Datasheet last updated 2025-05-09 06:38:03 (supersedes all previous editions)



Alleima® 12C27 Billets Datasheet

Alleima 12C27 is a martensitic stainless chromium steel.

After heat treatment the composition of carbon and chromium gives a unique combination of properties including:

- Very high hardness
- Good corrosion resistance
- Very high wear resistance

Standards

ASTM: 420

UNS: S42000

Certificates

Status according to EN 10 204 3.1

Chemical composition (nominal)

Chemical composition (nominal) %

С	Si	Mn	Р	S	Cr
0.60	0.4	0.4	≤0.025	≤0.010	13.5

Forms of supply

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.

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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

Hollow bar

Disclaimer:

Recommendations are for guidance only, and the suitability of a material for a specific application can be confirmed only when we know the actual service conditions. Continuous development may necessitate changes in technical data without notice. This datasheet is only valid for Alleima materials.

