



**COATER / DEVELOPER PLATFORMS  
CAPABILITY**

# ABOUT US

## VISION STATEMENT

“ To be the Supplier of choice for upkeep and Capacity extensions for Wet and Coating tools.

”

## PRODUCT RANGE

- Spin Motors
- Computer repair/exchange
- Robots
- End-effector assembly and blades
- Pumps
- Process bowls
- Used tool trading and turn key refurbishment
- Coater / Developer module refurbishment
- Hotplate / Cool plate refurbishment
- Process arm custom nozzles
- Gear unit Process arm
- Spray nozzle upgrade
- Load port adapter
- Flow control

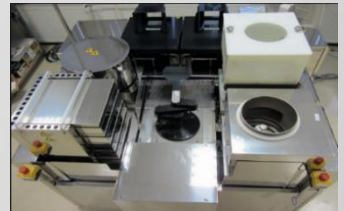
# COATER / DEVELOPER PLATFORMS TURNKEY SOLUTIONS

## COATER / DEVELOPER REFURBISHED TOOLS

- We take in the Hardware & Process specifications, and design a system for a tool to be refurbished that meet the customers requirement. We work together from:
  - Specifications setting
  - Tool configuration
  - Tool sourcing (if non-existent)
  - Complete refurb and overhaul
  - Installation and Process approval
  - Warranty on the system and function

## COATER / DEVELOPER PLATFORMS

Süss Microtec - ACS 300 / ACS 200 / Fairchild Falcon



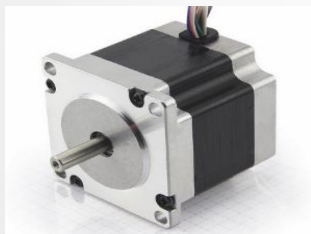
DNS Screen



# COATER / DEVELOPER PLATFORMS PARTS SUPPORT

## PARTS(OEM & 2<sup>nd</sup> Source New)

- Many other parts available for Falcon/Süss tools



ST5918M 2008-B  
Process arm



ST5918L 2008-A  
Process arm



Chucks



Bowls



Sensors



Cable chains



Flowmeter



Medium Valves



SM Cards



Libbert cards

# Süss / Falcon REPAIR AND UPGRADES

## PROCESSES



### REPAIR PROCESS



### MODIFICATION PROCESS

## SPINMOTOR AND CONTROLLER REFURBISHMENT



#### OVERALL BENEFITS:

- Reliable and comprehensive repairs
- Fast turnaround times with express option
- 1 Year warranty on Spin motor

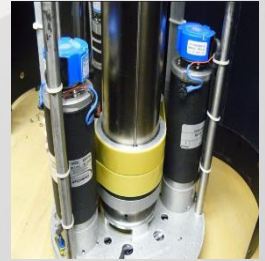


# Süss / Falcon REPAIR AND UPGRADES

## GENMARK ROBOT GP4S; GP4P ; GP7...

### ROBOT REFURBISHMENT

- PARTS REPLACEMENT
- STANDARD LEVEL TOLERANCES AND CLEARANCES
- SERVO MOTOR REPLACEMENT
- ELECTRICAL HARNESSING
- CYCLE TEST



## END EFFECTORS

- End-effectors 2nd source or complete redesign of any end-effectors possible



# Süss / Falcon REPAIR AND UPGRADES

## COATER/DEVELOPER REFURBISHMENT

- Refurbishment of all coater and developer modules
- Custom changes from liquid lines and anything else possible
- After refurbishment test of all functions and tightness test of liquid lines





# Süss / Falcon REPAIR AND UPGRADES

## GEAR UNIT PROCEESSARM REFURBISHMENT

- We also offer 2nd source new Processarms. Customers do not have to wait for the refurbishment.



## CHUCK AND BOWLS

- We can produce and re-design any kind of bowls and chucks.





# Süss / Falcon REPAIR AND UPGRADES

## PROCESSARM CUSTOM NOZZLE UPGRADES/CHANGES



Custom Nozzle  
inserts

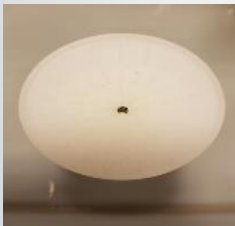


Custom Diameters with  
or Without  
Double Containment

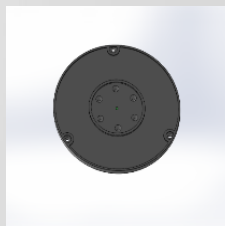


Custom Number and  
Order of Nozzles

## SPIN CHUCKS REPAIR AND RE-DESIGN



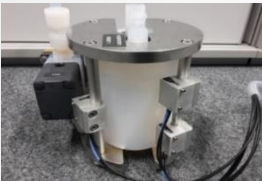
Repair and  
testing of  
existing chucks



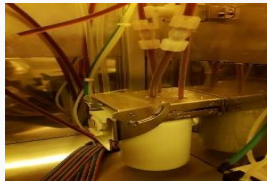
Re-design or new  
design of any  
chucks  
Find solutions for  
different  
problems

# Süss / Falcon REPAIR AND UPGRADES

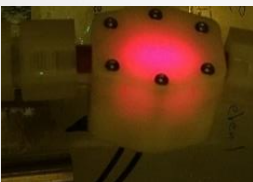
## WAFERTECPUMP SYSTEM MODIFICATION - REPAIR



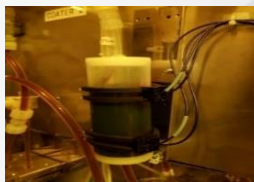
Custom trap tank  
solutions With  
sensor



Filter integration  
for HV medium



Bottle empty Tube  
Sensor upgrade



Changing or build up  
new pump system

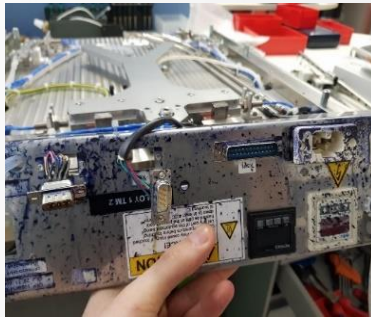


Custom Nozzle  
Setups



# Süss / Falcon REPAIR AND UPGRADES

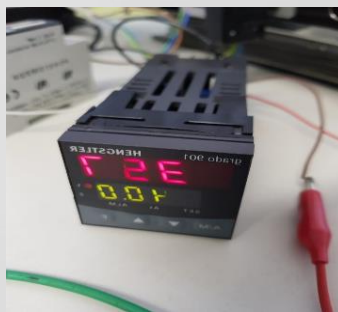
## HOTPLATE REFURBISHMENT DNS SCREEN - SUSS



Refurbish

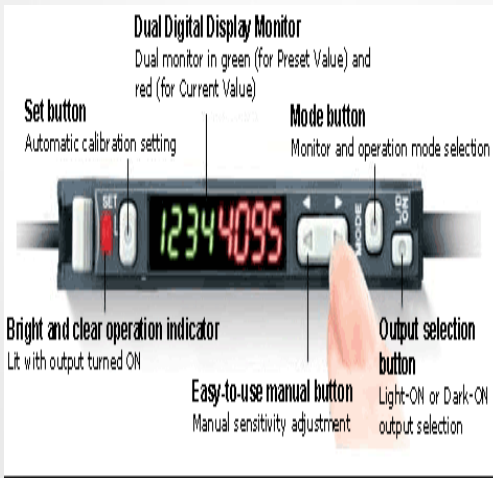


Test



# Süss / Falcon REPAIR AND UPGRADES

## FLOWMETER UPGRADE



Examble existing flowmeter



- Upgrade kit for existing flowmeters without flow monitoring (with Keyence sensor )
- Create alarms if flow is not correct during process

# Süss / Falcon REPAIR AND UPGRADES

## LOADPORT ADAPTER UPGRADE

Benefits of replacing existing 200mm Süss Adapter:

- For Wafermapping, no movement of wafers necessary
- No maintenance of cylinders or mechanical part necessary
- Solution for particles on wafer. No mechanical movement above the wafer



Adapter for Brooks Loadboard on ACS300 for 200mm production  
For Wafer mapping, sensor holder must be changed

## SPRAY NOZZLE UPGRADE

### Quality Increase

Fixed spray angle and defined drop size  
Easy mechanical adjustment of the nozzle  
Electromagnetic vaporization  
Minimal mist and over-spray - Reduction of spray dust  
Monitoring and flow detection with alarm

### Cost Reduction

Sprayed solution is delivered to the target with minimal waste  
Reduction of liquid consumption (up to 50%)  
Reduction of process time ( depends on actual system )  
Reduced Exhaust needed  
No N2 needed for Vaporization  
Only 1 nozzle for 4/5/8 inch . 2 Nozzle 12 inch



Control Unit



Spry Nozzle

# Süss / Falcon REPAIR AND UPGRADES

## SPRAY NOZZLE UPGRADE

MeSpray Nozzle Upgrade dium Reduction: Change from Existing Spray Nozzle with N2 to New Spray Nozzle

### Old System

- 8" : 2 Nozzles 2x 70ml/min developer medium 80 sec Stop Medium 1x 200ml/min 14sec Consumption : 186ml **0,65\$** / Wafer
- 12" : 3 Nozzles 3x70ml/min developer medium 80 sec Stop Medium 1x 200ml/min 14sec Consumption: 280ml **0,98\$** / Wafer

### New System

- 8" : 1 Nozzles 1x 70ml/min developer medium 80 sec Stop Medium 1x 100ml/min 14sec Consumption : 93ml **0,32\$** / Wafer
- 12" : 2 Nozzles 2x70ml/min developer medium 80 sec Stop Medium 1x 200ml/min 14sec Consumption : 186ml **0,65\$** / Wafer

Assumed Price / Liter 3,50\$

# WHAT WE CAN DO FOR PROACTIVE SERVICES

## COST REDUCTION PROGRAM

- Reversed engineering process on applicable parts
- Prompt spare outsourcing at lower cost
- Competitive from any other supplier
- Supports “WIN-WIN” situation to both parties

## SPRAY NOZZLE UPGRADE

- Low medium consumption(~50%)
- Maintenance free
- Quality increase

## ROBOT REFURBISHMENT

- GP4P
- GP7
- GP4 / GP4s
- Full refurbishment
- Full testing after refurbishment

## SPARE PARTS READINESS

- Support most on Non-consumable local and overseas inventory as defined
- Lower cost on consumable parts local and overseas inventory
- Parts refurbishment
- Parts flexibility - OEM or PTW Asia

## TRAINING SUPPORT

- Training at our facility is also available
- On site training at lower cost

## OUR GAME PLAN

- ✓ Technical support : 24/7
- ✓ Includes Major Planned Maintenance and technical troubleshooting services
- ✓ Bring in Legacy tools in local warehouse for part exchange program
- ✓ Supports CIP to improve tool utilization performance





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