316L-SCQ

316L-SCQ is an austenitic stainless steel designed for where extremely good surface finishes are required.

316L-SCQ is a **specially processed derivative of 316L aimed at restricting the amount of residual elements to reduce inclusion content within the final microstructure,** thus improving the overall micro-cleanliness. 316L-SCQ offers improved electropolishing characteristics over 316L with similar corrosion resistance, machinability, and weldability performance. This type of steel is often used in industries where corrosion resistance is a critical factor, such as in the manufacturing of medical devices, pharmaceutical equipment, and in marine environments.

Similar alloys: 304L, 316L, 316LN, BioDur® 316L (Medical applications), BioDur® 734 (Medical applications)

KEY FEATURES OF 316L-SCQ

- **Improved micro-cleanliness**: Achieved through careful selection of melt stock to restrict the occurrence of typical residual elements such as sulfur and melted by an air melting + vacuum arc remelting (AOD+VAR). Vacuum induction melting + vacuum arc remelting (VIM+VAR) can also be used if a greater level of micro-cleanliness is required.
- **Superior corrosion resistance:** 316L-SCQ is designed to resist corrosion to a greater extent than other types of stainless steel. This makes it an excellent choice for applications where the material will be exposed to harsh environments or corrosive substances.
- **Low carbon content:** The L in 316L stands for Low Carbon, which means that the carbon content is reduced. This enhances the material's resistance to corrosion even further.
- **Versatile applications:** Due to its superior corrosion resistance, 316L-SCQ is often used in industries where corrosion resistance is a critical factor. This includes the manufacturing of medical devices, pharmaceutical equipment, and in marine environments.
- **Durable:** While no material is completely immune to corrosion, 316L-SCQ is designed to withstand exposure to corrosive substances for extended periods. However, factors such as exposure time, concentration of corrosive substances, and temperature can still affect its durability.
- **High-quality material:** The specific grade of stainless steel, 316L, includes elements like chromium, nickel, and molybdenum, which contribute to its overall quality and durability.