



SEZ TOOLS, PARTS AND UPGRADES OVERVIEW

INTRODUCTION

OVERVIEW

We offer a variety of new parts, spareparts, refurbishment and modification of components, as well as full tool refurbishments for SEZ/LAM wet etch tools.

With over 25 years of experience at our disposal we are able to offer a wide spectrum of existing systems

Particularly we are still able to deliver parts for the first generations (RST100/101/102/103 – SP200/201/203/223 – wet master – 304 – 323 – 4200 – 4300 and DV Tools).

Refurbishments are carried out in our own clean room according to Semi Standard, and include installation and training.

We also offer conversions from 6" to 8" starting with generation 200 tools. (separate presentation available on request)

ABOUT US

VISION STATEMENT

“

To be the Supplier of choice for upkeep and Capacity extensions for SEZ used Wet Clean tools.

”

PRODUCT RANGE

- Chucks
- Bernoulli Gripper
- Eco Gripper
- Process Chambers
- Elevating Units
- Bearing Units
- PCB Repairs
- Flip Modules
- Chuck Brakes
- Single/Double sided End effector
- Loadports
- SEZ/LAM Spare Parts
- Used tool trading and turn key refurbishment

SEZ TOOLS – TURNKEY SOLUTIONS

SEZ REFURBISHED TOOLS

■ We take in the Tool/Process specs and design a system spec for a tool to refurbish and meet the customers specs. We work together from:

- Spec setting
- Tool configuration
- Tool sourcing (if non existent)
- Complete refurb and overhaul
- Installation and Process approval
- Warranty on the system and function

TOOL TYPES

- Da Vinci Series (DV) –
DV-Prime / DV3x / DV2x



- SP Series –
20x / 223 / 30x / 323 / 4x00



- Esanti Series



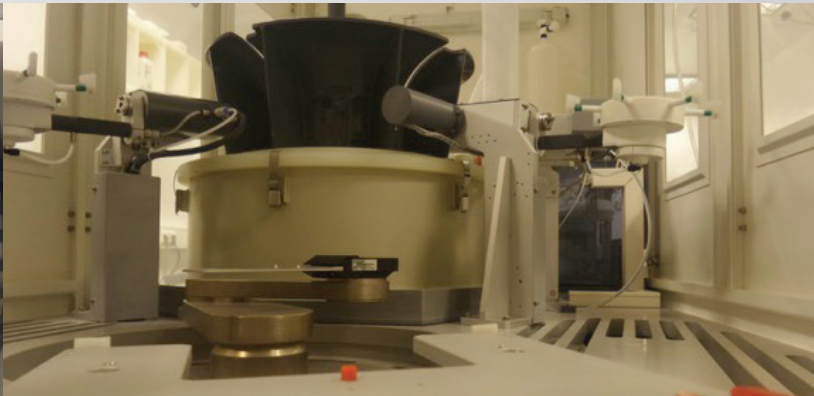
- RST Series – 100 / 101 / 102



SEZ REFURBISHED TOOLS



■ Pictures of a SEZ203 refurb job – before. All we had was the frame and this!

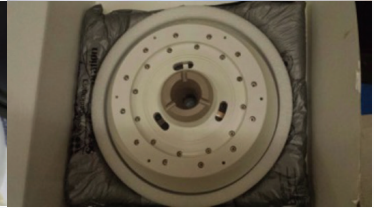
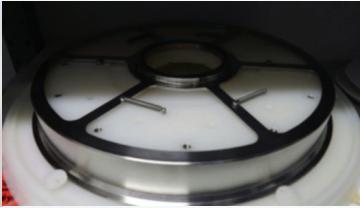
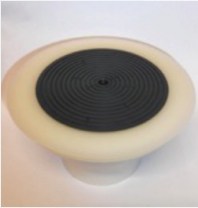


■ Pictures of a SEZ203 refurb job - finished

SEZ PARTS SUPPORT

CHUCKS

- 2" / 4" / 5" / 6" / 8" / 12" Standard Pin
- 6" / 8" / 12" NC-Chuck Pin
- 5" / 6" / 8" / 12" Pinless
- Undercut and Step Chucks



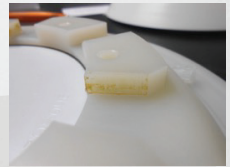
CHUCK QC CHECK

- We tightened the OEM Specs in terms of planarity, run out of total assembly
- We check each Chuck assembly before delivery to meet our tighter tolerances
- Against a fee we even can provide a test Wafer for the respective process desired



CHUCK REFURBISHMENT

BEFORE:



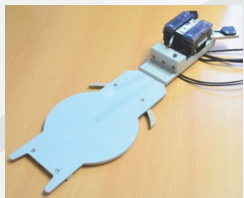
- Thorough check of all chuck parts
- Individual refurb offer for actual parts needed

AFTER:

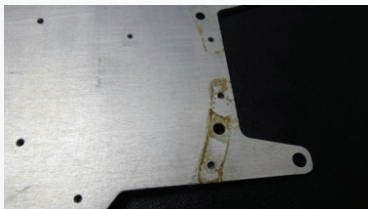
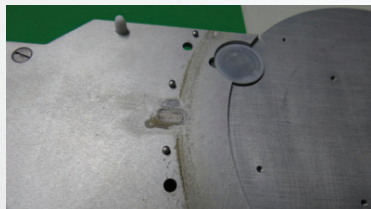


BERNOULLI GRIPPER 6" 18" 112"

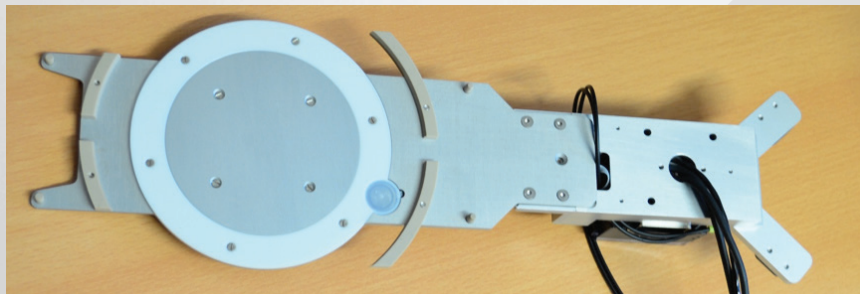
NEW OR REFURBED END EFFECTORS
AND GRIPPERS



BEFORE REFURBISHMENT



AFTER REFURBISHMENT

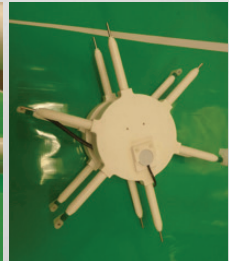


ECO GRIPPER

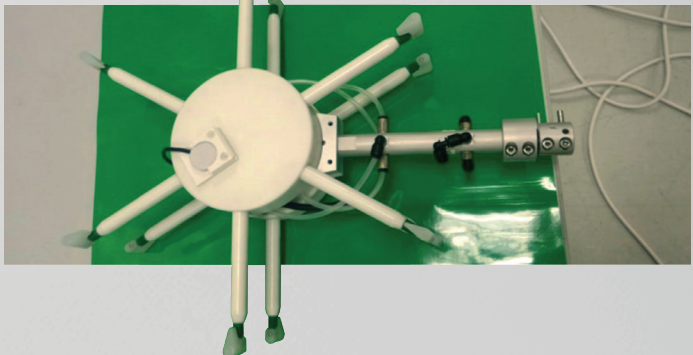
- New 5" / 6" / 8" / 12"
 - With Bernoulli
 - Standard ECO
 - Double ECO
- Spare Parts
- Refurbishments of existing grippers including testing and test protocol



EXAMPLE
ECO
GRIPPER
BEFORE
REFURB



EXAMPLE
ECO
GRIPPER
AFTER
REFURB



PROCESS CHAMBERS

- New 5" / 6" / 8" / 12"
- Complete Chamber or single parts
- Alterations and desired Improvements possible



ELEVATING UNITS

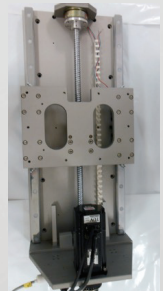
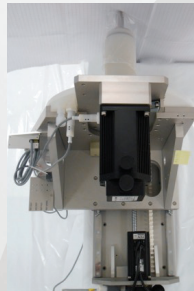
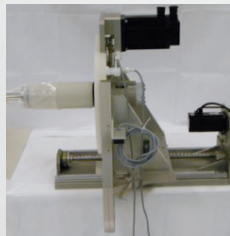
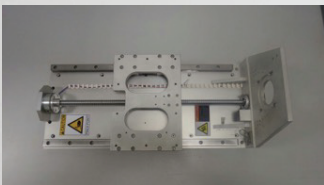
- 2nd Source new for all Models
- Also available as Exchange program or just refurb Service



BEFORE

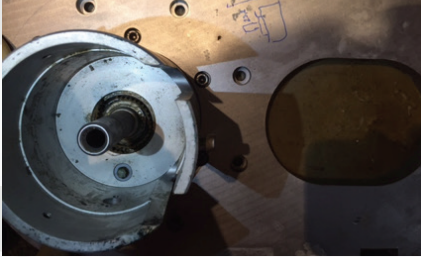


AFTER



BEARING UNITS

- 2nd Source new for all Models
- Also available as Exchange program or just refurb Service



BEFORE

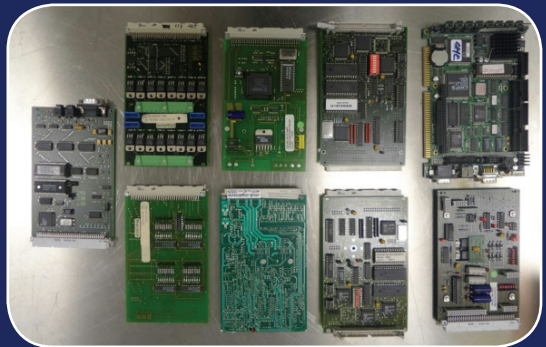
BEARING UNITS REFURB



AFTER

PCB REPAIRS

- We offer repair for the PCB Boards of SEZ tools.
- Send us your non working PCB's in and we repair those for you!



FLIP MODULES

- New or refurbished flip modules
- Refurbishment of Brooks robots



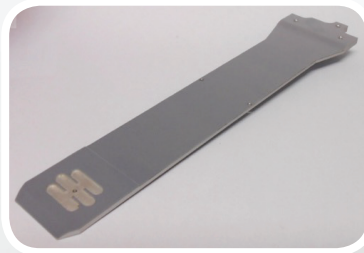
CHUCK BRAKES



Brake for 100/101/102

Brake for 200/201/203/223

SINGLE / DOUBLE SIDED END EFFECTOR



12' LOADPORTS

- OEM Loadports 12" refurbished for sales or exchange program
- Refurbishments of your Loadports



REFURB AND EXCHANGE OF ALL ROBOT TYPES FOR SEZ AND OTHER TOOLS

- All Robots for sales or exchange program
- Refurbishments of your Robots



SEZILAM SPARE PARTS



LOCK NUT (BEARING UNIT)



LABYRINTH SEAL



DISTANCE RINGS



BALL BEARINGS



BRAKE (DISASSEMBLED)



PREFLUSH MANIFOLD



ECO GRIPPER BERNOULLI CHUCK



PINLESS TOPPLATE



CHUCK PINS
(AND OTHER CONSUMABLE PARTS ALWAYS ON STOCK)





OTHER UPGRADES DEVELOPED BY PTW

- Improved suck back box that works even with ultra high viscosity medias
- Pump upgrade to get the Nippon pillar pumps out that
 - Improves process uniformity wafer on wafer
 - Reduces cost significantly
 - Reduces maintenance downtime significantly
- Speed pack Upgrade for Elevating unit
 - And many more!

ENGINEERING IDEAS AND INPUT

- If you have a specific problem, or
- If you have an Idea how to make something better by changing parameters or design or even material

Please do share with us – we are not a catalogue or partnumber but an Engineering Company and can develop specific solutions for specific problems with you together.

Even if its only a 1 pc 1 time off!



FOR SALES ENQUIRIES PLEASE CONTACT:

NAME: TORSTEN SEIFRIED
TELEPHONE: +65 90261590
EMAIL: torsten@ptwsingapore.com