

kg Cold rolled stainless steel

Steel is a ferrous metal and is an alloy of iron and carbon, as well as potential other elements. It has a very high tensile strength. Steel has been used in the construction industry for over a century. Stainless steel is extremely resistant to corrosion.

The core material for making steel is iron, which is found in iron ore. Iron is extracted from iron ore in blast furnaces through the smelting process, while controlling for the content of carbon. To render the steel stainless, chromium is needed and is typically added as stainless steel scraps. The molten steel is usually further processed before being cast for its final use. Cold rolled steel is cooled at room temperature and then annealed or tempered.

Steel is commonly used in the construction industry, mainly as a structural material. Cold rolled stainless steel is used to produce a range of high-precision corrosion resistant materials.

- Category** Metals
- Type** Stainless steel
- Functional unit** kg
- Specific heat** 456 J/(kg·K)
- Density** 7 740 kg/m³

Common uses
Exterior cladding, handrails, counter tops, interior surfaces

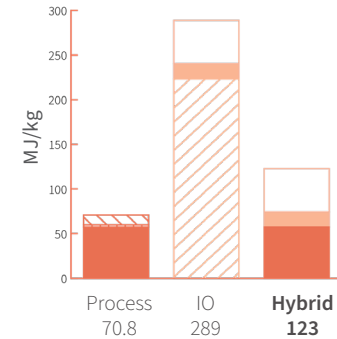
Process name
Stainless steel, cold rolled (custom)

Input-output sector
Iron and Steel Manufacturing

Further information
doi.org/10.26188/5dd09ea396b11

TOP THREE INPUTS

- 40.2%** Steel, converter, chromium steel 18/8, at plant/RER U/AusSD U
- 6.5%** Sheet rolling, chromium steel/RER U/AusSD U
- 6.0%** Road Transport

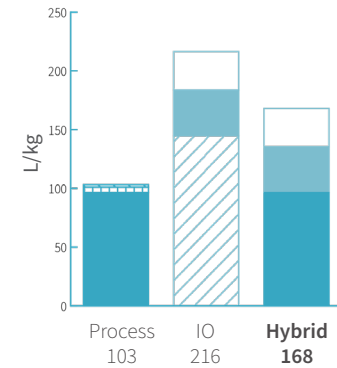


ENERGY



TOP THREE INPUTS

- 34.3%** Sheet rolling, chromium steel/RER U/AusSD U
- 23.0%** Steel, converter, chromium steel 18/8, at plant/RER U/AusSD U
- 2.9%** Coal mining

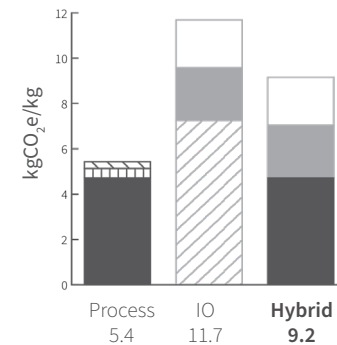


WATER



TOP THREE INPUTS

- 44.0%** Steel, converter, chromium steel 18/8, at plant/RER U/AusSD U
- 7.6%** Coal mining
- 7.6%** Sheet rolling, chromium steel/RER U/AusSD U



GREENHOUSE GAS EMISSIONS

