# Standard Cleaning and Packaging Process (FC-01)

## Scope

◎ This Specification applies to the standard cleaning, lubrication, assembly and packaging of FITOK products.
◎ Please read this Specification carefully before using the product to make sure it is up to the cleanliness requirements of your system.

## Process Requirements

◎ Particles and oil contamination on products from the manufacturing process should be eliminated according to the process requirements.
◎ Components to be assembled should be lubricated according to the requirements of the products.
◎ Finished products should be properly packaged to avoid damages during storage and shipment.
◎ Each product should be marked for easy identification.

## Cleaning and Inspection

◎ Carry out continuous ultrasonic cleaning to eliminate the smudges on the products from the manufacturing process, such as: cutting oils, polishing waxes and other dust particles.
◎ Carbon steel products are protected from atmospheric corrosion by plating, conversion coating or with a light oil film.
◎ Carry out visual inspection under bright lighting or violet lighting conditions, or use clean cloth to wipe for inspection.

## Lubrication, Assembly and Testing

◎ Greases should be applied to threads, mating surfaces, O-rings, and seals to form a lubricating film to prevent galling, to reduce friction and to enhance sealing effect. These greases are generally hydrocarbons, halogen contained hydrocarbon or silicon oil containing inorganic additives.
◎ Cleaned products should be assembled in clean and well-lighted environment.
◎ Use clean and dry air, nitrogen or helium to test according to the requirements of the products. Use clean tap water for hydrostatic pressure test. Dry the internal and external surfaces after passing the test.

## Packaging and Labeling

◎ Finished products should be packaged well to prevent them from damage or contamination during shipment and storage.
◎ The functional ports of the product, such as: male thread, sealing surface should be protected with cap and proper plug.
◎ Protected products should be packaged in the boxes with standard quantity according to the requirements.
◎ Boxes should be labeled with part number, quantity and packaging date.
◎ Nuclear grade products should be packaged in accordance with the requirements of ASME NQA-1.

## Reference

◎ **ASME Standard**
ASME NQA-1 Quality Assurance Requirements for Nuclear Facility Applications