

# Aluminum

- Lightweight metal about **one-third** the weight of steel which gives it a strength-to-weight ratio advantage over steels, making it ideal for **aerospace applications**



- Aluminum alloy 7178-T6 is heat-treatable and can develop strength as high as 88,000 psi
- It has excellent **forming** characteristics, meaning it can be bent, extruded, joined, or machined easily





- Aluminum is an excellent conductor of electricity and heat, and also possesses excellent corrosion resistance







- Metallurgists have developed numerous aluminum **alloys** for specialized applications and products:

-Aluminum-copper

-Aluminum-magnesium

-Aluminum-silicon

-Aluminum-manganese

-Aluminum-zinc

-Aluminum-silicon-magnesium

