Alleima® 3R19
Tube and pipe, seamless
Datasheet

Alleima® 3R19 is an austenitic stainless steel with low carbon content alloyed with nitrogen.

Standards

- ASTM: TP304LN
- UNS: S30453
- EN Number: 1.4311
- W.Nr.: 1.4311*
- DIN: X 2 CrNiN 18 10*
- SS: 2371*
- AFNOR: Z2CN18-10Az*

* Obsolete. Replaced by EN.

Chemical composition (nominal)

Chemical composition (nominal) %

C	Si	Mn	P	S	Cr	Ni
≤0.030	0.4	1.3	≤0.040	≤0.030	18.5	9

Others
N=0.14

Mechanical properties

Metric units, at 20°C

Proof strength	Tensile strength	Elong.
$R_{p0.2}$ [a)]	R_m	A [b)]
MPa	MPa	%
≥270	550-750	≥35

1 MPa = 1 N/mm²
a) $R_{p0.2}$ and $R_{p1.0}$ correspond to 0.2% offset and 1.0% offset yield strength, respectively.
b) Based on $L_0 = 5.65 \sqrt{S_0}$ where L_0 is the original gauge length and S_0 the original cross-section.

Imperial units, at 68°F

Proof strength	Tensile strength	Elong.
$R_{p0.2}$ [a)]	R_m	A [b)]
ksi	**ksi**	**%**
≥39	≥80-109	≥35

a) Rp0.2and Rp1.0correspond to 0.2% offset and 1.0% offset yield strength, respectively.
b) Based on L0 = 5.65 √S0 where L0 is the original gauge length and S0 the original cross-section.

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