

Supporting presentation for
lecturers of Architecture/Civil
Engineering

Chapter 10

Forms and availability

Why « Forms and Availability » ?

- Delivery times and costs are major issues for architects & civil engineers
- While all stainless steel products start from a melting shop
 - There are many processing routes for stainless products
 - And stockholders, traders providing service packages
- And therefore Delivery times and Costs may vary widely

Some background information

How stainless steel is produced

- [Video](#): Steelmaking and Hot Rolling of coils
- [Video](#): Hot Rolling of coils
- [Video](#): Cold rolling of coils
- [Video](#): Steelmaking and hot rolling of bars
- [Video](#): Wire rod rolling
- [Video](#): Wire rod rolling

Stainless Steel Supply Chain

SIMPLIFIED



Products

Coils, Sheets, Plates
Bars, Wire
Reinforcing bar

Service

Minimum weight 1 slab
Production on order
Lead time 2 – 3weeks
Lowest price /Kg

Customized:
Cut to length
Cut to shape
Polishing ...
Small orders
Available from stock
Short delivery times (1-3 days)
Price premium for service



Products

Fasteners
Tubes
Valves
Fittings

Service

Available from stock
Short delivery times (1-3 days)
Price premium for service

Flat products

Ex-mill

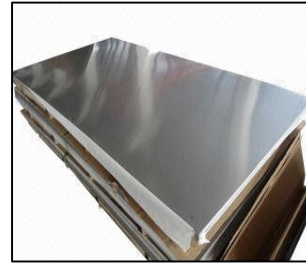
Cold-rolled coil



Cold-rolled strip



Cold-Rolled polished sheet

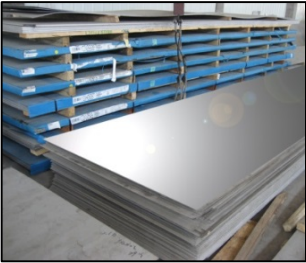


Custom

Laser cut shape



Plates



I-beam from plate



Door & Window profiles



Clamps



Standard tubes



Profiled tubes



Tube fittings



Railings



Long Products

Ex-mill

Bars



Reinforcing Bar

Tie-bars



Cables

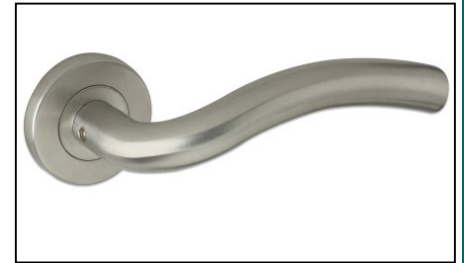
Threaded bars



Concrete Anchors

Custom

Handles



Sunbreaker



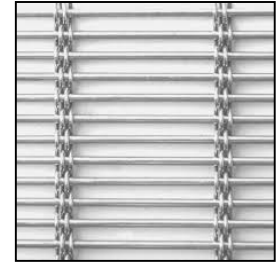
Wire Rod



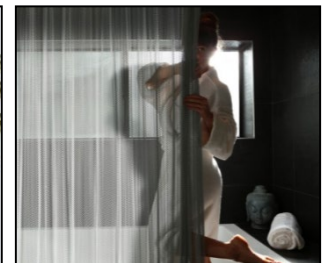
Mesh



Fasteners



Mesh shower curtain



Future trends

The urgency of climate change mitigation and of a sustainable economy will drive major changes in the years to come.

A new product offer is likely to appear:

- re-conditioned products. Stainless steel from buildings/facilities being de-constructed could be re-processed and made available for a new service life without loss of properties.
- Higher strength and thinner products, able to offer the same service performance with less material use. The development of lean duplex grades and of cold-worked austenitic grades is already taking place.

References

Major stainless steel producers

<https://www.worldstainless.org/about-issf/issf-members/>

Thank you

Test your knowledge of stainless steel here:

<https://www.surveymonkey.com/r/3BVK2X6>