

# WAFER BATCH TRANSFER SYSTEM

**FULLY AUTOMATED SYSTEM DESIGNED FOR TRANSFERRING, SPLITTING, MERGING OR FLIPPING 8" WAFER FROM THE INPUT CASSETTE TO THE OUTPUT CASSETTE IN BATCH MODE**



For further inquires, please contact:

**CREDEN MECHATRONIC SDN BHD** No.9, Jalan Juruukur U1/19, Section U1, Hicom Glenmarie Industrial Park, 40150, Shah Alam, Selangor DE, Malaysia

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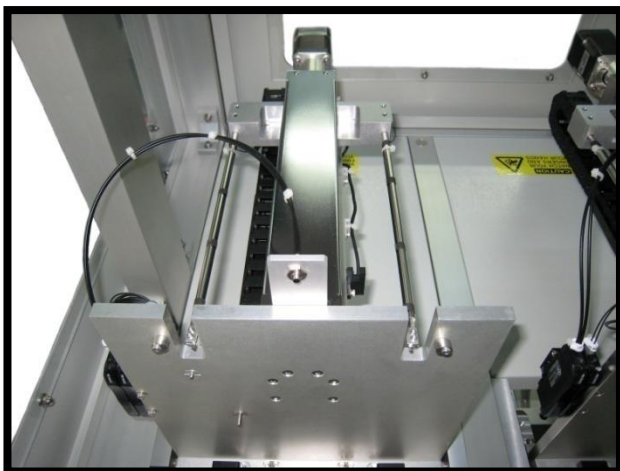
## SYSTEM DESIGN



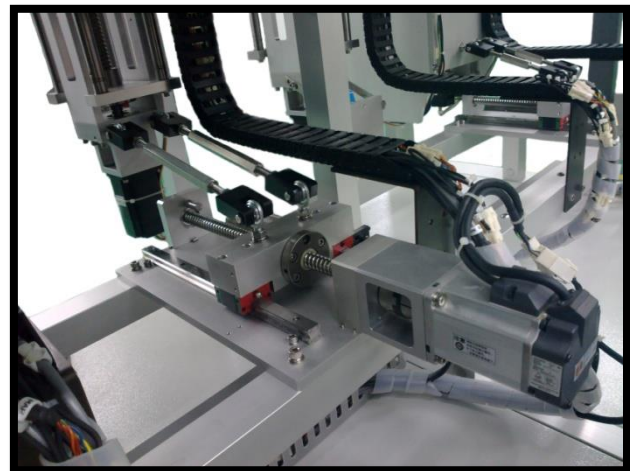
**FOUR LOAD PORTS AVAILABLE FOR INPUT CASSETTE WITH 26-SLOT, 25-SLOT AND 13-SLOT**



**HIGH PRECISION GRIPPER DESIGNED FOR WAFER TRANSFERRING, SPLITTING, MERGING AND FLIPPING PROCESS**



**RELIABLE CASSETTE MAPPING SENSORS, WAFER PROTRUDE SENSOR AND CASSETTE PLACEMENT SENSOR**



**PROGRAMMABLE AND HIGH PRECISION BALL SCREW AND SERVO MOTOR USED IN EACH LOAD PORT**

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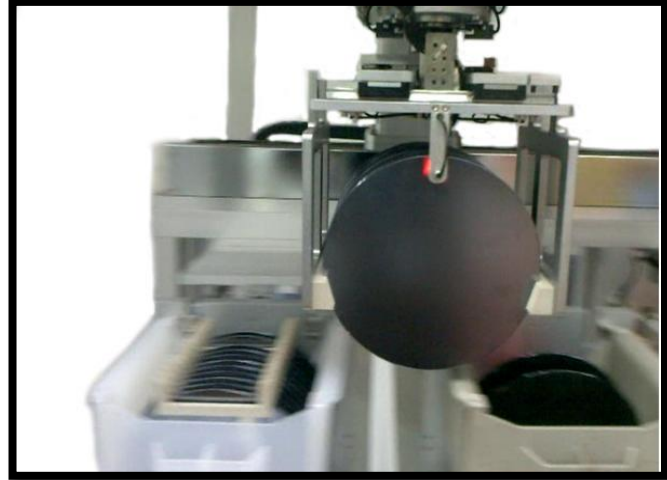
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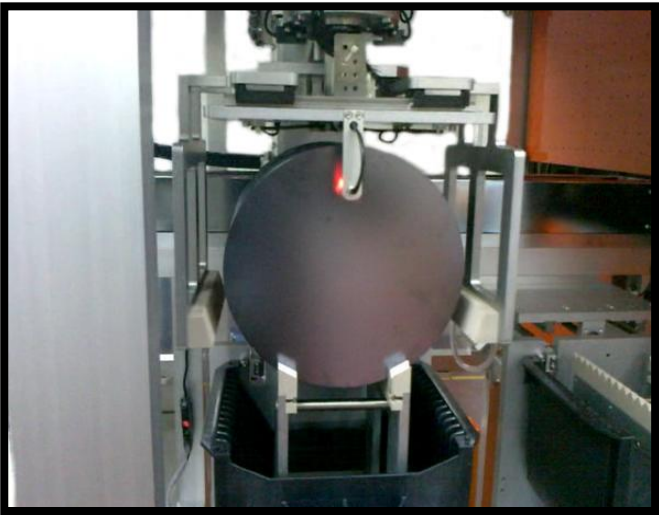
# WORKING CONCEPT & PROCESS FLOW



**1. THE WAFER PUSHED BY COMB VERTICALLY AND GRIPPER WILL HOLD SELECTED WAFERS THAT NEED TO TRANSFER (SELECTION AVAILABLE ON EITHER 13 OR 25 WAFERS)**



**2. SELECTED WAFERS WILL BE TRANSFER BY GRIPPER MODULE**



**3. THE COMB WILL AUTOMATICALLY MOVING UP AND SECURE THE WAFER AFTER REACHED THE OUTPUT PORT**



**4. GRIPPER RELEASED AND WAFERS MOVING DOWN TO OUTPUT PORT GUIDED BY COMB.**

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## SYSTEM SPECIFICATIONS

Wafer Size	<ul style="list-style-type: none"> <li>150mm &amp; 200mm Silicone Wafer</li> </ul>
Input Cassette (Type)	<ul style="list-style-type: none"> <li>SEMI Standard Open Cassette with 26-Slot</li> <li>SEMI Standard Open Cassette with 25-slot</li> <li>SEMI Standard Open Cassette with 13-Slot</li> </ul>
Load Ports	<ul style="list-style-type: none"> <li>Four Load Ports Available With Three Inputs Load Ports And One Output Load Port</li> <li>Equipped With High Precision Sensor For Wafer Mapping Detection And Cassette Placement Detection</li> </ul>
Gripper Module	<ul style="list-style-type: none"> <li>Motorized Gripper Module Equipped With Two 25-Slots Combs For Wafer Transferring, Splitting, Merging And Flipping Process</li> <li>Equipped With High Accuracy Reflective Sensor For Wafer Protrusion Detection.</li> </ul>
Comb Materials Used	<ul style="list-style-type: none"> <li>PEEK (Material Properties: High Strength Alternative To Fluoropolymers With An Upper Continuous-use Temperature Of 250°C (480°F). PEEK Exhibits Excellent Mechanical and Thermal Properties, Chemical Inertness, Creep Resistance at High Temperatures, Low Flammability, Hydrolysis Resistance, And Radiation Resistance)</li> </ul>
Standard WHG300G Software Application	<ul style="list-style-type: none"> <li>Product Recipe Managed By User Friendly GUI Software Run Under WIN XP Pro Base Control Software</li> <li>TCP/IP Networking For Interface With Host Map Server, And Storage Of Map Data Over The Network</li> <li>SECS/GEM Communication Tools (Optional Item)</li> <li>Sorting Method</li> <li>1. Split From 25-Slot Cassette to 2x13-Slot Cassette</li> <li>2. Flip From 2x13-Slot Cassette to 2x13-Slot Cassette</li> <li>3. Flip And Merge From 2x13-Slot Cassette to 25-Slot Cassette</li> <li>4. Merge From 2x13-Slot Cassette to 26-Slot Cassette</li> <li>5. Split From 26-Slot Cassette to 2x13-Slot Cassette</li> <li>6. Flip From 2x13-Slot Cassette to 2x13-Slot Cassette</li> <li>7. Merge From 2x13-Slot Cassette to 26-Slot Cassette</li> <li>8. Transfer/Flip From 26-Slot Cassette to 25-Slot Cassette</li> <li>9. Transfer/Flip From 25-Slot Cassette to 26-Slot Cassette</li> </ul>
System Control & User Interface	<ul style="list-style-type: none"> <li>Standard Industrial PC And LCD Wide Screen Monitor</li> <li>OS Windows XP Pro</li> <li>CREDEN Hybrid Motion Control And IO Card</li> <li>Hepa Filter System</li> </ul>
Utility Requirements	<ul style="list-style-type: none"> <li>Power: 230V AC +/- 10% @ 13A 50HZ</li> <li>Power Core: Three Pins With Single Phase</li> <li>Room Temperature: 20°C - 28°C</li> </ul>
Foot Print	<ul style="list-style-type: none"> <li>1920 mm (L) x 900 mm (W) x 2050 mm (H)</li> </ul>

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