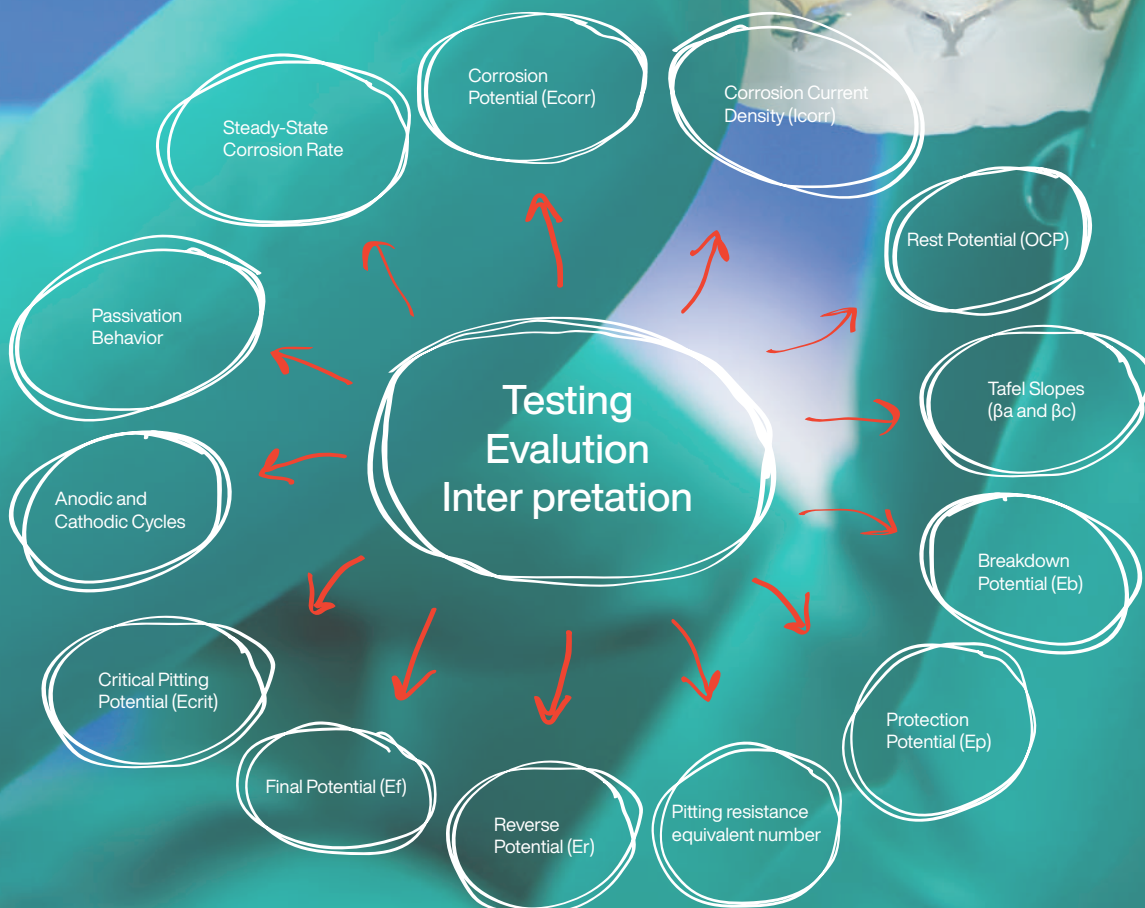
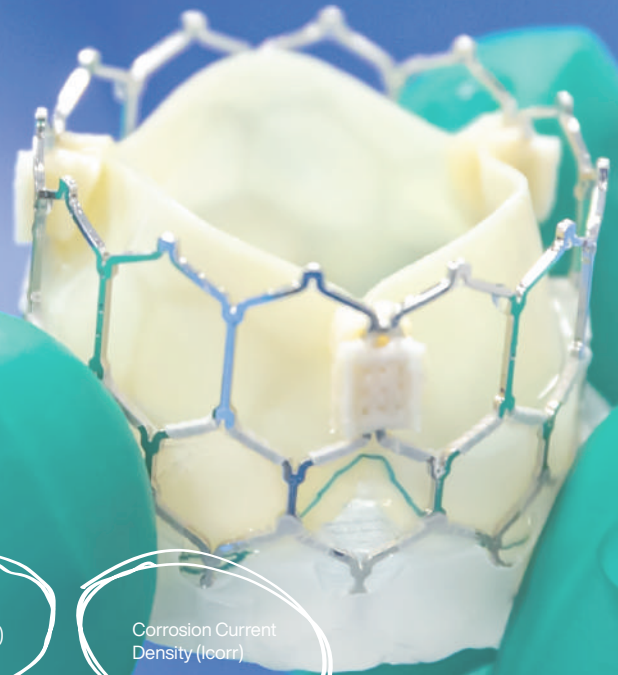


Industrial Solutions

## BIOCOMPATIBILITY TESTING

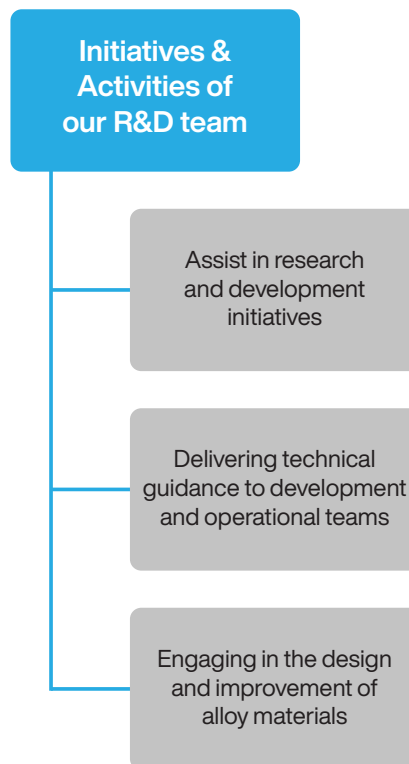
Test Certificate with  
ILAC and MRA Mark



# Biocompatibility Testing

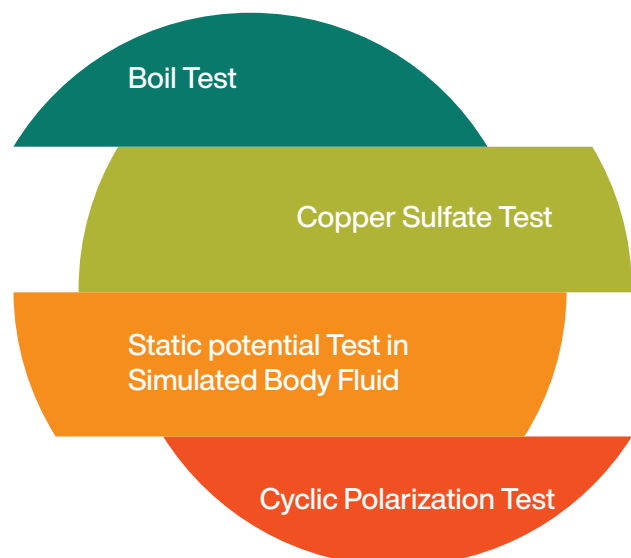
## How it works for our Customers ?

Biocompatibility measures how compatible a device or component is with a biological system. The goal of this test is to determine how fit is a device for human use, and to diagnose any potentially harmful physiological effects the device can have on humans.



## Why should you get Test conducted?

Corrosion tests are essential for electromedical devices and surgical instruments to ensure patient safety and device longevity. Corrosion testing assesses the material's resistance to degradation in bodily environments, which is crucial to maintain structural integrity and prevent the release of harmful ions. Together, these evaluations confirm that medical devices can perform their intended functions reliably without compromising patient health.



## Evaluate critical criteria ensuring the quality and safety of medical devices and raw materials.

Ensuring the safety and reliability of medical devices and materials is paramount. To this end, specific guidelines have been established: one outlines procedures for assessing the corrosion resistance of stainless steel surgical instruments, utilizing tests like the boil and copper sulfate methods to detect surface defects or impurities; another specifies methods for evaluating corrosion susceptibility in small metallic implants through cyclic polarization testing, ensuring implants such as vascular stents and cardiac occluders can withstand physiological environments without degrading

A third guideline provides requirements for testing the security and effectiveness of devices designed for skeletal fixation, verifying their reliable performance in orthopedic procedures; and a fourth describes procedures for assessing corrosion potential in metallic samples via potentiodynamic polarization, aiding in understanding corrosion behavior across various environments, including biomedical applications. Adherence to these guidelines supports the safety and effectiveness of materials used in medical and laboratory settings, contributing to enhanced patient safety and product reliability.

## BIOCOMPATIBILITY

The materials used need to be non-toxic to perform particular physiological functions. These functions include that of stent, knee replacement, dentistry equipment, surgical implants, and instruments. Thus, in short, biocompatibility will determine the ability of a material to co-exist and perform with a natural substance.

## TOXICOLOGY

Unless otherwise engineered for safety purposes, this test type checks how toxic is a biomaterial when in use.

## and how we conduct it...

