

## Secco Sistemi

### Stainless Steel



#### THE MATERIAL

Stainless steel is an iron alloy containing chromium, nickel and molybdenum, discovered in 1913 by the Englishman Harry Brearly and has the property of not rusting when exposed to the atmosphere. By varying the quantity of the alloying elements over 100 different types of stainless steel can be manufactured, each one offering different mechanical properties and corrosion resistance whereby all the production requirements of our industrial society can be satisfied. In addition to the structural properties it offers, stainless steel can also be given various types of polished or matt surface finishes to create the most suitable aesthetic effect for every type of environment; these properties have put stainless steel in the limelight of modern architecture.

#### THE ADVANTAGES OF STAINLESS STEEL

- Very high structural resistance, resolves any design requirements, modulus of elasticity 3 times higher than that of aluminium and absolute maintenance of shape over the years
- Thermal conductivity 4 times less than aluminium: steel 55 w/mk - aluminium 220 w/mk
- Reduced coefficient of expansion, close to that of concrete and twice less than that of aluminium
- High aesthetic value in terms of elegance and slenderness
- Wide choice of finishes for a current added value to buildings of all ages
- High resistance to corrosion and aggressive environments
- Maximum hygiene and easy to clean
- Natural and essentially ecological material, 100% recyclable without limit

#### TRANSFORMATION PROCESS

The billet produced by forging is cold rolled into coils of the required gauge and the surface is controlled. To guarantee the quality, uniformity and consistency of the finish, the strips are industrially pre-treated to obtain satin, Scotch-Brite or polished surface finishes. This is followed by cold forming of the material with the continuous application of an adhesive film to protect the finish.