

Description:

Moly ferritic stainless steels are chromium stainless steels alloyed with Molybdenum, and can be stabilised with niobium and/or titanium. Annealed moly ferritics are ductile and can be formed using a large variety of roll forming or mild stretch bending operations as well as the more common drawing and bending operations. They do not harden excessively during cold working.

Chemical Composition:

| С | S | Р | Mn | Si | Cr | Mo | Nb |
|---------------|----------------|---------|---------------|---------------|-----------------|-----------|-----------------------|
| ≤ 0.08 | ≤ 0.015 | ≤ 0.040 | ≤ 1.00 | ≤ 1.00 | 16.00- 18.00 | 0.75-1.25 | 7(C+N)+0.1 ≤Nb≤0.8 |

Mechanical Properties

| Rm (MPa) | Rp0.2 (MPa) | A50 (%) | HRBW |
|--------------|--------------------|-----------|-------------|
| ≥ 450 | \geq 240 | \geq 22 | ≤ 89 |

Applications:

Automotive exhaust systems, trim, cladding and domestic appliances.

Corrosion Resistance

For the moly ferritic stainless steels, the corrosion resistance is a function of the chromium and molybdenum contents. In common with the other ferritic stainless steels, the moly ferritics are not susceptible to Stress Corrosion Cracking (SCC). Their pitting resistance is, however superior to 430 but not as good as 304. 434 and 436 thus have good resistance to rural and industrial atmospheres but in marine atmosphere environments, staining may occur, unless they are regularly washed.

Specifications:

It can be delivered according to EN, ASTM, ASME standard requirements.