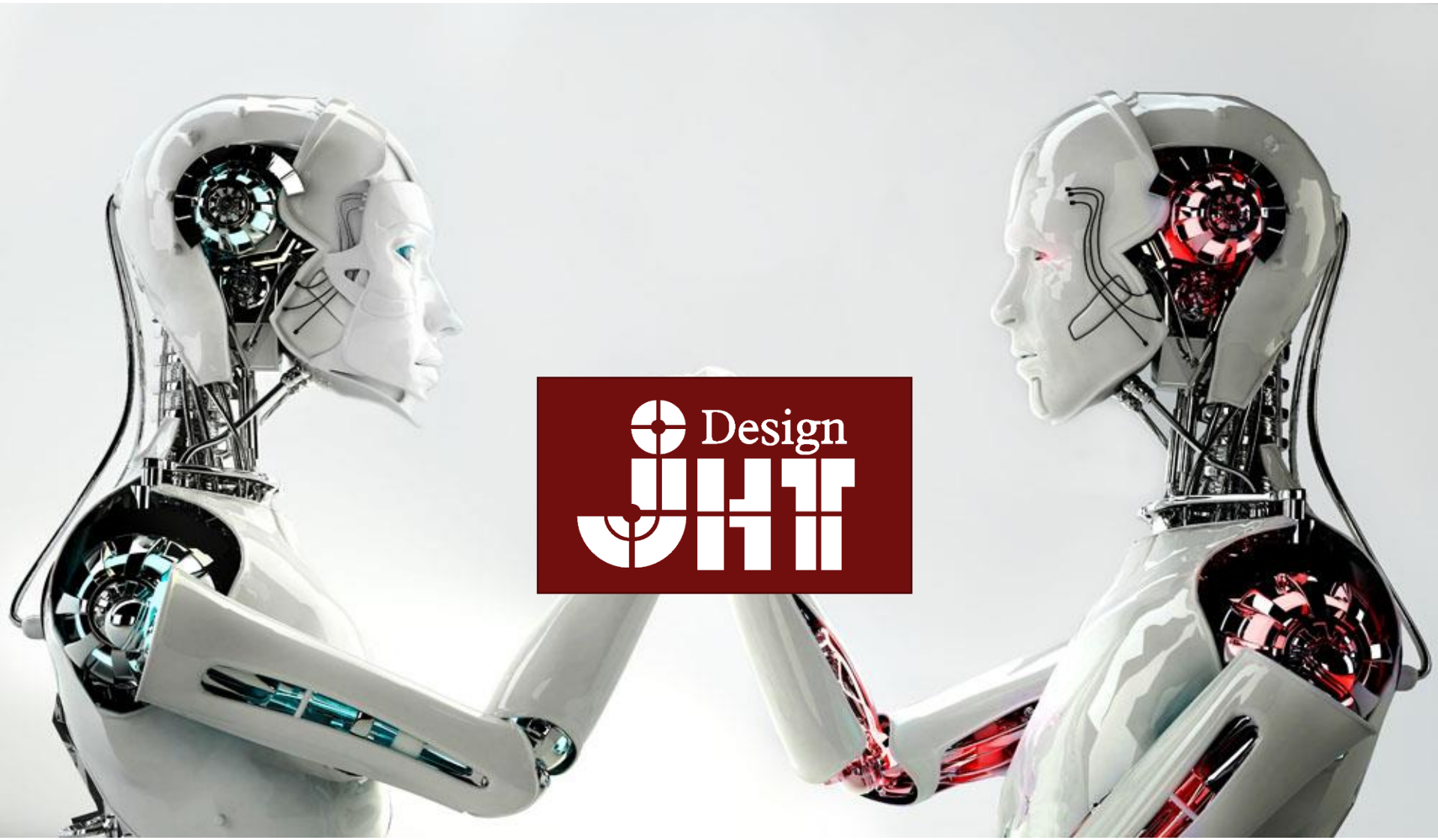


TOTAL CUSTOMER SATISFACTION

EXCEED SERIES INFO

JHT EXCEED SERIES HANDLER RUN QFN2X2 REPORT

Sample Type：QFN
Sample Size：2mmX2mm
Tray Type：UBoT UL02021.01435XBU（JEDEC）
Conversion KIT：Quad Site 2X2
Handler Model：JHT EXCEED6000/EXCEED8000
Handler Speed：100%

Sample & Tray

Quad Site KIT

Octal Site KIT

SETUP

SETUP Steps（Total Time：Approx 4 Hours）

1.Install Conversion KIT

2.Adjust Shuttle Sensor

3.Setting Device Information（As Below DEVS）

4.Calibrate Contact Height

5.Dummy Run to Adjust Offset & Sensor

QFN2X2(2X2)-backup(20181026093727).devs

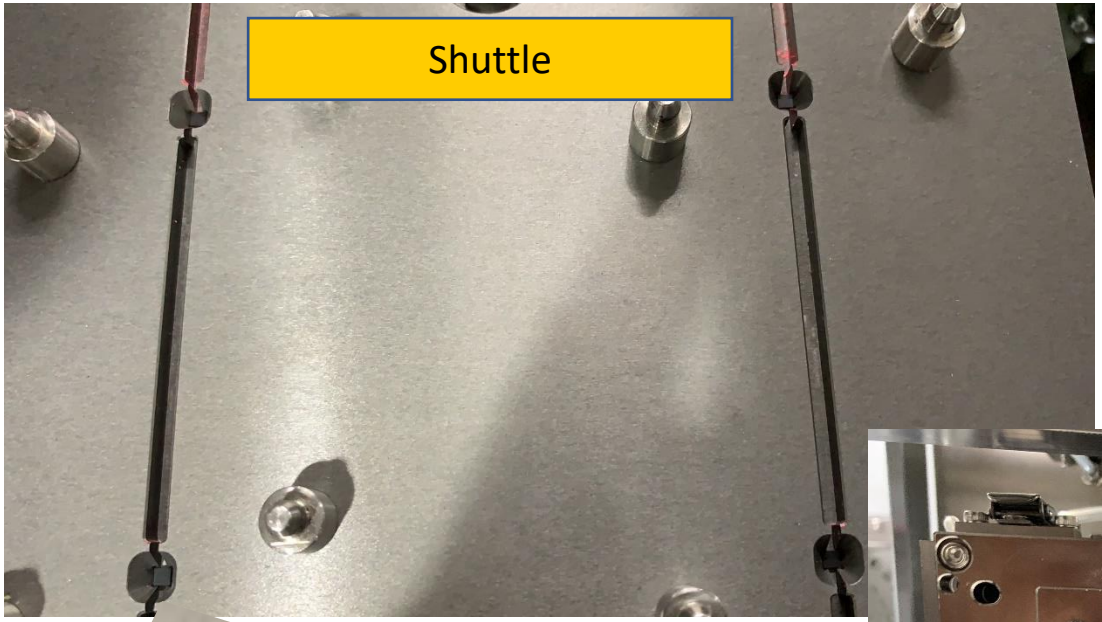
Dummy Run Pics

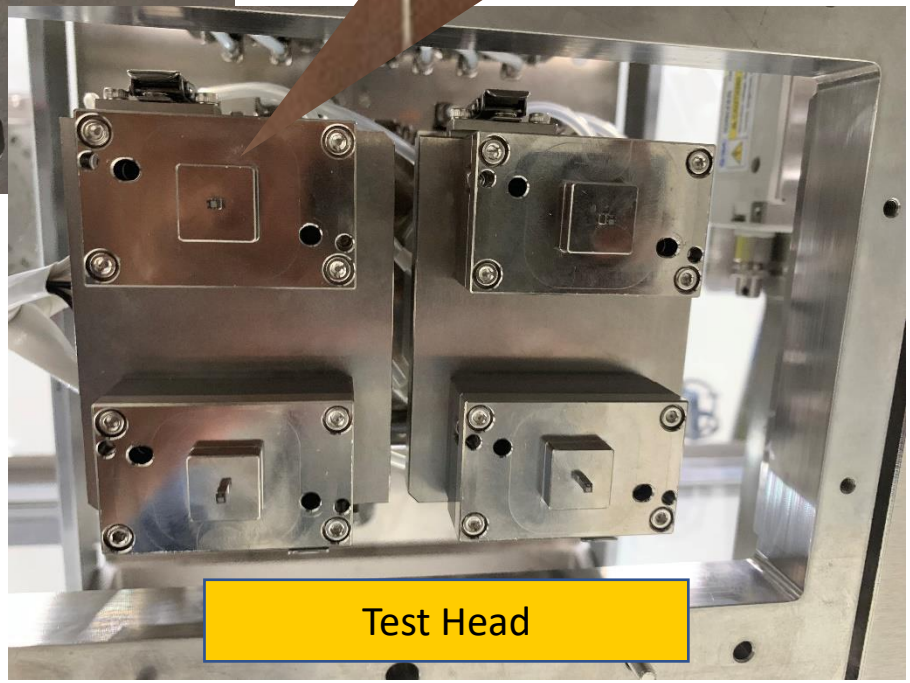
Exceed series

Loader Tray

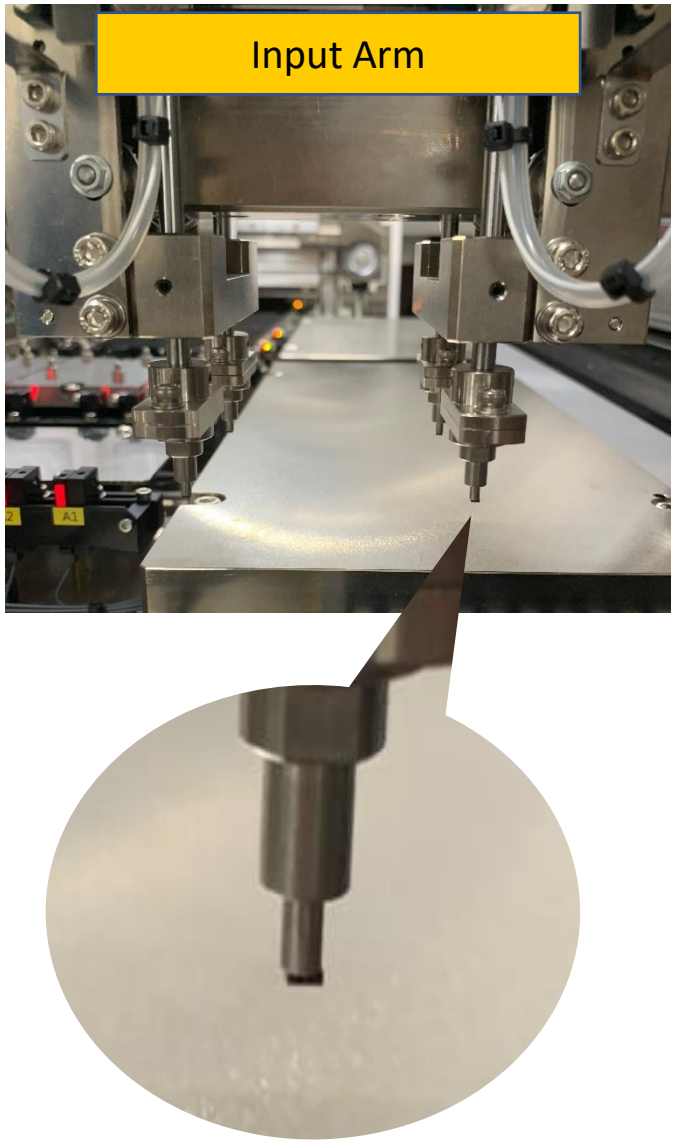
Auto Unloader Tray

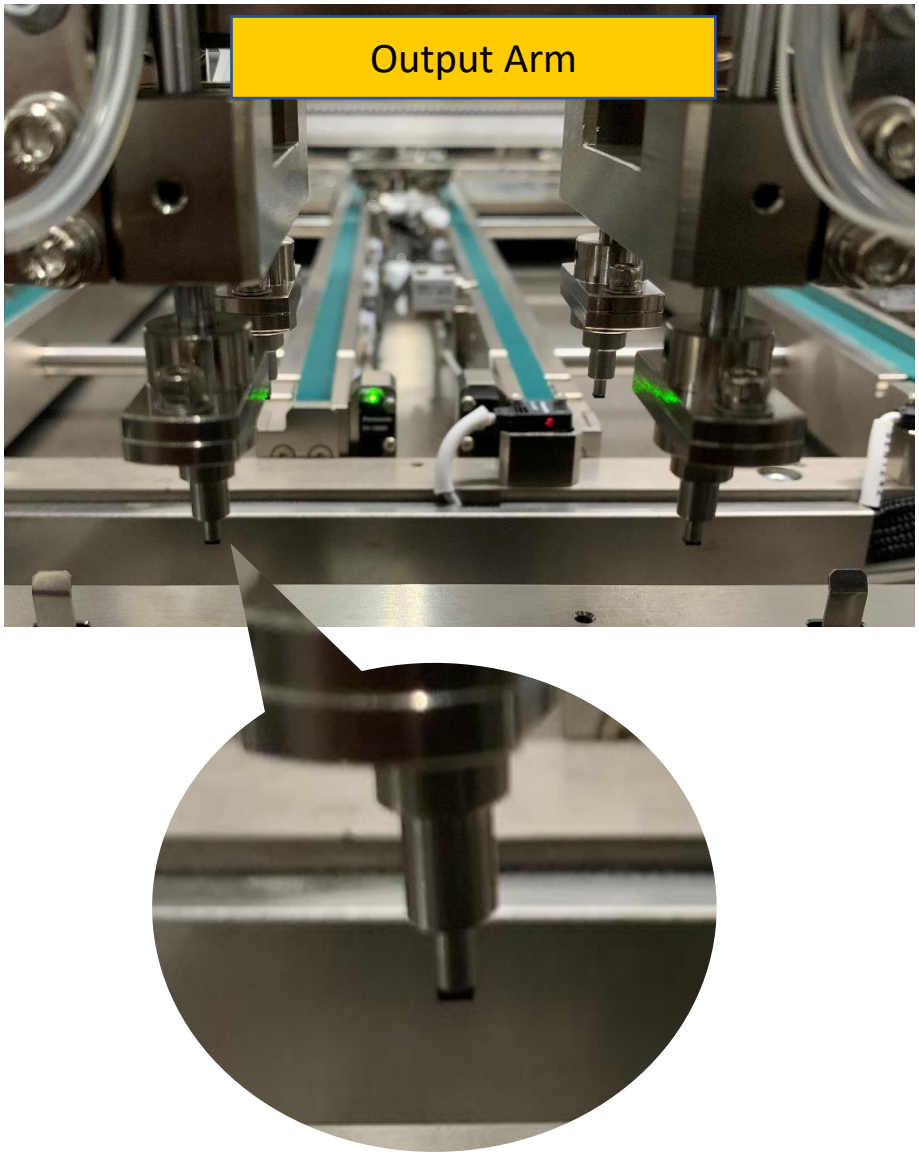
Dummy Run Pics（EXCEED6000）





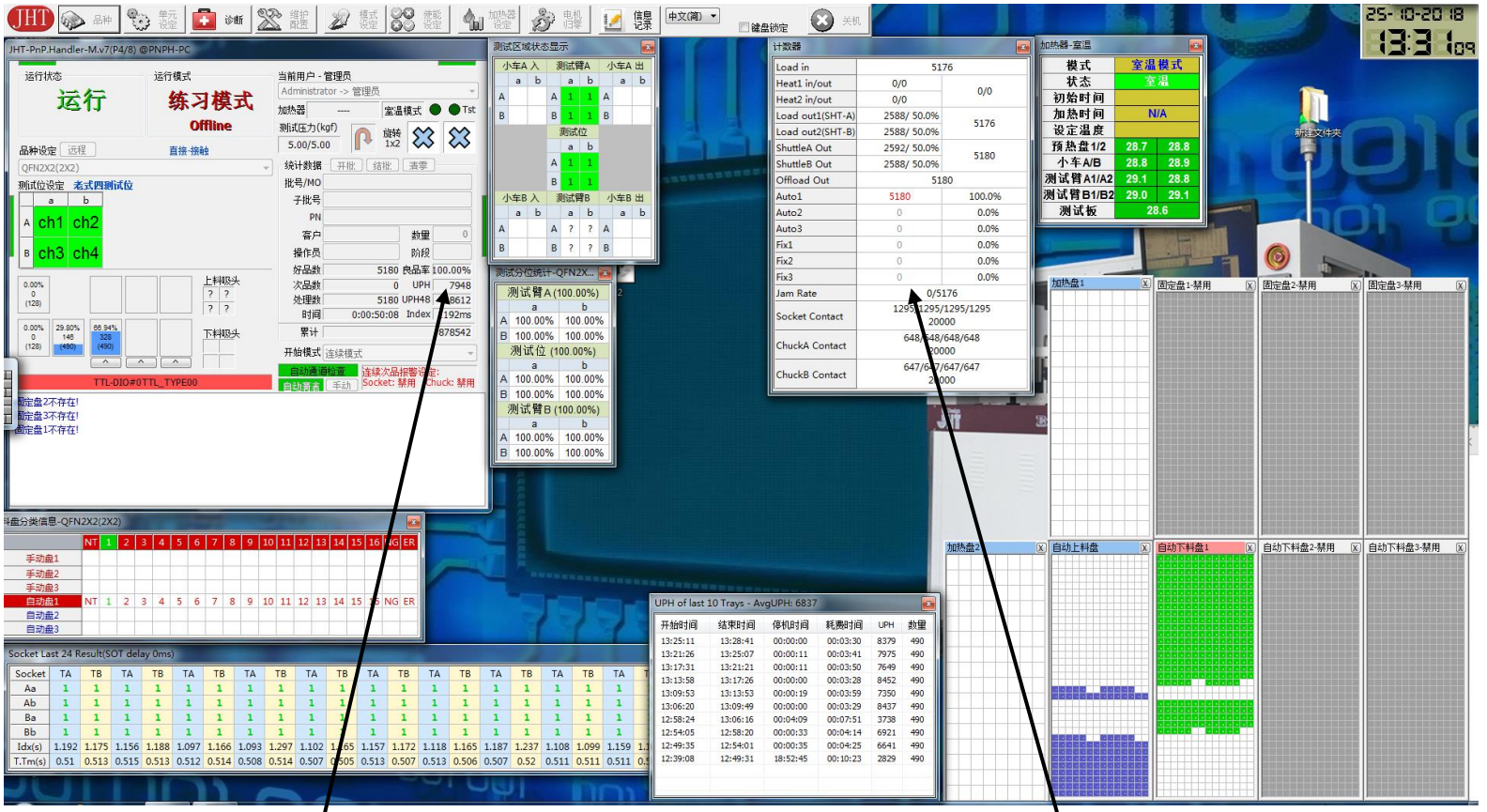
Dummy Run Pics（EXCEED6000）





Dummy Run Data(EXCEED6000)

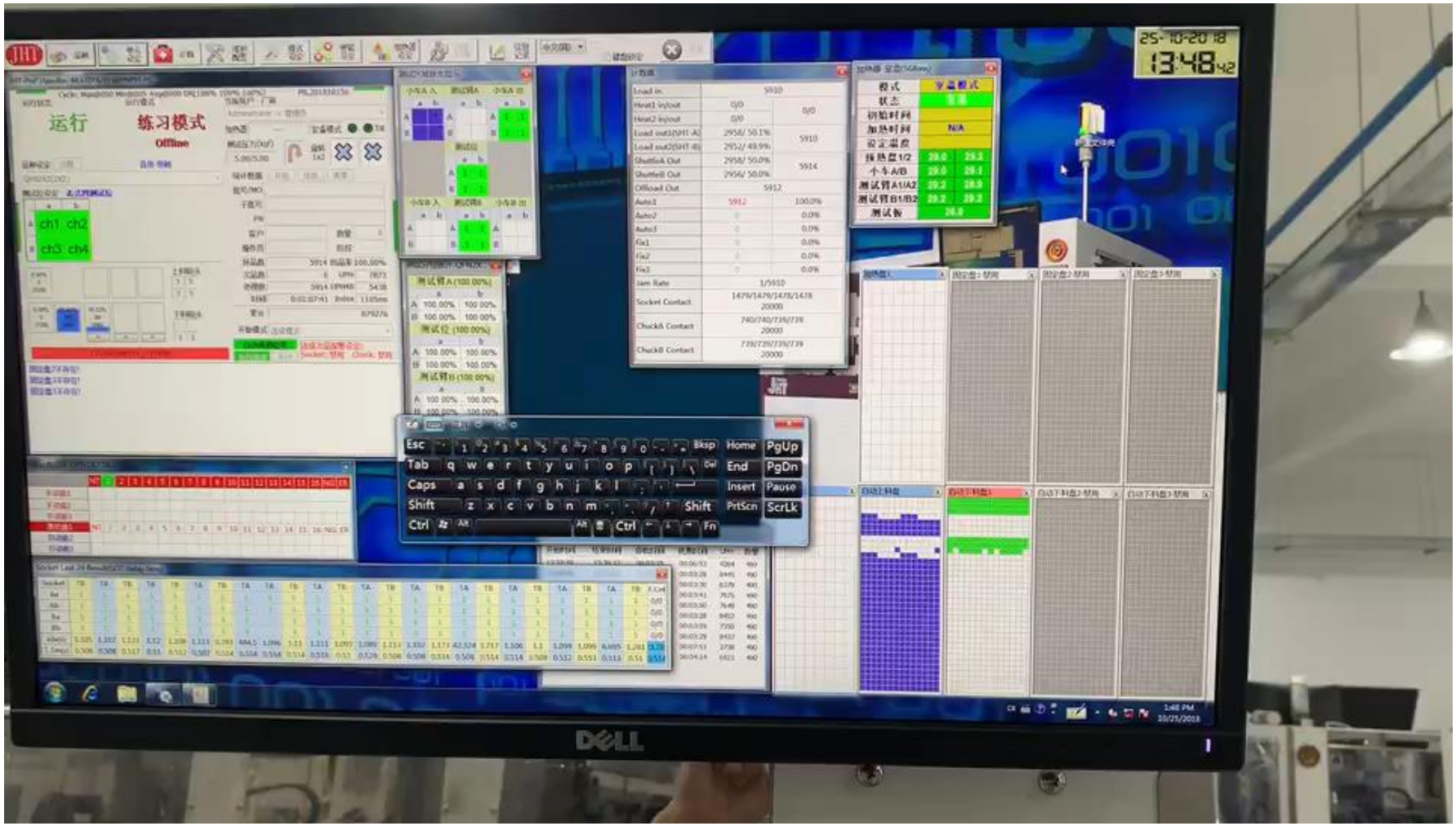
Exceed series



UPH: 7948

Jam Rate: 0/5176

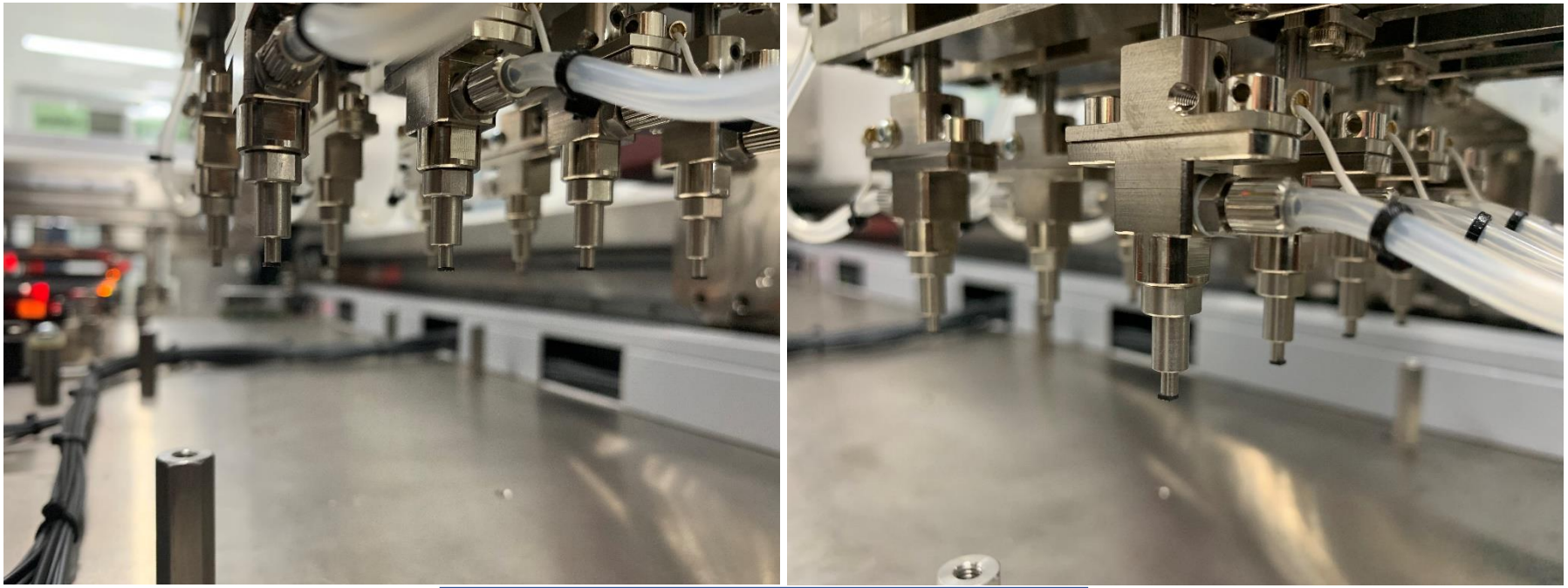
Dummy Run Video（EXCEED6000）



Dummy Run Pics（EXCEED8000）

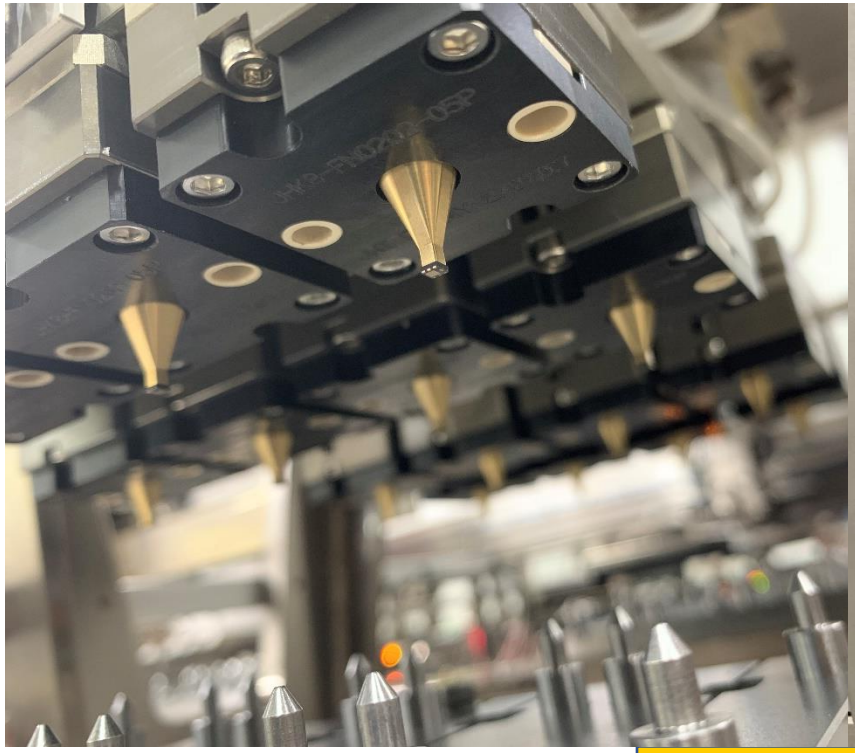
Shuttle

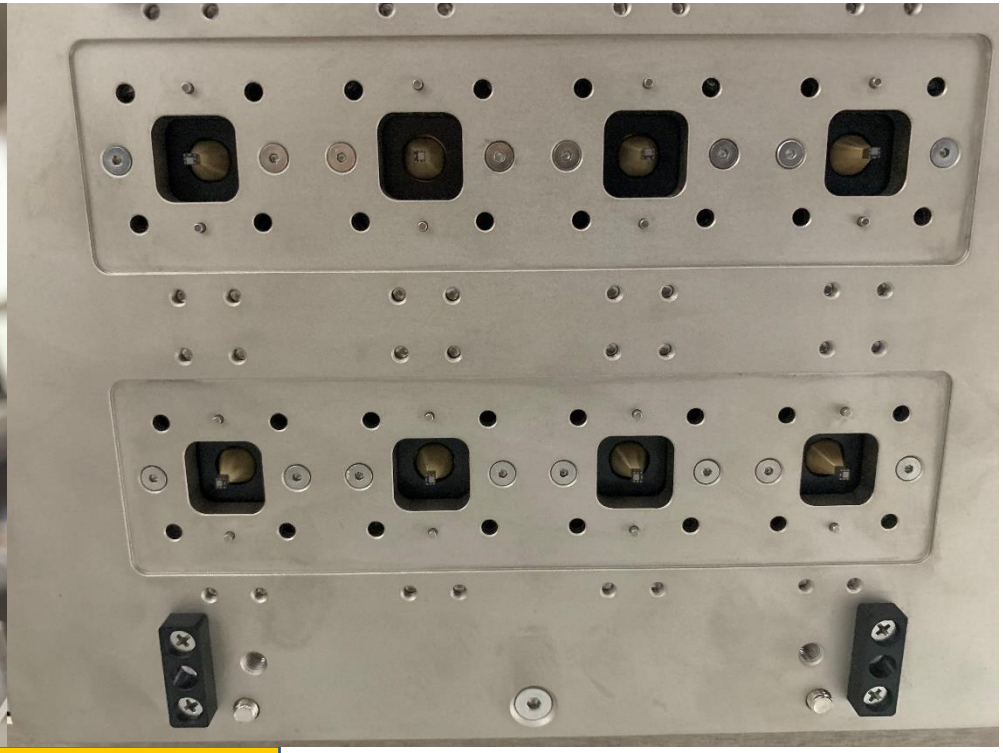
Dummy Run Pics（EXCEED8000）



Input Arm Pick-up Head

Dummy Run Pics（EXCEED8000）

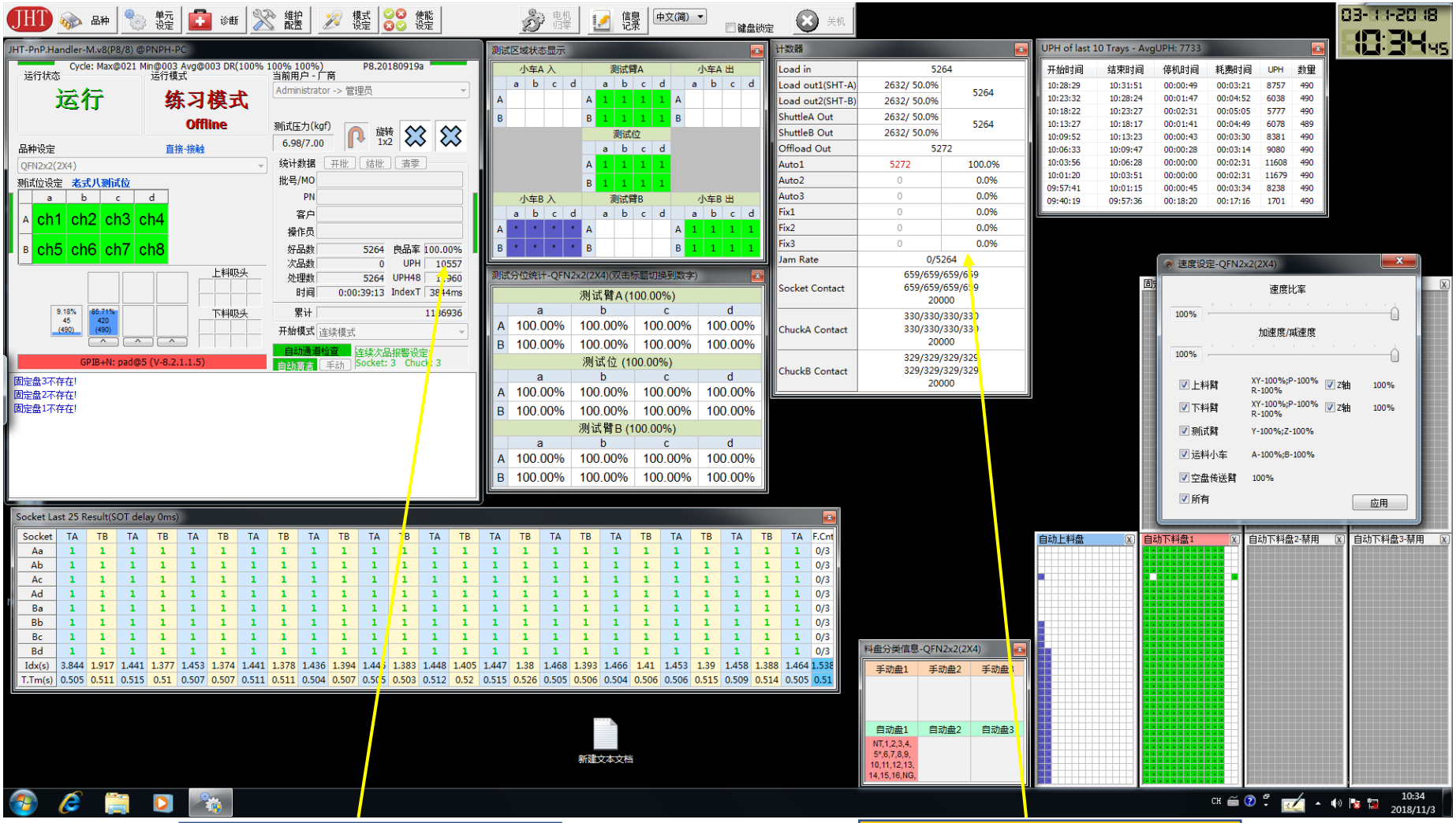




Test Head

Dummy Run Data(EXCEED8000)

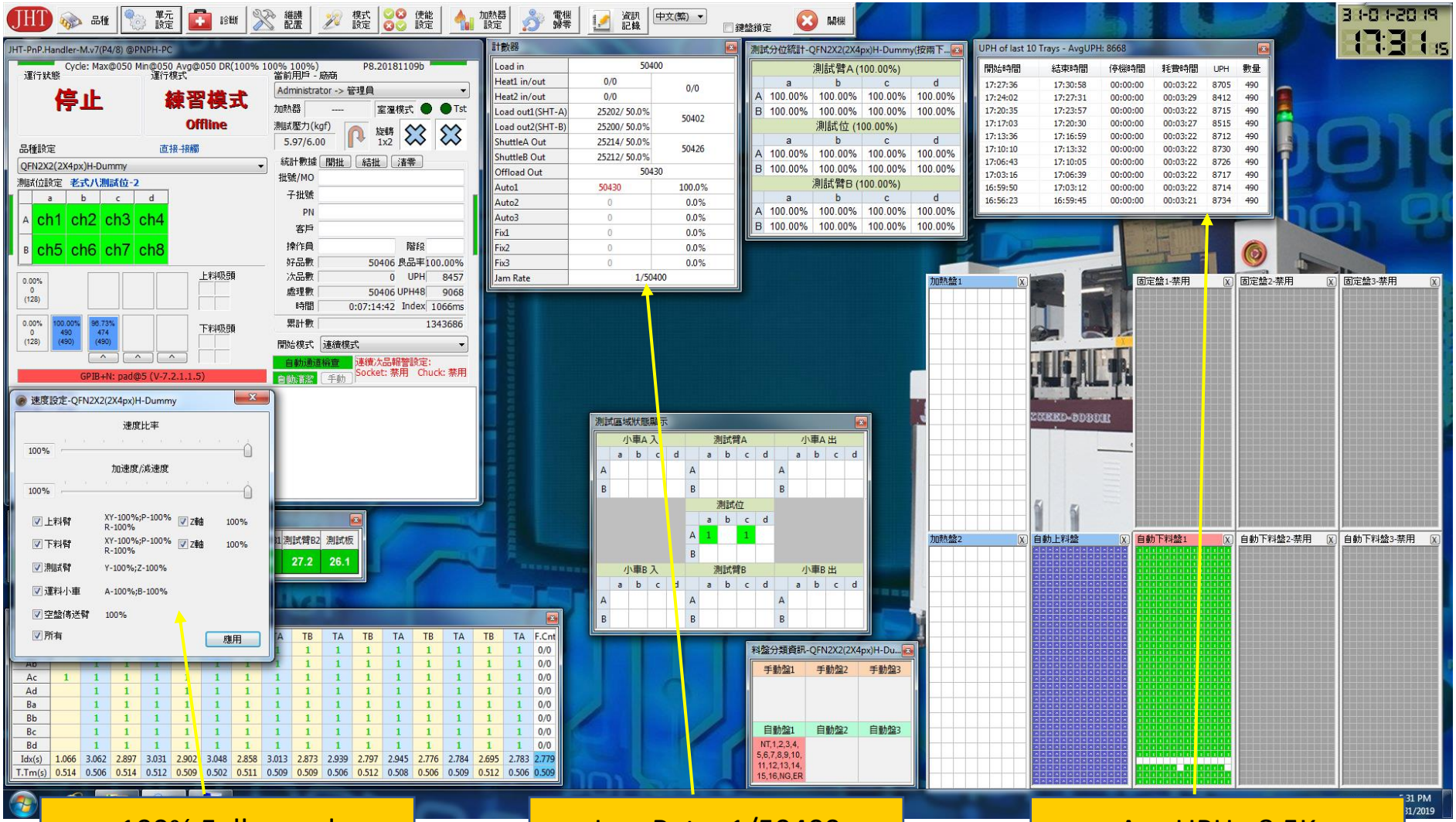
Exceed series



Dummy Run Video（EXCEED8000）

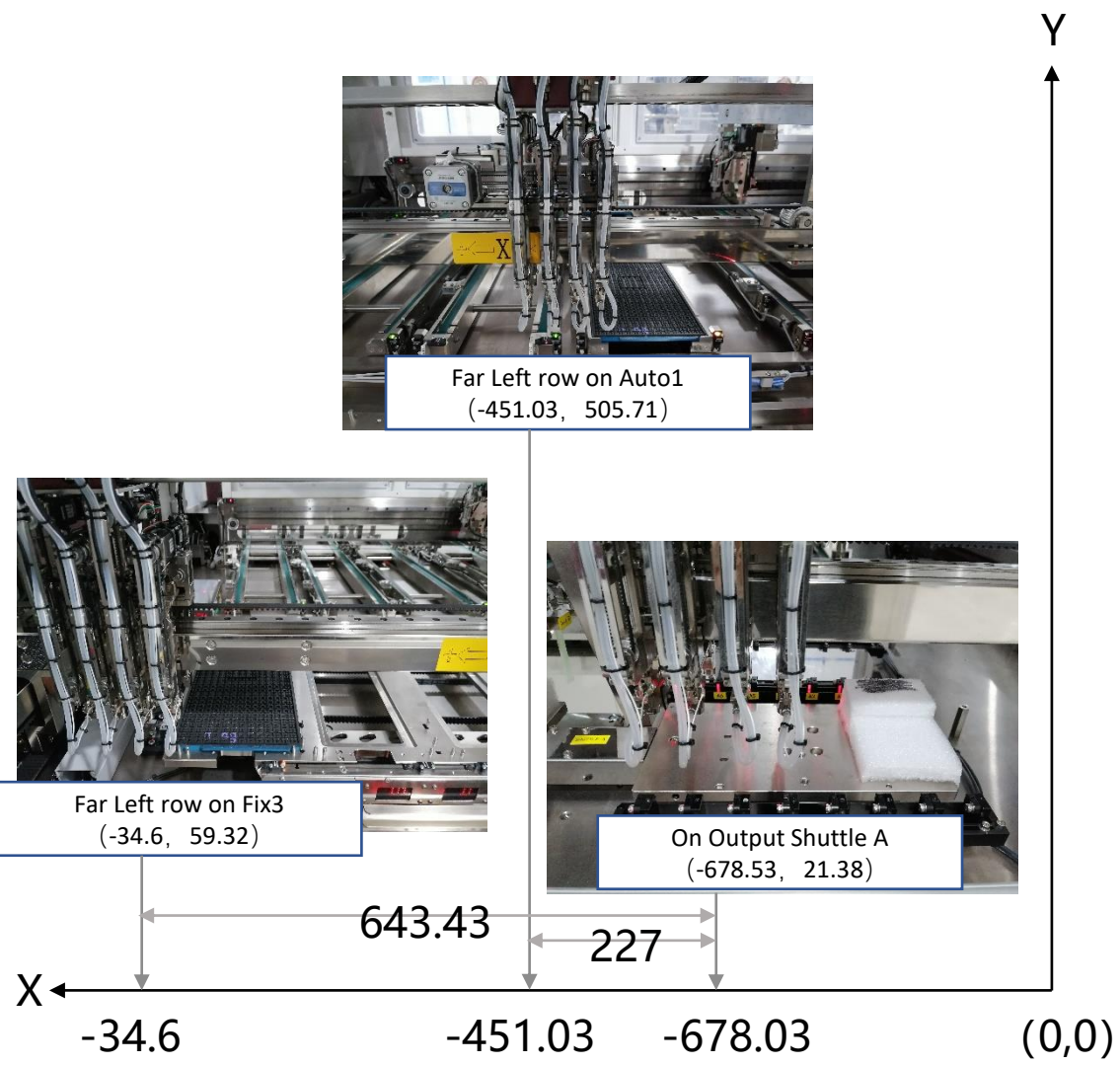
Buyoff data on customer site – ChipMOS Taiwan

Exceed series



Input/Output Arm X-Direction Control & Accuracy （+/-0.01mm）

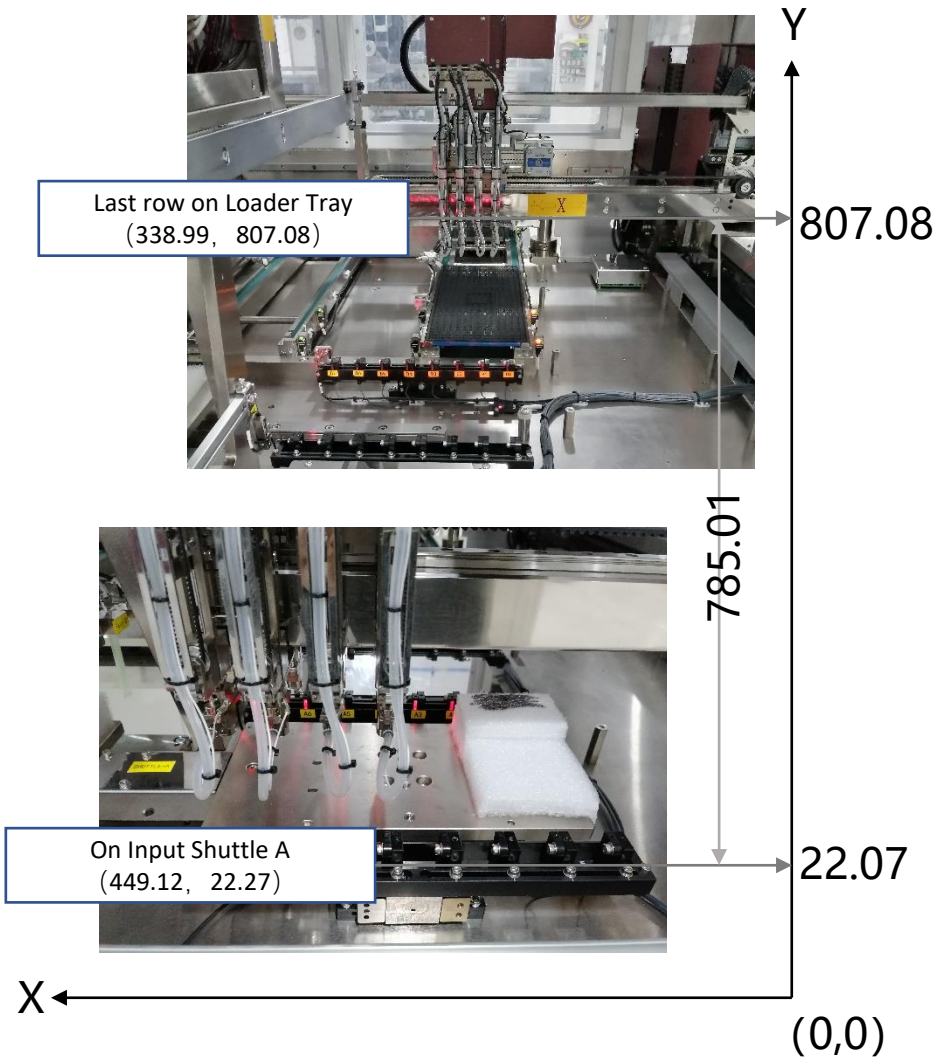
Exceed series

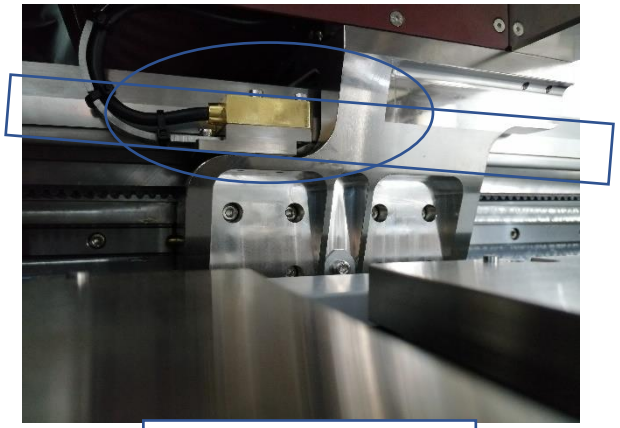


X direction movement distance : The interval from Shuttle->Auto1 is the most commonly used. The maximum distance is about 230mm. The longest movement distance is from the leftmost side of shuttle->Fix3. The maximum distance is about 650mm. The servo motor is used to drive the pulley, and the real-time position is fed back through the encoder to form a closed loop system. X-direction control accuracy: 9um (0.009mm) X-direction encoder accuracy: 9um (0.009mm) When the Arm needs to move to the target position, it will check whether it matches the encoder position in real time and perform automatic compensation, so the X-direction accuracy can be controlled at 10um (0.01mm).

Input/Output Arm Y Direction Control & Accuracy (+/-0.01mm)

Exceed series



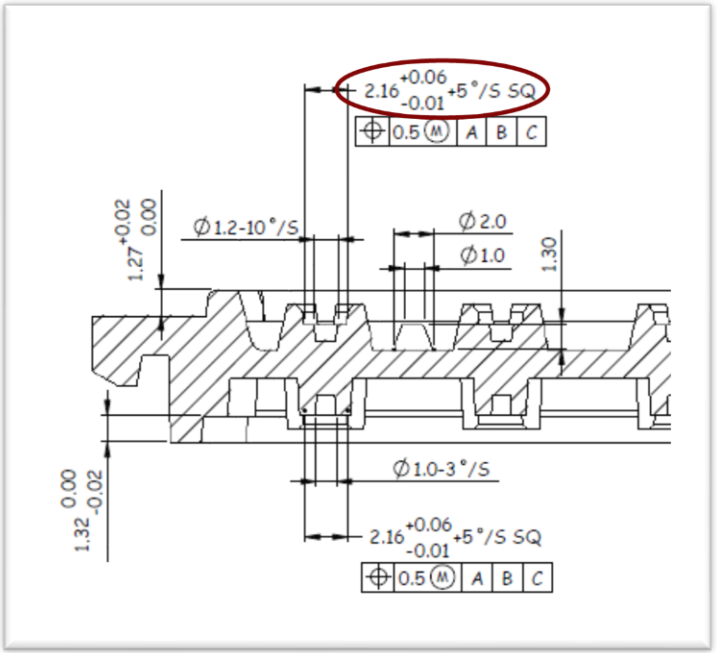


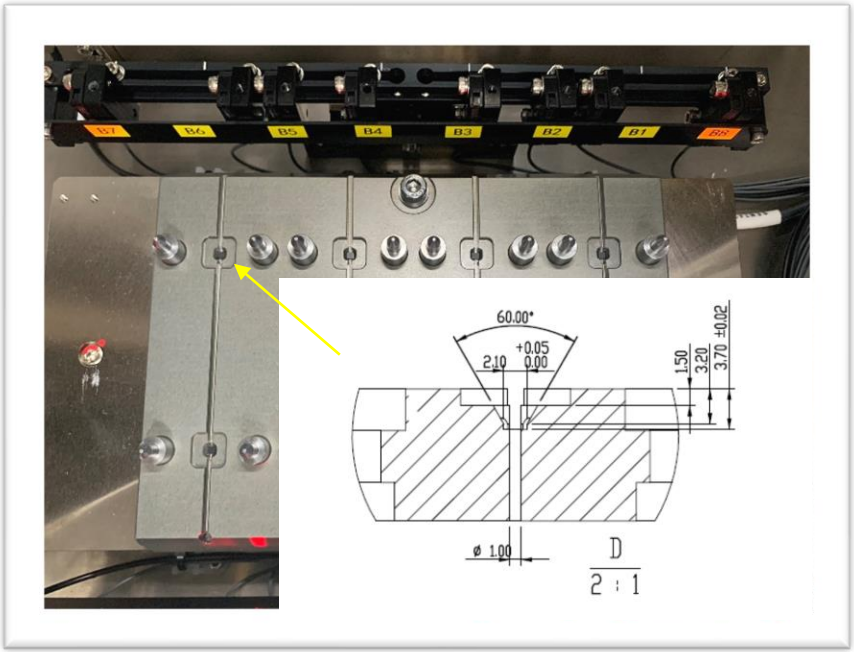
Magnetic ruler

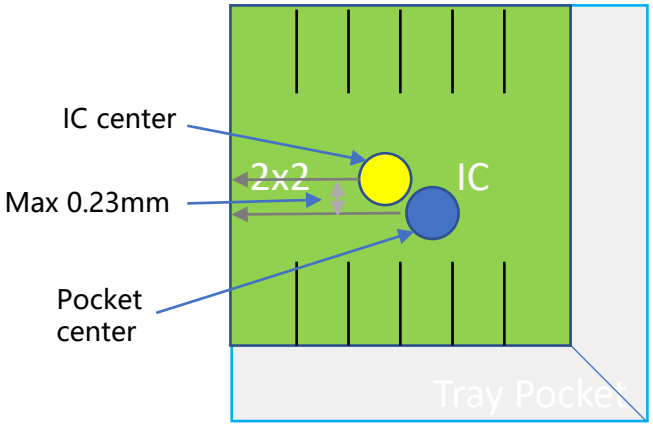
Y direction movement distance :
Loader Tray last row -> Shuttle A About 785mm, it uses a servo motor to drive the pulley and uses a magnetic scale to feedback the position to form a closed loop system. Y-direction control accuracy: 7.5um (0.0075mm) Y-direction magnetic scale accuracy: 5um (0.005mm) When the Arm needs to move to the target position, it will check whether it matches the position of the magnetic scale in real time and perform automatic compensation, so the Y-direction accuracy can be controlled at 10um (0.01mm)

Input/Output Arm Pick&Place small size IC stability

Exceed series





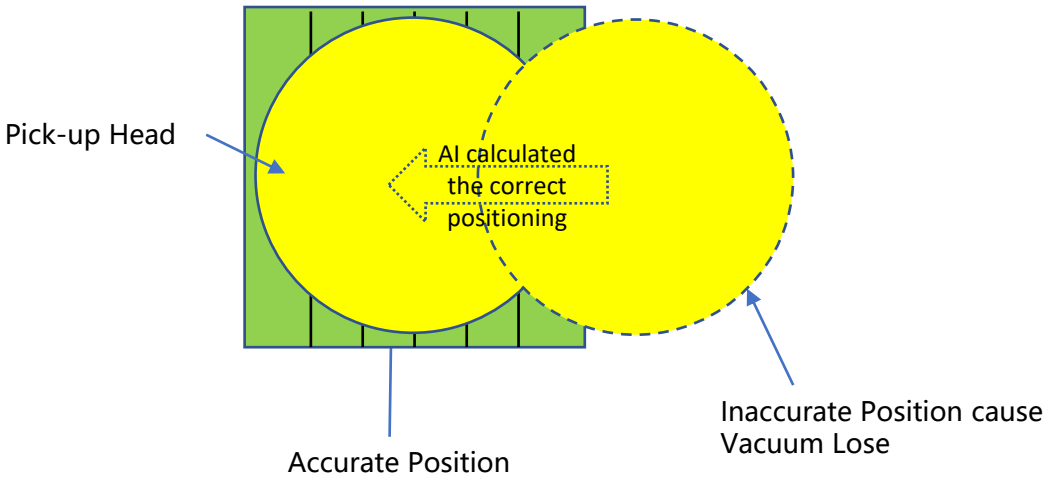


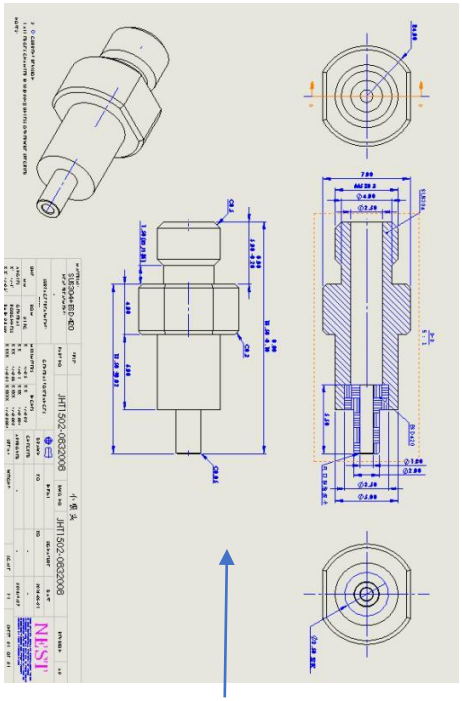
IC Size: 2x2mm(±0.01mm) Tray Pocket Size: 2.15-2.22mm Shuttle Pocket Size: Top3.5-3.55/Bottom2.1-2.15mm From Tray to Shuttle tip suction center position deviation is up to 0.23mm, it can be put into the shuttle pocket (Top 3.5-3.55 and 60° inclination design); From Shuttle to Tray, the center position is even smaller (0.16mm), and there is no problem with putting in Tray. In the same way, the Hotplate Pocket design tolerance is the same as Shuttle, which is also OK.

Input/Output Arm Pick&Place small size IC Stability

Exceed series

On the benchmark of high-precision positioning, JHT has developed AI operations to further ensure the accuracy of Pick & Place and overcome some larger warpages: When the Pick-up head picks up or place IC on Tray & Shuttle, Step motor will adjust the Pick up speed in multiple stages according to the changes in the Vacuum Generator real-time signal. If the Vacuum Generator signal has ms level fluctuations (Lose), the control system will XY position is fine-tuned, the most accurate position is calculated intelligently, and Pick& Place position is memorized;



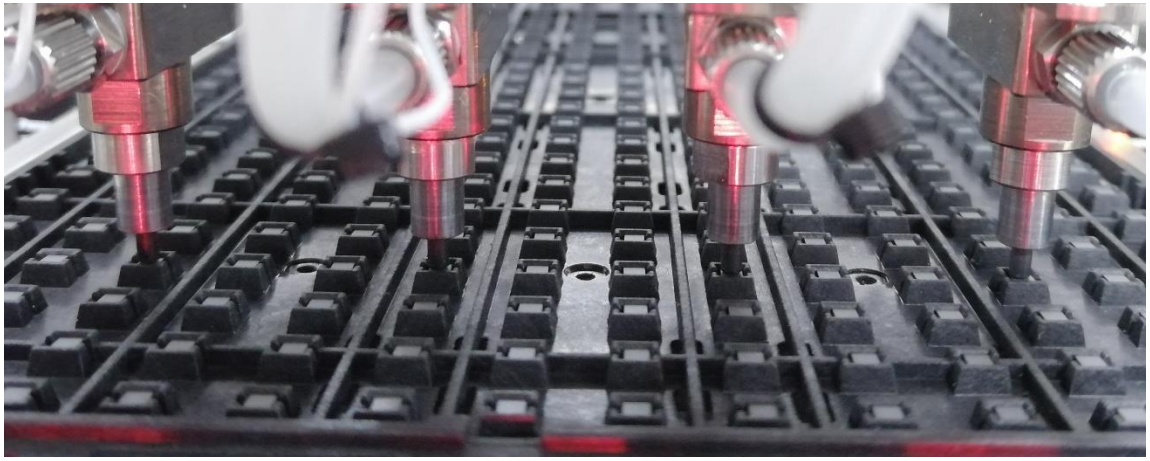


JHT Small Pick up Head φ1.2mm

Input/Output Arm Pick&Place small size IC Stability

Exceed series

When the Pick& Place position is correct, the Pick-up head Vacuum action matches the signal. When the Vacuum signal is stable, it automatically enters the next action.

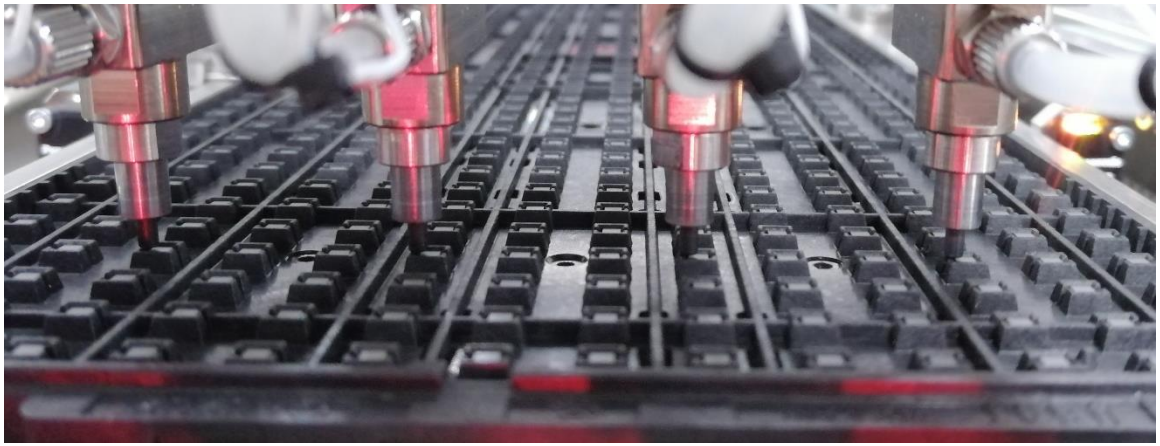


Pick up head 位置准确，Vacuum信号均为On

Input/Output Arm Pick&Place small size IC Stability

Exceed series

When the Pick& Place position and IC position deviate too much, the Pick-up head Vacuum action cannot match the signal normally, and there will be ms-level blicking. At this time, the control system adjusts the XY Serve Motor and Z Step Motor through AI calculations, and monitors the Vacuum in real time. Signal, when the Vacuum signal is stable, it will automatically enter the next action



Pick up head position deviation is too large, Vacuum signal is unstable

JHT EXCEED Series Handler Can Support 2mmx2mm Small Size Package.

We aspire to be a leader in semiconductor testing equipment

THANK YOU