# Cons

Poor surface finish and dimensional accuracy compared to cold-rolled; may need additional processing for tight-tolerance or aesthetic applications.