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**: Cold rolling of coils
- **Video**: Steelmaking and hot rolling of bars
- **Video**: Wire rod rolling
- **Video**: Wire rod rolling
Stainless Steel Supply Chain

Stainless Steel Mill
- Ex-mill sales
  - Coils, Sheets, Plates
  - Bars, Wire
  - Reinforcing bar

Distributors (of which mill-owned)
- Customized:
  - Cut to length
  - Cut to shape
  - Polishing...

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

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

Fabricators
- Specific finishes (such as color)

Stainless Steel Mill
- Standard Component Manufacturing

Distributors (of which mill-owned)
- 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
- Plates
- I-beam from plate
- Door & Window profiles
- Standard tubes
- Profiled tubes
- Tube fittings

**Custom**
- Laser cut shape
- Clamps
- Railings
Long Products

Ex-mill
Bars
Reinforcing Bar
Wire Rod

Tie-bars
Cables

Threaded bars
Concrete Anchors
Fasteners

Custom
Handles
Sunbreaker
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

Thank you