



## STAINLESS STEEL SA-351 CF8

CF8 is the cast equivalent of Type 304 Stainless Steel, part of a range of austenitic chromium-nickel alloys that provide good strength and ductility. They are also known as 18/8 stainless due to their chemical composition which includes approximately 18% chromium and 8% nickel by weight.

CF8 has good cavitation resistance, which is important for hydroturbines and pump impellers, and is used primarily for water handling. CF8 also provides resistance to strongly oxidising environments and corrosive media applications such as hydrocarbons, liquid oxygen, organic liquids, nitric acid, sodium carbonate, etc. Applications include architectural trim, valves and fittings, flanges, heating coils, mixing agitators and propellers, pumps, spray nozzles, etc.

### Chemical Composition

Element		%
Carbon	C	0.08 maximum
Silicon	Si	2.0 maximum
Manganese	Mn	1.5 maximum
Phosphorus	P	0.04 maximum
Sulphur	S	0.04 maximum
Chromium	Cr	18 - 21
Nickel	Ni	8 - 11
Molybdenum	Mo	0.50

### Heat Treatment

CF8 cannot be hardened by heat treatment.

Typical Mechanical Properties	
Tensile Strength	485 MPa min.
Yield Strength	205 MPa min.
Elongation (in 50mm)	35 % min.

### Comparative Specifications

Material	Country/Standards
A351 CF8	USA/ASTM
A743 CF8	USA/ASTM
A744 CF8	USA/ASTM
J92600	USA / UNS
304	AISI
60304	SAE
SCS 16A	Japan / JIS
1.4409	European Union / EN
GB/T2100 ZG0Cr18Ni9Ti	China

**To discuss your requirements, call a member of NovaCast's team on +44 (0) 1225 707466, or email [sales@novacast.co.uk](mailto:sales@novacast.co.uk)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy options rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.

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