



## OYSTERSTEEL

### HIGH-PERFORMANCE STAINLESS STEEL WITH OUTSTANDING SHEEN

A Rolex watch must work perfectly and maintain its beauty even in the harshest environments. That is why Rolex uses Oystersteel to make several elements of its watch cases. Oystersteel belongs to the 904L steel family – superalloys that are commonly used in high-technology and in the aerospace and chemical industries.

### AN EXCEPTIONAL ALLOY

In 1985, Rolex became the first watchmaking brand to use a 904L stainless steel for the cases of all its steel watches. 904L steels are superalloys whose excellent anti-corrosion properties are comparable to those of precious metals. Specially developed by Rolex, Oystersteel is not only extremely resistant but also offers exceptional sheen. Rolex watches manufactured with this special steel retain their beauty even when exposed to the most extreme conditions.

Aesthetically, Oystersteel goes particularly well with 18 ct yellow or Everose gold on Rolesor (combination of gold and steel on a single watch) models.

### EXCEPTIONALLY RIGOROUS MANUFACTURE

The manufacturing process of Oystersteel – produced exclusively for the brand – requires the greatest rigour. After a first casting, the metal is re-melted in a vacuum, which purifies it and eliminates any inclusions that would diminish its corrosion resistance and lead to problems in polishing.

In its Central Laboratory, Rolex conducts in-house quality controls of each Oystersteel casting it receives from suppliers, using a scanning electron microscope that is capable of detecting even the slightest structural or surface defect. Only the castings that meet the brand's particular and exacting specifications are used for manufacturing the watches.

### SPECIFIC TOOLS DEVELOPED BY ROLEX

Rolex masters in-house the entire manufacturing process for its Oystersteel watch components. The physical characteristics and the toughness of Oystersteel required perfecting specific tooling and working methods to cut the rolled slabs, form them by stamping and to machine the components. Thermal treatments facilitate forming the material. Very hard tools, some made of tungsten carbide with an anti-wear coating, were developed for stamping the steel. The last manufacturing step is the polishing that gives each component a final polished or satin finish like no other.