

➤ Special Bar Quality steels



Stomana Industry S.A. specializes in the production of engineering steel (Special Bar Quality steels – SBQs) and has been actively producing SBQs for more than two decades.

SBQs are produced and delivered as “hot rolled round bars” in diameters from 22mm to 120mm and “bright round bars” (peeled and polished round bars) in diameters from 32mm to 115mm.

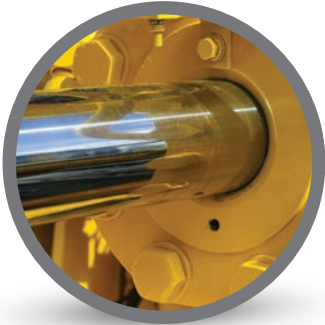
The production range includes a wide range of steel grades according to the European norms: structural, for quenching and tempering (Q&T), for flame and structural induction hardening steels, case hardening, micro-alloyed and free-cutting. Additionally, Stomana offers optional to its customers tailored made steel grade production to meet their special needs and/or specifications.

The expanding customers list of Stomana includes major steel distributors, service centers and manufacturing companies in the hydraulic components, forging, automotive, heavy vehicles and earth moving machines, cranes and other engineering steel sectors. Stomana’s SBQ steels are supplied to most European countries like Germany, Italy, France, Romania, Austria, Poland, and others as well as Turkey, North Africa and South America.



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> Applications



Hydraulic components



Agricultural machining



Cranes, forklifts & earth moving machines



Machine building



Forging industry



Roads & rail



Automotive



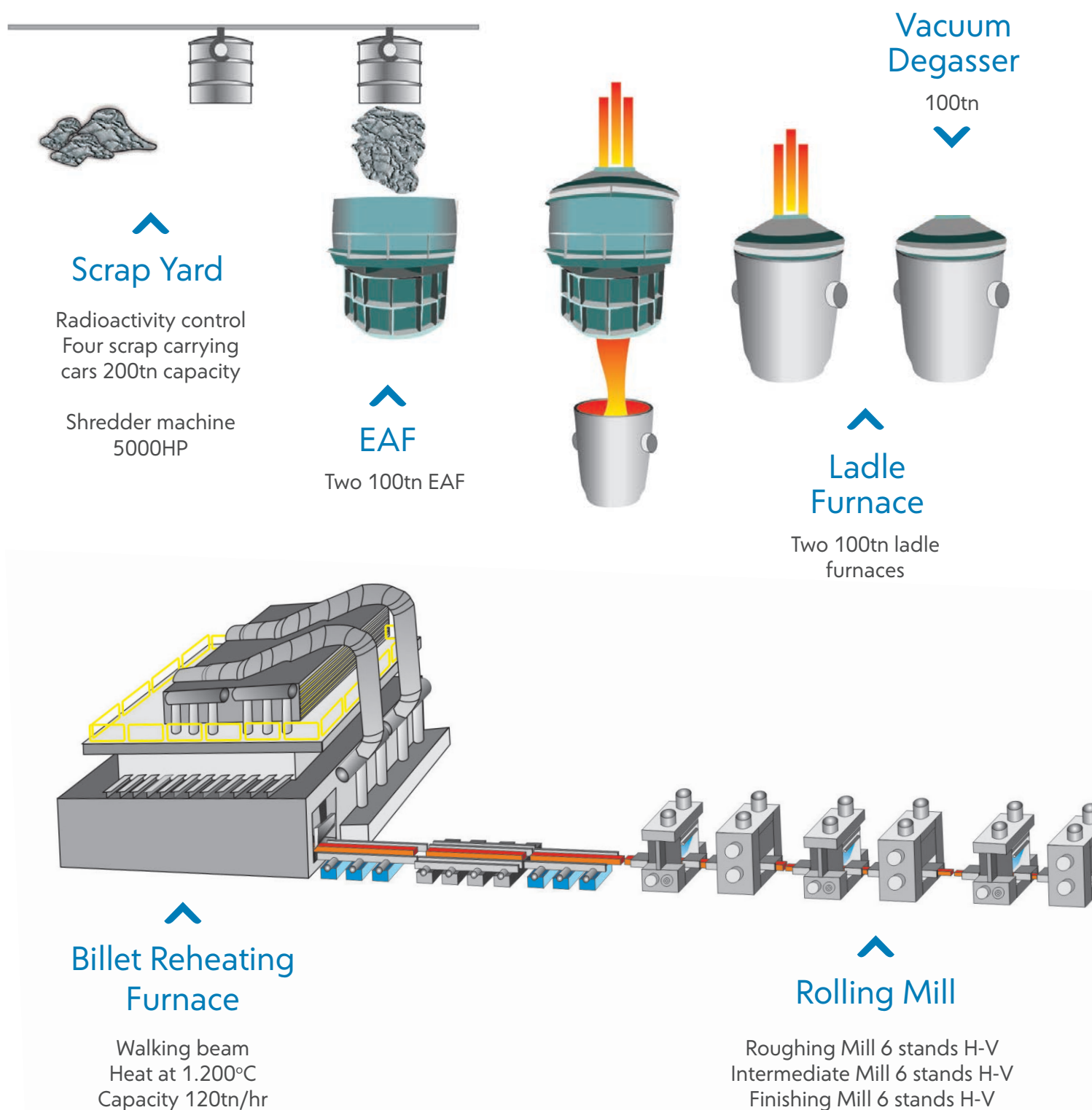
Engineering and industrial applications



Transportation

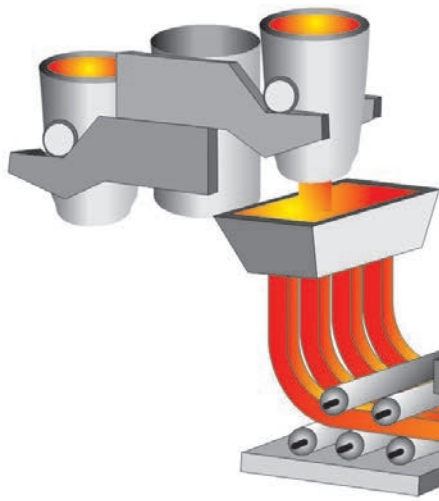


> Production process



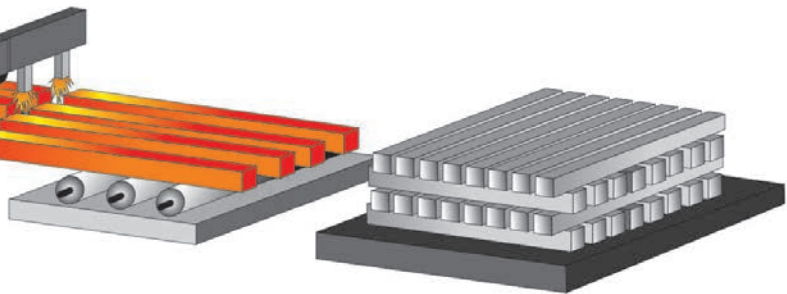
Continuous Caster

One 4-strand continuous casting machine for billets and blooms from 160x160 up to 250x300

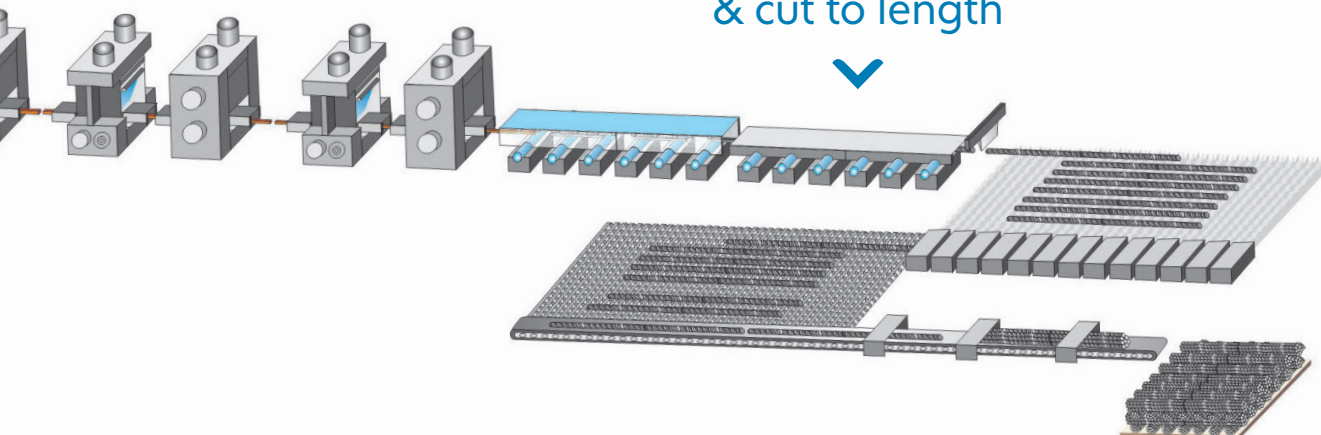


Billet Conditioning

Billet grinding
Surface and edges
Capacity 12tn/hr



Cooling Beds & cut to length

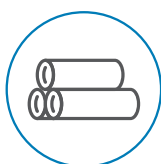


To finishing lines

Inspection lines
Peeling lines
Quenching and tempering lines

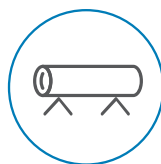


➤ Hot rolled round bars



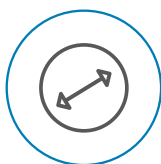
Product:

Hot Rolled Round Bars
according to EN 10060



Straightness:

1. Straightness according to EN 10060
2. Maximum deviation from straightness 2.5mm/m



Diameters:

Standard sizes in mm
D22, D24, D25, D26, D27, D28,
D30, D32, D35, D36, D37, D38,
D40, D42, D43, D45, D47, D48,
D50, D52, D53, D55, D58, D60,
D62, D63, D65, D66, D68, D70,
D73, D75, D78, D80, D83, D85,
D90, D93, D95, D100, D103,
D105, D110, D115, D120

Non standard sizes:
Upon request and after mill's
confirmation with a minimum
order 80tn per size and grade



Length:

1. Standard length 6.00m
2. Non standard lengths in the range of 5.00m-7.20m
3. Non standard lengths in the range of 10.00m-12.00m for size range 22-83mm
4. Acceptable non standard lengths: X.XX0m
5. Non standard lengths upon agreement and with minimum order of 40tn per size and grade
6. Standard length tolerances: -0/+100mm, -0/+200mm



Packing:

In bundles of 2.0-2.5 tn/bundle
Smaller bundles available on stock
Bundles tied with 3 steel wires for unloading with hook crane



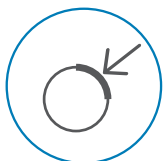
Labelling:

Two tags per bundle with the following information:
Bundle ID:
Order confirmation number:
Grade/Size/Length:
Heat N°:
N° of bars number:
Quality:
Batch number:
Weight in kg:
Date:
Time:



Marking:

Colour marking



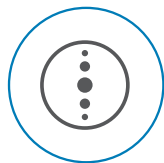
Surface quality:

1. Class A, according to EN 10221
Maximum defect depth: 2% of bar size
2. Class B on request (for sizes 40mm-120mm and max length 7.20m), according to EN 10221
Maximum defect depth: 1% of bar size
3. Eddy current on request



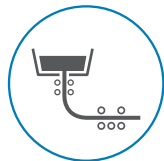
Ultrasonic test:

On request.
According to: EN 10308



Other properties:

Grain size: 5-10 according to ASTM 112



Manufacturing method:

EAF-LF-CC with EMS and Air Mist-RM
Vacuum Degasser treatment depending on the steel grade



Certificate of quality:

1. Mill's inspection certificate according to EN 10204/3.1
2. Certificate according to EN 10204/3.2 upon request

Customer order information included in the inspection certificate

1. Stomana order number
2. Dispatch wagon/truck number
3. Customer name
4. Customer order reference

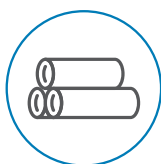
Per grade/size/heat number the following information is also provided

5. Heat/Cast N°
6. Grade
7. Length/Size
8. Number of bundles, Number of bars, Weight
9. Radioactivity free material declaration
10. CE mark for grades according to EN 10025:2004 (S235JR, S275JR, S355J2, S355JR)



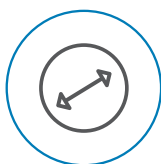


➤ Bright steel round bars (peeled and polished)



Product:

Bright Steel Bars
according to EN 10278



Diameters:

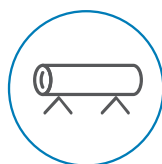
Standard diameters in mm
D32, D35, D40, D45, D50, D55,
D60, D65, D70, D75, D80, D85,
D90, D95, D100, D105, D110,
D115

In between sizes (including
sizes with decimals) possible on
request



Tolerances:

h9, according to EN 10278



Straightness:

Maximum deviation from
straightness: 0.5mm/m
Peeled straightness method is
according to EN 10278 (B.2)

*(The straightness is defined
as half of the max. indication
of the 'clock' in a 360 deg.
The round is suspended on 2
points, left and right from the
measuring point and at 1 meter
distance in between)*



Length:

6.000 -0/+100mm
3.000 -0/+100mm
3.000 -0/+50mm

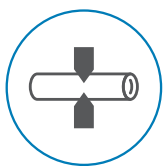


Packing:

In bundles of 0.7-1.5 tn/bundle
 In bundles of 0.5-1.1 tn/bundle
 Smaller bundles available on stock
 Bundles tied with 4 straps, carton between strap-bar, and 2 belts for unloading with hook crane

Optional upon request:

1. Nylon cover (transparent)
2. Plastic-paper cover for humidity protection (opaque)



Bar ends:

Optional upon request:

1. No chamfering - saw cutting
2. 45 deg chamfering (one or both ends)



Labelling:

Two tags per bundle with the following information:

Bundle ID:

Order confirmation number:

Grade/Size/Length:

Heat N°:

N° of bars number:

Quality:

Batch number:

Weigth in kg:

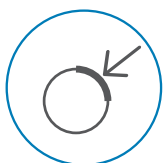
Date:

Time:



Marking:

Colour marking



Surface quality:

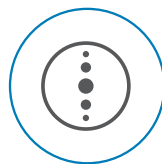
According to EN 10277-1, Class 3



Ultrasonic test:

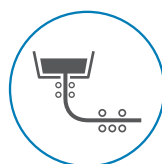
On request.

According to: EN 10308



Other properties:

Grain size: 5-10 according to ASTM 112



Manufacturing method:

EAF-LF-(VD)-CC with EMS - Air Mist-RM-Cold Finishing (PEELING) Vacuum Degasser treatment depending on the steel grade



Certificate of quality:

1. Mill's inspection certificate according to EN 10204/3.1
2. Certificate according to EN 10204/3.2 upon request

Customer order information included in the inspection certificate

1. Stomana order number
2. Dispatch wagon/truck number
3. Customer name
4. Customer order reference

Per grade/size/heat number the following information is also provided

5. Heat/Cast N°
6. Grade
7. Length/Size
8. Number of bundles, Number of bars, Weight
9. Radioactivity free material declaration



➤ Special Bar Quality steel grades

S355J2

- CS (*) based on EN 10025-2 (Mat.Nº 1.0577)

S235JR

- CS (*) based on EN 10025-2 (Mat.Nº 1.0038)

C35E /C40E

- CS (*) based on EN ISO 683-1 (C35E: Mat.Nº 1.1181) / (C40E: Mat. Nº 1.1186)

C45E /R

- CS (*) based on EN ISO 683-1 (C45E: Mat. Nº 1.1191) / (C45R: Mat. Nº 1.1201)

Cf53

- CS (*) based on DIN 17212 (Mat. Nº 1.1213)

C50E /C60E

- CS (*) based on EN ISO 683-1 (C50E: Mat. Nº 1.1206) / (C60E: Mat. Nº 1.1221)

16(20)MnCr5

- CS (*) based on EN ISO 683-3 (16: Mat.Nº 1.7131) / (20: Mat.Nº 1.7147)

16(20)MnCr(S)5

- CS (*) based on EN ISO 683-3 (16: Mat. Nº 1.7139) / (20: Mat. Nº 1.7149)

20MnCrS5+HH

- CS (*) based on EN ISO 683-3 (Mat. Nº 1.7149+HH)

11SMn30

- CS (*) based on EN ISO 683-4 (Mat. Nº 1.0715)

20MnV6

- CS (*)

38MnVS6

- CS (*) based on EN 10267 (Mat. Nº 1.1303)

27MnCrB5-2

- CS (*) based on EN ISO 683-2 (Mat. Nº 1.7182)

33MnCrB5-2

- CS (*) based on EN ISO 683-2 (Mat. Nº 1.7185)

41Cr4

- CS (*) based on EN ISO 683-2 (Mat. Nº 1.7035)

42CrMoS4

- CS (*) based on EN ISO 683-2 (Mat.Nº 1.7227)

42CrMoS4+QT

- CS (*) based on EN ISO 683-2 (Mat.Nº 1.7227)

34CrNiMo6

- CS (*) based on EN ISO 683-2 (Mat.Nº 1.6582)

20NiCrMo2-2

- CS (*) based on EN ISO 683-3 (Mat.Nº 1.6523)

(*) CS: Stomana Specification





Sidenor S.A.

33, Amaroussiou-Halandriou str.,
GR-15125 Maroussi, Athens, Greece
Tel.: +30 210 6787111, Fax: +30 210 6787740
e-mail: info@sidenor.vionet.gr, www.sidenor.gr



Stomana Industry S.A.

1, Vladaisko Vastanie str.,
BG-2304, Pernik, Bulgaria
Tel: +359 76 681 013, Fax: +359 76 681 951
e-mail: export@stomana.bg, www.stomana.bg