



Application Data

Stainless Steel Tube Forming Rolls

Description

When producing stainless steel tubes from strips, so called cold welds might occur on the forming rolls. These cold welds on the forming rolls are damaging the surface of the stainless steel tubes.

Additionally working on a semi-circular forming roll in order to obtain a tube out of a flat stainless steel strip, the differences in tangential speeds along the surface of the tube induce sliding between forming roll and the stainless steel sheet.

Because of the cold welding effect and the difference in speed on the forming rolls, these rolls must be chosen out of a material with very good sliding characteristics in order to obtain an absolutely perfect surface on the stainless steel tubes.

Material

AMPCO® 25

Advantages

Advantages of Ampco 25:

- Extended life of the forming rolls
- Perfect stainless steel tubes end product obtained
- No hardening or expensive coatings on the forming rolls required



Ampco 25 rolls are also used in the same production lines at the tube welding station, when producing mild steel tubes also. The advantages of the Ampco 25 rolls at the welding station are coming from the non-magnetic properties of Ampco 25 which avoids severe heating up of the pressure rolls due to induction from the high-frequency welding loop used to seam weld the tube.

Advantages of Ampco 25 at the welding station:

- Non-magnetic properties of Ampco 25
- No severe heating, easier cooling of the rolls
- Perfect mild steel tube surface quality



This is the type of installation, where Ampco 25 forming rolls are used for the production of stainless steel tubes (above: welding station).