Coal, gas and nuclear powerplants produce electricity by heating water to create steam. The steam is driven through turbine blades at very high pressure. The blades drive the turbine which generates electricity.

The typical operating temperature of the steam is around 600° C. The blades must be tough and resistant to stress, cracking and corrosion. The super-martensitic stainless steels used in these blades are perfect for use in this application.

**Location/environment** | WORLDWIDE/INDOOR
---|---
**Product** | STAINLESS STEEL BARS
**Fabrication process** | MACHINED FROM BARS OR FORGED AND MACHINED, DEPENDING ON SIZE
**Grade/surface** | SUPER- MARTENSITIC STAINLESS STEEL (FOR EXAMPLE, 0.2C, 13CR MO V)
**Material thickness/diameter** | 
**Weight** | 
**Competing material** | 
**Date of completion** | 
**Manufacturer** | ALSTOM SWITZERLAND SA
**Material supplier** | 
**Source of information** | ISSF LONG PRODUCTS COMMITTEE
**Remarks** |