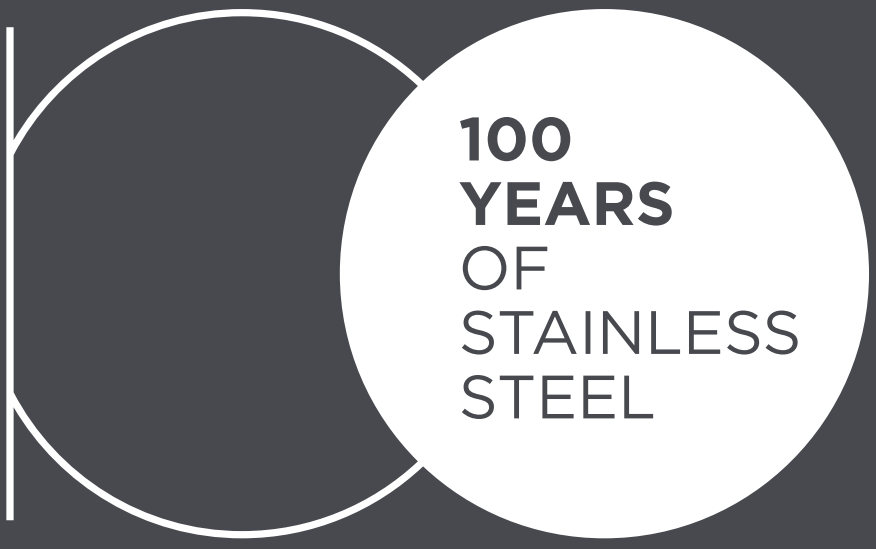


WELCOME
TO THE 100 YEARS OF STAINLESS STEEL EXHIBITION

1751 to 1797

Axel Fredrik Cronsted discovers nickel (1751), **Karl Wilhelm Scheele** discovers molybdenum (1778), and **Nicolas-Louis Vauquelin** discovers chromium (1797).

1871

John T. Woods and **John Clark** recognise the commercial value of corrosion-resistant chromium alloys and obtain a British patent for a 'Weather Resistant' alloy.

1910 to 1911

Philipp Monnartz and **Wilhelm Borchers** discover the correlation between chromium content and corrosion resistance. **Monnartz** is the first to note that there is a significant boost in corrosion resistance when the steel included at least 10.5% chromium and a controlled amount of carbon.

1911 to 1914

Frederick M Becket and **Christian Dantsizen** discover a number of ferritic chromium stainless steels.

1912

While working for Krupp, **Eduard Maurer** and **Benno Strauss** are granted patents on two chromium-nickel stainless steels. The first alloy is a martensitic grade, while the second is an austenitic grade.

1913

Harry Brearley discovers martensitic chromium stainless steel while seeking a corrosion-resistant alloy for gun barrels. He casts the first commercial martensitic chromium stainless steel. Brearley obtained Canadian, French and US patents in 1915.

1930

Duplex stainless steel is produced for the first time at the **Avesta Ironworks** in Sweden. The microstructure of the alloy consists of both ferrite and austenite.

1949

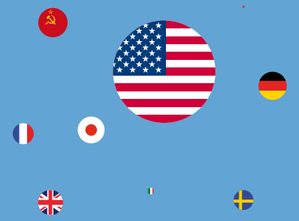
British Stainless Steel Fabricators' Association is formed. It is the world's first stainless steel development association (SSDA). In the 1950s, SSDAs were founded in Germany (1958) and Japan (1959).

GROWTH IN PRODUCTION VOLUME

Total production for

1960

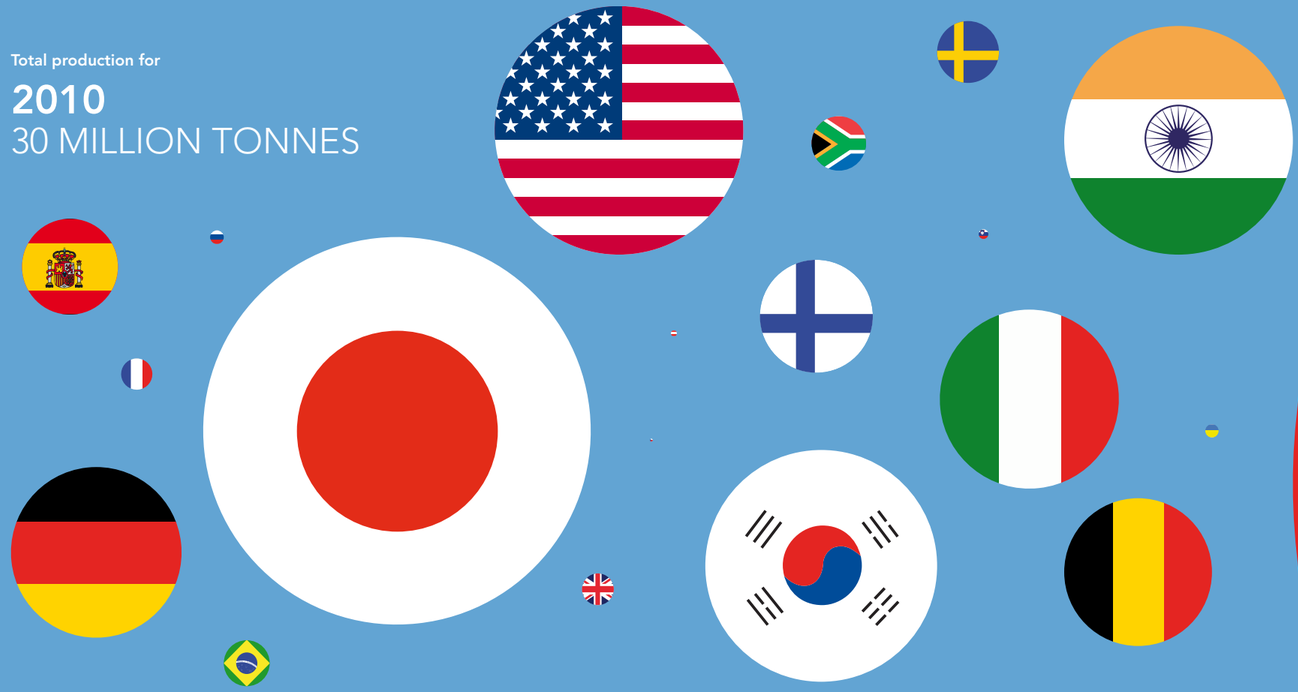
2.3 MILLION TONNES



Total production for

2010

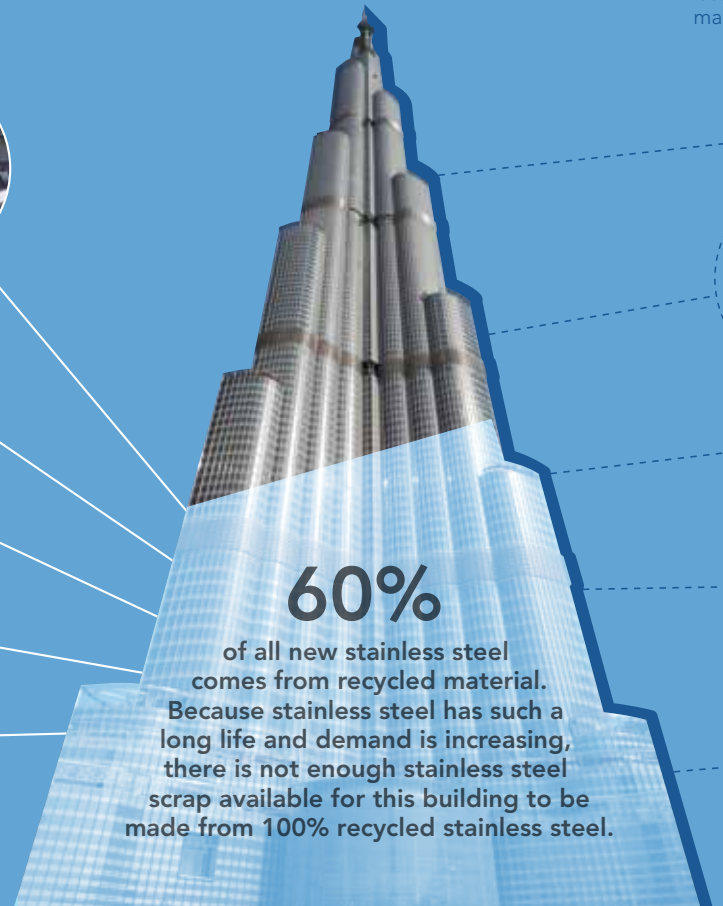
30 MILLION TONNES



YESTERDAY

All stainless steel applications can be recycled at the end of their life to make new stainless steel.

TODAY



60%

of all new stainless steel comes from recycled material. Because stainless steel has such a long life and demand is increasing, there is not enough stainless steel scrap available for this building to be made from 100% recycled stainless steel.

TOMORROW

By the time the building is recycled, 100% of the stainless steel it contains will be made into things that we can only imagine!

- Satellites, Spacecraft ?
- Medical applications ?
- The sky is the limit !
- Desalination plant ?
- Solar power plant ?

Stainless steel
is already part
of your daily life.