

## 317LMN

317LMN (UNS S31726) is a nitrogen alloyed austenitic stainless steel with a high Molybdenum content. Because of its higher molybdenum content, this steel has a higher resistance to corrosion in chloride containing environments than standard grade 316L. Nitrogen additions and low silicon content have a stabilizing effect on the austenitic structure and reduce the precipitation of intermetallic phases during welding. Nitrogen addition also increases the yield strength compared to 317L.

### Chemical Composition, %

element	Cr	Ni	Fe	Mo	N	C	Mn	Si	P	S
min.	17.00	13.50	bal.	4.00	0.10	0.030	2.00	1.00	0.045	0.030
max.	20.00	17.50		5.00	0.20					

Chemical Composition according to ASTM. Some compositional limits of other specifications may vary slightly.

### Designation and standards

National Standards	Material designation	Chemical composition	Forgings	Rod and bar	Plate and sheet	Strip	Seamless tube
ASTM ASME	UNS S31726 317LMN	A959 SA959	A182 SA182	A276 SA276 A479 SA479	A240 SA240	A240 SA240	A213 SA213 A249 SA249 A312 SA312
DIN	1.4439 X2CrNiMoN17-13-5	DIN 10088-1	DIN 10222-5	DIN 10088-3 DIN 10272	DIN 10088-2	DIN 10088-2	DIN 10297-2 DIN 10216-5
GB/T	022Cr19Ni16Mo5N 00Cr19Ni16Mo5N S31723	GB/T 20878			GB/T 3280 GB/T 4237	GB/T 3280 GB/T 4237	

**Density** 7.90g/cm<sup>3</sup>

### Corrosion resistance

- excellent resistance to chloride pitting and crevice corrosion
- corrosion resistance slightly below 904L, but better than 316L and 317L
- good resistance to diluted sulfuric or hydrochloric acid solutions at moderate temperature

### Applications

Typical applications are:

- flue gas desulfurization equipment
- chemical and pharmaceutical industries
- petrochemical industry