Special Steel Bars and Tubes manufacturing process

**Melting/Refining/Casting**
- Ladle furnace refining
- RH vacuum degassing
- Continuous casting
- Ingot casting
- Ingot
- Bloom
- Large-diameter bar casting
- Billet casting
- Billet inspection
- Billet
- Bar and wire rod casting
- Hot extrusion

**Hot working**
- Large-diameter bar casting
- Billet casting
- Billet inspection
- Billet
- Bar and wire rod casting
- Hot extrusion

**Heat treatment**
- Heat treatment
- Heat treatment
- Heat treatment

**Cold working**
- Cold working

**Inspection**
- Inspection
- Inspection
- Inspection

**Products**
- Rolled bars
- Tubes
- Forged bars
- Flat square bars

**Special melting**
- Special melting further improves the cleanliness of steel and the homogeneity of steel quality.
- High-cleanliness materials created through atmosphere melting are used as base materials for 15t ESR and 5t VAR.

*The manufacturing process once ingots are created is the same as with special steel bars and tubes.*