



800-722-5029  
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# 18SR Stainless Steel

## DESCRIPTION

Type 18 SR Stainless Steel provides excellent resistance to high-temperature scaling. 18SR is readily welded by conventional methods. It is not subject to embrittlement or loss of corrosion resistance in the heat-affected zones that affects many other straight chromium alloys. This alloy is especially valuable for applications requiring high-temperature scaling resistance superior to Types 409, 430 and 304 stainless steels and for those applications where Types 442 and 446 give only marginal protection.

## PRODUCT FORMS

Sheet, Strip

## SPECIFICATIONS

ASTM A 167 and ASTM A240

## TYPICAL APPLICATIONS

Industrial ovens, blowers, exhaust systems, furnace equipment, heaters, induction furnaces and furnace tubes, annealing boxes, baffle plates, heat exchangers, resistor grids, kiln liners and pyrometer tubes.

## CORROSION

18 SR Stainless Steel provides corrosion resistance comparable to other ferritic 18% Cr stainless alloys and approaches Type 304 in many aqueous media.



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## CHEMICAL COMPOSITION: (TYPICAL)

<b>Element</b>	<b>Type 18SR</b>
Carbon	0.015 max.
Manganese	0.30 max.
Chromium	17.30
Nickel	0.25
Titanium	0.25
Aluminum	1.7

## MECHANICAL PROPERTIES: (TYPICAL)

<b>Type</b>	<b>Yield Strength 0.2% offset (KSI)</b>	<b>Tensile Strength (KSI)</b>	<b>% Elongation (2" Gauge Length)</b>
18SR	56 min.	78 min	30 min.