SEZ TOOLS, PARTS AND UPGRADES OVERVIEW

INTRODUCTION
We offer a variety of new parts, spare parts, 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)
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 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
Pictures of a SEZ203 refurb job – before. All we had was the frame and this!

Pictures of a SEZ203 refurb job - finished
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" / 8" / 12"

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
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
BEARING UNITS

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

BEARING UNITS REFURB

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

SEZ/LAM SPARE PARTS

- Lock Nut (Bearing Unit)
- Ball Bearings
- Labyrinth Seal
- Distance Rings
- Brake (Disassembled)
- ECO Gripper Bernoulli Chuck
- Pinless Topplate
- Preflush Manifold
- Chuck Pins (and other consumable parts always on stock)
SEZ UPGRADES

OTHER UPGRADES DEVELOPED BY PTW

- Improved suck back box that works even with ultra high viscosity medias
- Speed pack Upgrade for Elevating unit
- Pump upgrade to get the Nippon pillar pumps out that
  - Improves process uniformity wafer on wafer
  - Reduces cost significantly
  - Reduces maintenance downtime significantly
- 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!
Name: Torsten Seifried
Telephone: +65 90261590
Email: torsten@ptwsingapore.com

For Sales Enquiries Please Contact:
PTW Asia Pte. Ltd. • 10 Ubi Crescent, #05-22 Ubi Tech Park Singapore 408564