

NICKEL & HEALTHCARE

The most commonly used nickel alloy, stainless steel, is a vital component to the modern healthcare industry. Stainless steel is used in a variety of medical applications, because it is highly durable and can be repeatedly treated with disinfecting chemicals without deterioration.



MEDICAL EQUIPMENT: Stainless steel equipment and devices are found throughout medical facilities, even after decades of use, because of corrosion and wear-resistant properties. Additionally, stainless steel is easy to clean and sterilize, an important and necessary characteristic of medical instruments and equipment.

SURGICAL IMPLANTS: The majority of orthopedic implants such as knee, hip and joint replacements, and the screws, plates and wires that may accompany them, contain stainless steel. Stainless steel is also compatible with the human body and post-surgery diagnostic practices such as X-rays and MRIs.

HYPODERMIC NEEDLES: Hypodermic needles deliver important, often life-saving, drugs and vaccines to people in need. A needle is a relatively simple medical device but must be strong, sharp and sterile to be safe and effective – stainless steel provides those important qualities.

PHARMACEUTICALS: Stainless steel allows for the mass production of medicines because it does not react to chemicals or other substances used in manufacturing processes. Stainless steel ensures that pharmaceuticals can be produced on a large scale in properly sterilized conditions.

Sources:

Nickel Institute, http://www.worldstainless.org/Files/ISSF/non-image-files/PDF/Team_Stainless_Stainless_Steel_for_a_Sustainable_Future.pdf

<http://www.nickelinstitute.org/~media/Files/Magazine/Volume25/Vol25-02Nov2010.ashx#Page=10>