Alleima® 253 MA
Billets
Datasheet

Alleima® 253 MA* is an austenitic chromium-nickel steel alloyed with nitrogen and rare earth metals. The grade is characterized by:

- High creep strength
- Very good resistance to isothermal and, above all, cyclic oxidation
- Very good resistance to combustion gases
- Good structural stability at high temperatures
- Good weldability
- The grade can be used at temperatures up to about 1150°C (2100°F)

Standards

- ASTM: F45
- UNS: S30815
- EN Number: 1.4835

Product standards

Suitable for the production of flanges etc. according to ASTM A182 grade F45.

Certificates

Status according to EN 10 204 3.1

Chemical composition (nominal)

Chemical composition (nominal) %

C	Si	Mn	P	S	Cr	Ni
0.08	1.6	0.6	≤0.040	≤0.030	21	11

Others: N=0.17 Ce=0.05*
* To cerium should be added the quantity of other rare earth metals, since the the additive takes the form of misch metal containing about 50% Ce.

Forms of supply

Datasheet last updated 5/9/2025 6:38:03 AM (supersedes all previous editions)

Sizes and tolerances

Round-cornered square, as well as round billets, are produced in a wide range of sizes according to the following tables. Larger sizes offered on request.

Surface conditions

Square billets

Unground, spot ground or fully ground condition.

Round billets

Peel turned or black condition.

Square billets

Size	Tolerance	Length
mm	**mm**	**m**
80	+/-2	4 - 6.3
100, 114, 126, 140, 150	+/-3	4 - 6.3
160, 180, 195, 200	+/-4	4 - 6.3
>200 - 350	+/-5	3 - 5.3

Sizes and tolerances apply to the rolled/forged condition.

Peel turned round billets

Size	Tolerance	Length
mm	**mm**	**m**
75 - 200 (5 mm interval)	+/-1	max 10
>200 - 450	+/-3	3 - 8

Unground round billets

Size	Tolerance	Length
mm	**mm**	**m**
77 - 112 (5 mm interval)	+/-2	max 10
124, 134	+/-2	max 10
127, 147, 157	+/-2	max 10
142, 152, 163	+/-2	max 10
168, 178, 188	+/-2	max 10
183, 193	+/-2	max 10

Other products

- Seamless tube and pipe

* 253 MA is a trademark owned by Outokumpu OY.

- Hollow bars

Datasheet last updated 5/9/2025 6:38:03 AM (supersedes all previous editions)