

11 Cr-Cb

STAINLESS STEEL



AK Steel 11 Cr-Cb™ is a patented AK Steel ferritic stainless steel that has increased silicon levels and is dual stabilized with titanium and columbium. Designed for use in automotive exhaust tubing and other high-temperature applications, this is a more cost-effective alternative for many applications now using AK Steel 18 Cr-Cb and Type 439 stainless steels. This alloy also should be considered for applications in which Type 409 provides only marginal strength and oxidation resistance.

In addition to its high-temperature performance, AK Steel 11 Cr-Cb Stainless Steel provides good forming and welding characteristics. By nature of its lower chromium content, it is less wet-corrosion resistant than the higher chromium stainless steels (17 to 18%).

However, from the standpoint of creep and oxidation resistance, it is nearly equivalent to these more costly alternatives. Prospects for most automotive and truck hot-exhaust applications are excellent.

Oxidation resistance superior to Type 409 and comparable to AK Steel 18 Cr-Cb and Type 439 stainless steels makes AK Steel 11 Cr-Cb Stainless Steel a cost-effective material for automotive exhaust tubing and other high-temperature applications. Corrosion resistance of this material is essentially the same as Type 409.

With the superior oxidation resistance and equivalent corrosion resistance to Type 409, this alloy appears to be a natural material for upgrading from Type 409 in hotter exhaust applications such as pipes and converter shells.

TYPICAL COMPOSITION

	%
Carbon	0.010
Manganese	0.25
Silicon	1.30
Chromium	11.35
Nickel	0.20
Titanium	0.20
Nitrogen	0.015
Columbium	0.35
Iron	Balance

AVAILABLE FORMS

AK Steel produces 11 Cr-Cb Stainless Steel in coils and cut lengths in thicknesses from 0.030" to 0.100" (0.762 to 2.54 mm) and widths up to and including 48" (1219 mm). For other thicknesses, inquire.

