

Passivation is the process of removing the free iron from the surface of stainless steel.

Stainless steel is comprised of a mixture of iron, chromium, nickel, molybdenum and manganese. It is this mixture and blend that allows the special properties of corrosion resistance by the formation of an outer oxide protective layer or passive film.

Mineral acids, such as nitric and phosphoric acid, have been the most commonly used method of cleaning and passivating, but are very hazardous to breathe, handle and dispose of.

State of the art technology has found that citric acid is highly effective in passivating of stainless steel. Citric acid is an organic acid and regarded as safe for use in food products.

We have used both methods of passivation and prefer the citric acid approach. We would be happy to assist you in selecting the method that suites your needs.