ASSEMBLY PROCESS FLOW CHART

装配加工流程图 Assembly Processing Flow Chart

超声波单品清洗 COMPONENTS ULTRA-SONIC WASHING

滚道测量 RACEWAY MEASURING

装 球 BALL MATCHING

保持架装配，铆合 CAGE PRESSING

超声喷射清洗 ULTRA-SONIC & JET WASHING

甩干 DRYING

外观检测 APPEARANCE INSPECTION

噪音检查 NOISE & VIBRATION TESTING

加防尘盖/密封圈 SEALING

加润滑脂 GREASE FILLING

噪音检查 NOISE & VIBRATION TESTING

防锈包装 ANTIRUST PACKING

颜色状态标识 Color Status Indicator

不良品 Unqualified Products

返工品 Rework Products

合格品 Qualified Products
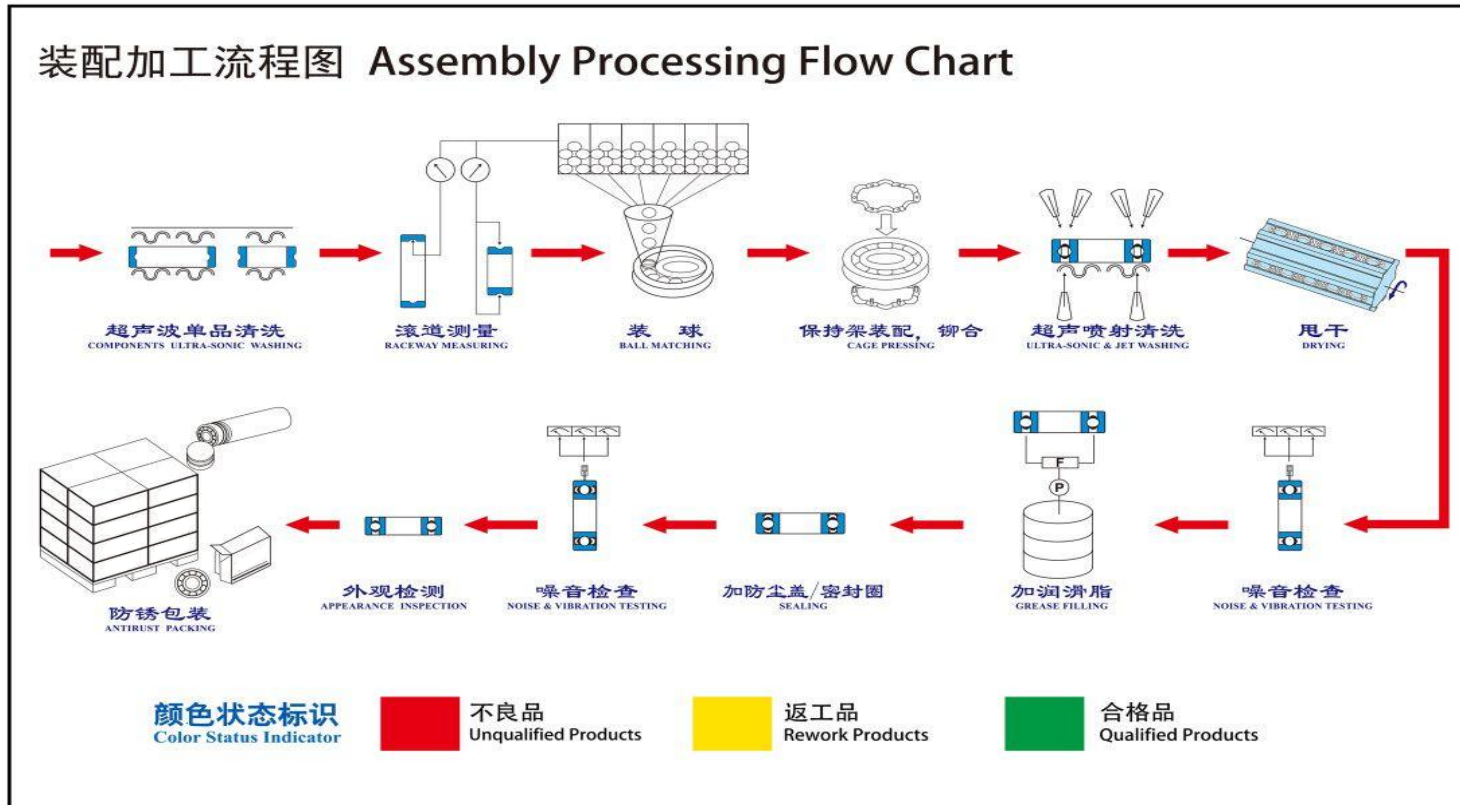
Component Washing before assembly
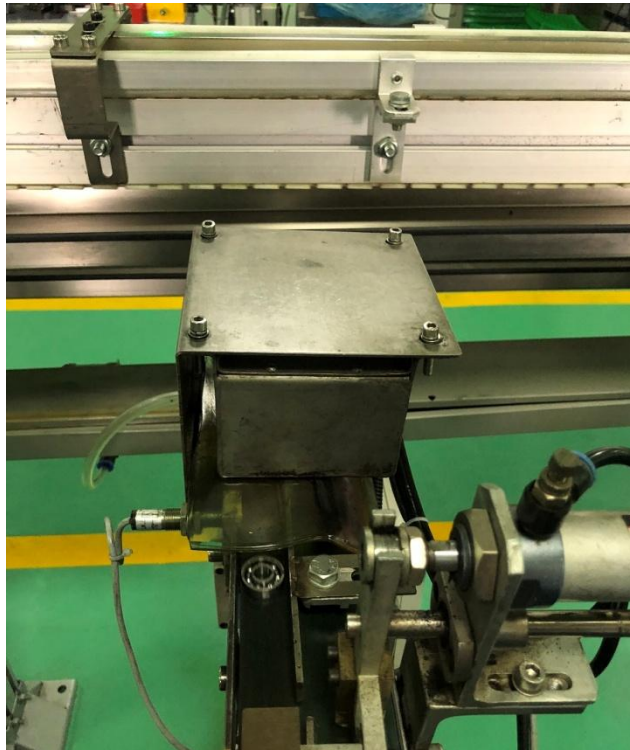
Demagnetization

Ultrasonice cleaning and
Spray cleaning

ASSEMBLY：I.R ,O.R, Balls

MANUFACTURING
PROCESSES

RAW MATERIAL

STEEL TUBE

TURNING
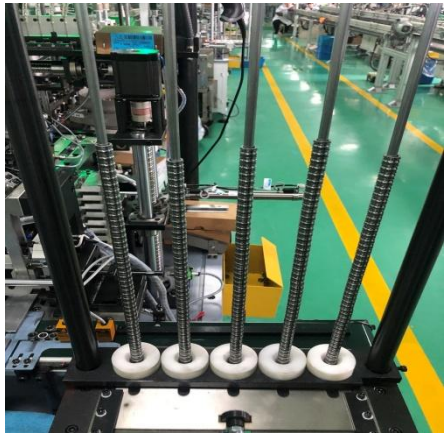
HEAT TREATMENT

GRINDING &
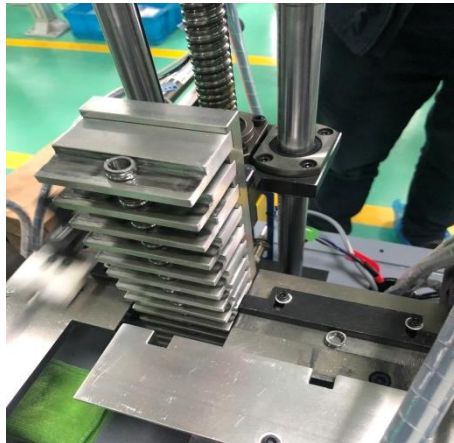SUPERFINISHING

ASSEMBLY

FINAL CHECKING

Inner ring feeding

I.R raceway
measurement

I.R stock for assembly

O.R feeding

O.R raceway
measurement

O.R stock for assembly

ASSEMBLY：I.R ,O.R, Balls

Choose available I.R and O.R as clearance value set in the computer

Feeding balls between I.R and O.R

ASSEMBLY：I.R ,O.R, Balls
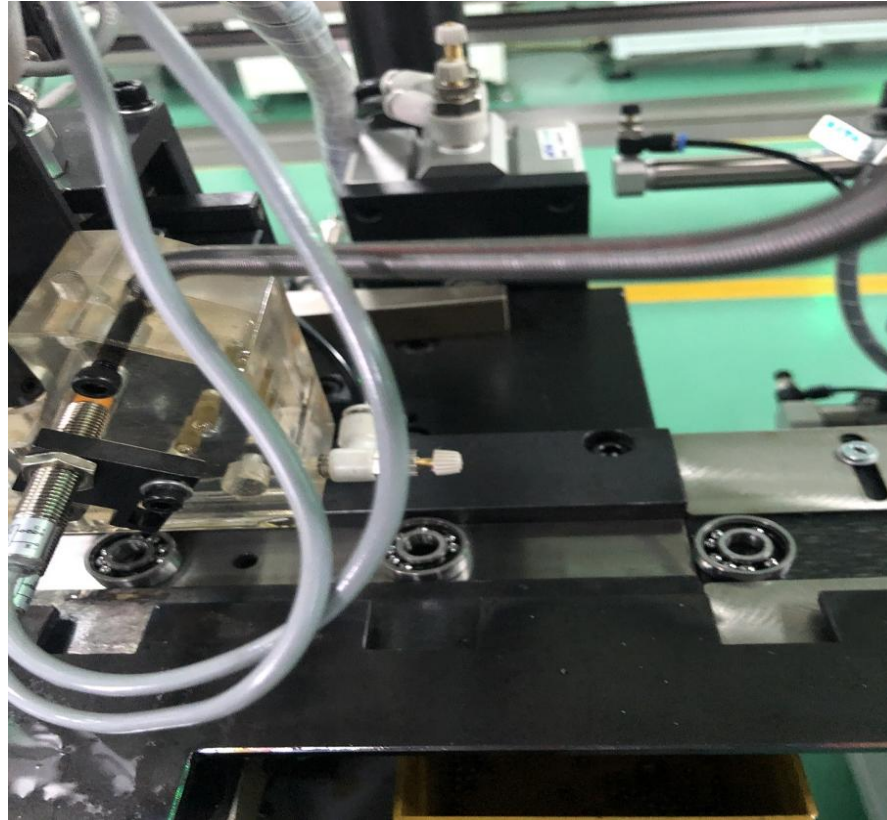
Finish the assembly for I.R, O.R and balls
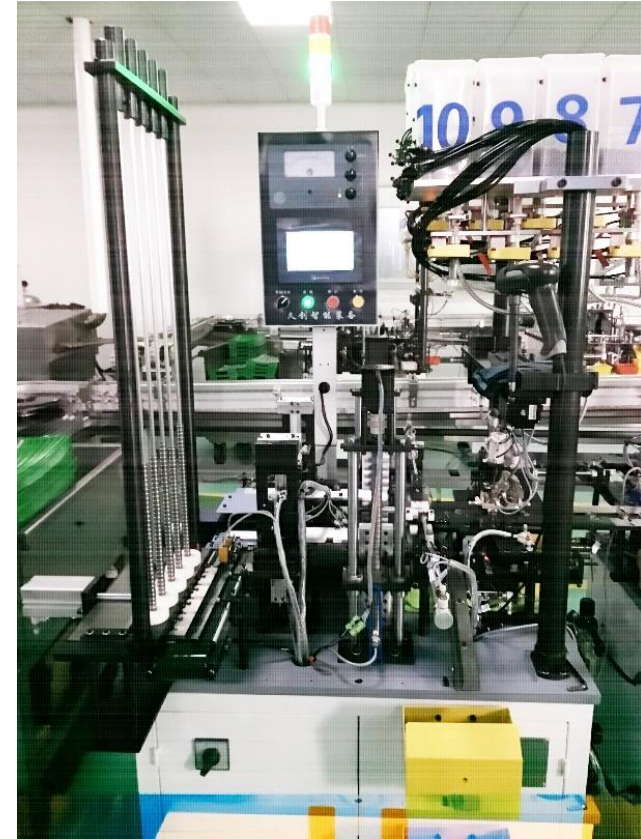
NG rejected into yellow box

ASSEMBLY: Balls checking

MANUFACTURING
PROCESSES

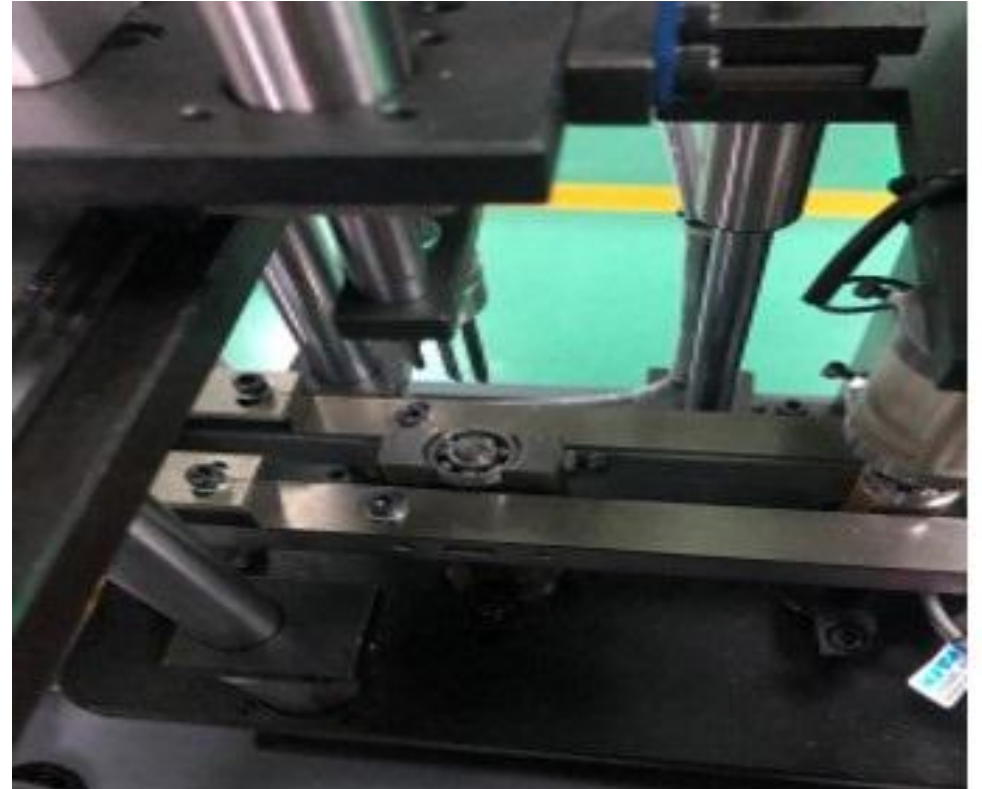RAW MATERIAL

STEEL TUBE

TURNING

HEAT TREATMENT

GRINDING &
SUPERFINISHING

ASSEMBLY

FINAL CHECKING

fibre-optical checking

Separate balls and balls checking(less or if separate

ASSEMBLY: Press cages
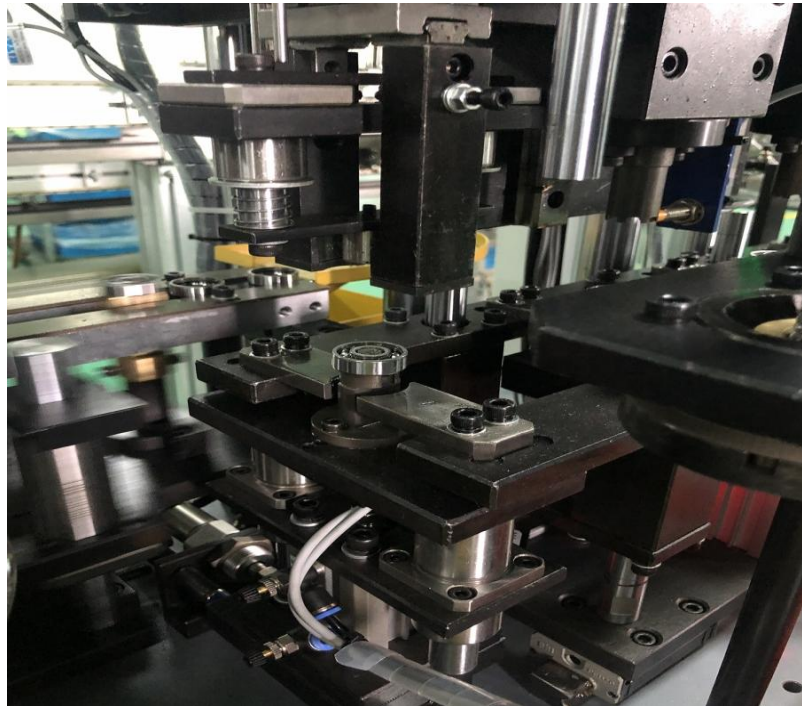
TN Cage or upper cage(上保持器） checking by robot arm

NG rejected into yellow tray

ASSEMBLY: Press cages
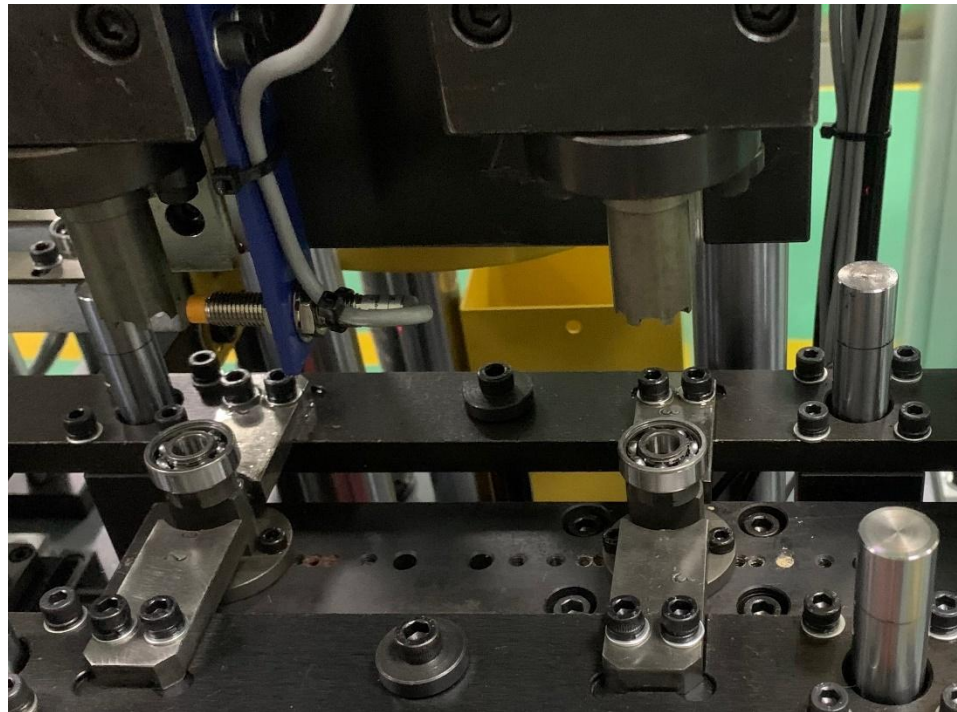
Rivet checking and Pressing Rivet
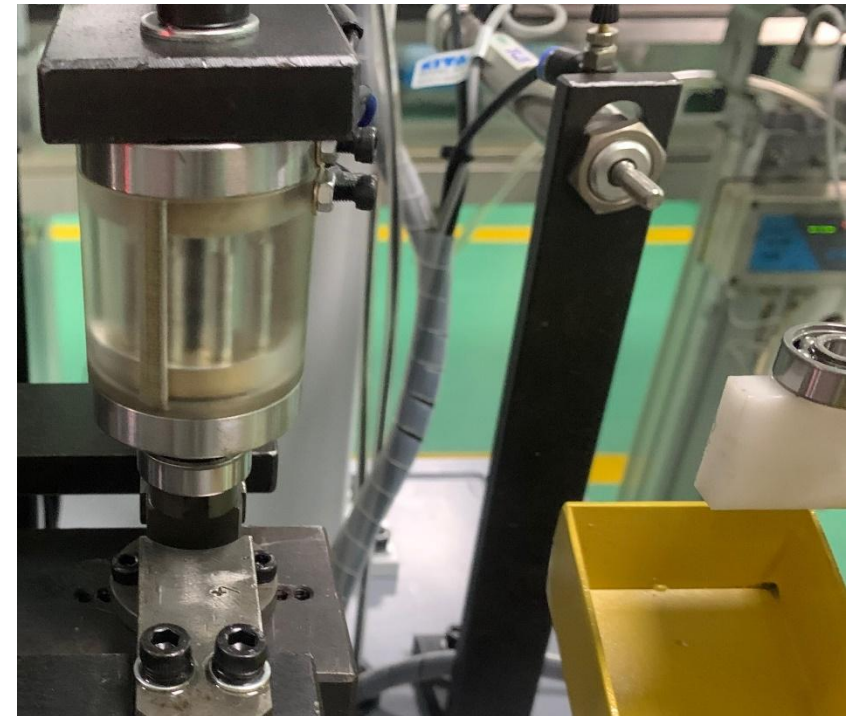
Rivet height check ,NG rejected into yellow tray

Camera detection on components

To check if there are balls, cage, inner ring and outer ring after assembly

I.D , O.D and clearance checking

内孔检测   外径检测

游隙检测机构

I.D checking and O.D checking   Radial clearance checking

Washing after assembly
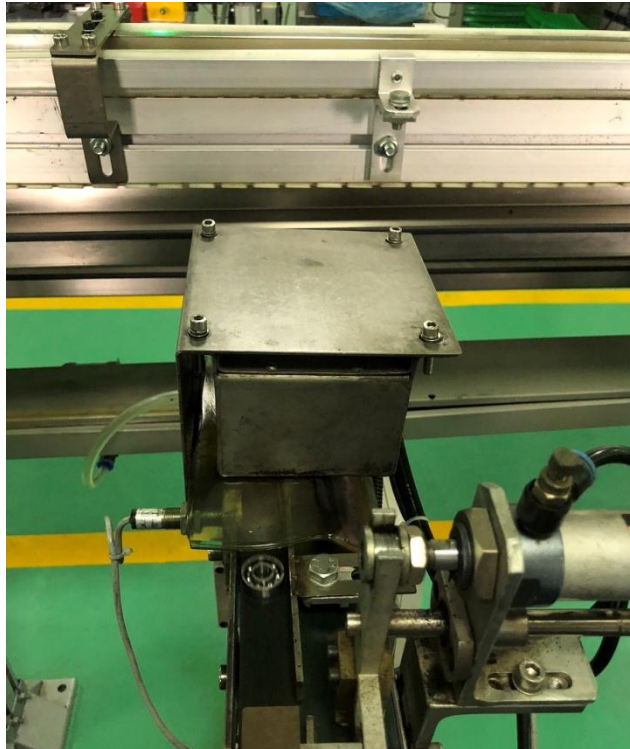
Demagnetization

Ultrasonice cleaning and Spray cleaning

Spin dry-Anti rust-Spin dry again

First vibration checking before greasing

First checking for one side →Turn to anther
side→second checking →NG rejected

Greasing and weighting
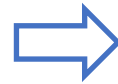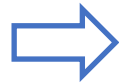
Flexibility checking

First weighting

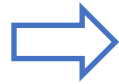A side Grease

Turn to another side

B side grease

Second weighting

Fibre optical check on grease

NG rejected

Shields pressing

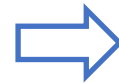A side shield feeding and checking
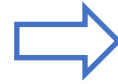
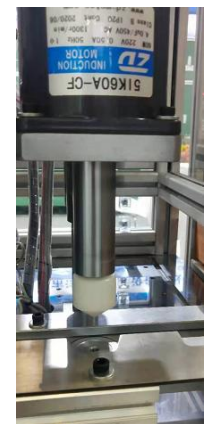A Shield pressing and checking

Turn to another side

B side shield feeding and checking

B shield pressing and checking

NG rejected

grease distribution

Second vibration checking after greasing

To check the noise value of Inner ring, Outer ring, Balls, Cage, shields and seals, also Low band, Medium band and High band of each bearing

Grease distribution→First checking for one side →Turn to anther side→second checking →NG rejected

Final appearance checking

Camera detection 100% for appearance of finished bearings