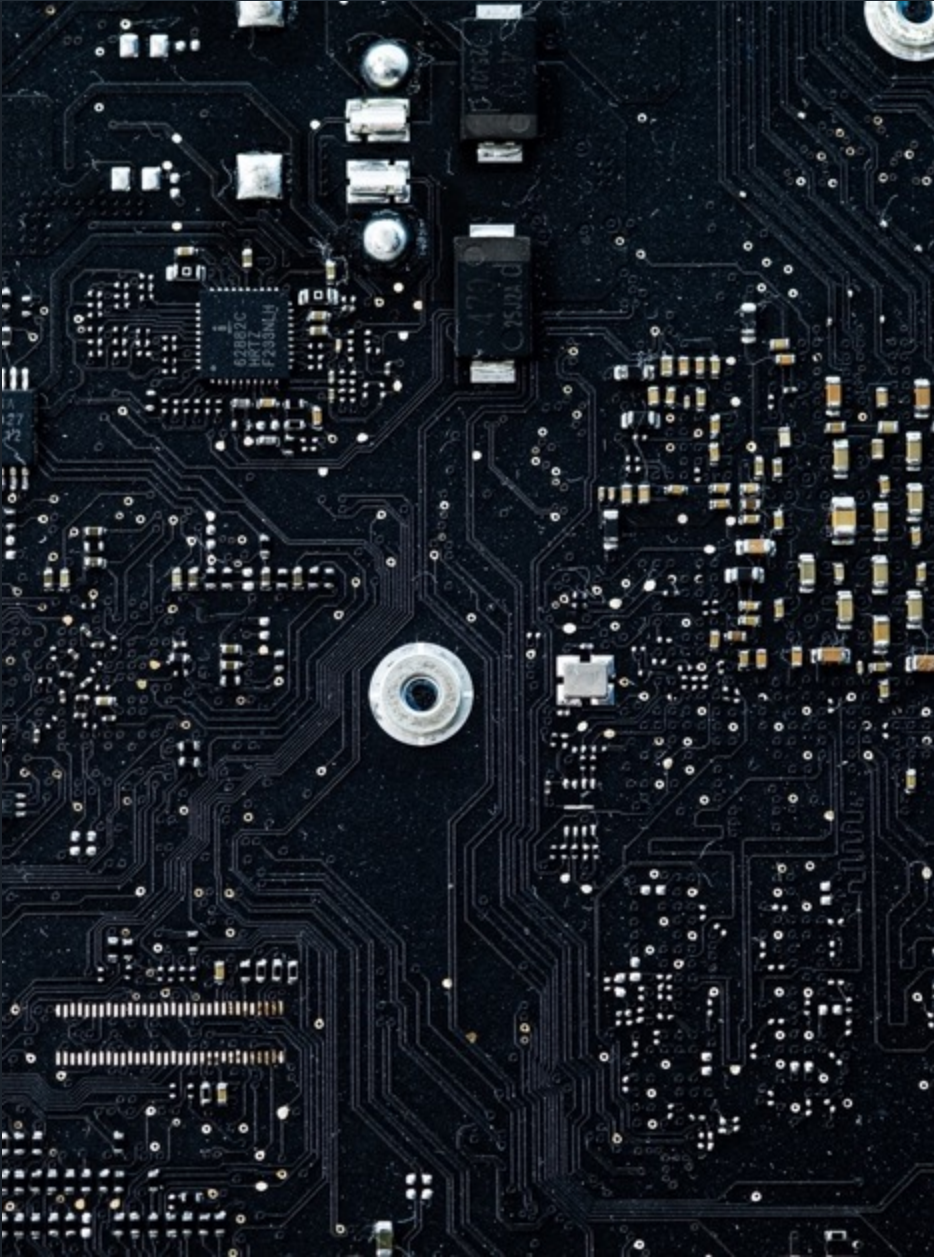




# Vishesh Innovative Technologies Pvt Ltd

CORPORATE PRESENTATION

VIT Corporate Presentation  
2022 / Version 3.0 / Controlled Document



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# Great Technologies Start With Great Processes

Welcome to VISHESH INNOVATIVE TECHNOLOGIES Pvt Ltd

VIT is ISO 9001:2015 and IATF 16949:2016 Certified by TÜV Rheinland (I) Pvt. Ltd.

## About Us



Established in 2013



Investment in excess of  
₹ 4,00,00,000



Located in Prime  
Industrial Hub



State of Art 25000 Sq Ft  
Work area spread  
across 2 floors



ISO 9001:2015 & IATF  
16949:2016 Certified by  
TÜV Rheinland (I) Pvt. Ltd.



Total manufacturing  
solution to cover the  
entire bandwidth of  
Electronic Manufacturing  
Services and support  
services



Integrated ERP package  
for material and system  
handling





## Our Capabilities

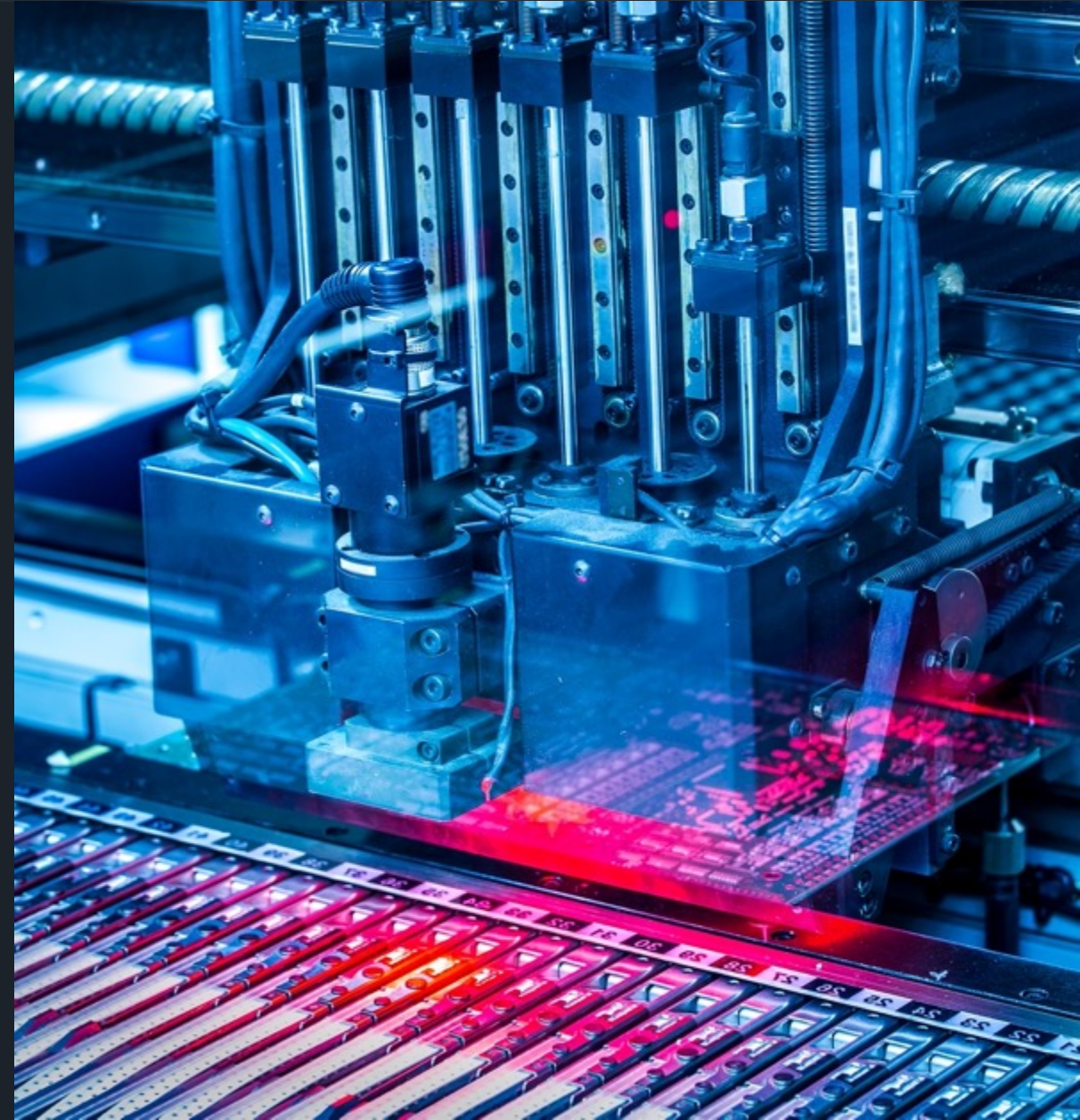
- In-house capability of SMT (Surface Mount Technology) and THT (Through - Hole Technology) assembly
- PCBA (Printed Circuit Board Assembly), Full Box Build Manufacturing.
- We have combined skill sets in manufacturing, testing and parts development.
- We adopt good manufacturing practices and tools such as 5S, SPC, KAIZEN, FMEA and Six Sigma practices to deliver the quality products.
- SMD component assembly such as 0201~ 0.3mm fine pitch QFP, BGA's, LGA's, CSP's.



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## Our Services

- Quality incoming inspection of PCBA and testing
- Complete SMD and PTH PCB assembly
- Full Turnkey projects
- Testing and Programming as per customer requirement
- Box Build Assembly



A vertical decorative image on the left side of the slide. It shows a hand holding a circuit board, with various electronic components and symbols overlaid on it, including a large circular gauge-like element in the center.

# Process Advantage

- **Six Sigma Process**

VIT adheres to Six-Sigma process standards to manufacture quality products

- **Good Manufacturing Processes**

VIT adopts good manufacturing practices and tools such as 5S, SPC, KAIZEN, FMEA and Six Sigma practices to deliver quality products

- **Regular Audits**

VIT proactively practices periodic quality audits and Small Group Activities (SGA's), effectively supplemented by management review meetings

- **Proactive DFM Designs**

VIT gives DFM guidelines to Customer upfront to improve design constraints and reduce manufacturing lead time





# Our Focus Industries



Defence &  
Aerospace



Power infrastructure  
(Energy meters, Power  
drivers)



Wifi Modules and  
IoT modules



Industrial  
Automotive  
(Clusters)



Lighting Industry

# Facilities

- 25000 Sq.Ft. facility in a convenient location for ease of access to the customers
- Production floor with complete ESD flooring
- Highly advanced two automatic Siemens SMT Lines of 170k (1.7 Lacs) CPH
- Standalone Third line with 30k CPH
- 125 HP Power
- 30 KVA UPS Power Backup
- 2 Compressors with 70 CFM for 2 SMT Lines
- 125 kVA Diesel Generator - Kirloskar make [Automatic]
- High Capability Lead free Electrovert Omniflo 7 Reflow Oven
- EMS Wave soldering machine having capability of producing 6000 boards (100mm length) per day
- Highly skilled employees
- Internal training facility by IPC certified trainer for employees on soldering skills and QC standards







# Facility Specification

## DEK 265LT

- Screen Frames: (29" X29")
- Print image justification: Front, centre
- Print area: 510 X 489 mm (20 x 19.25 in.)
- Print stroke: 56 – 566 mm (2.2 – 22.3 in )
- Board handling:
  - Minimum size: 70 x 38 +/- 0.5mm (2.8 x 1.5 +/- 0.02 in.)
  - Maximum size: 510 x 508 +/- 0.5mm (20.1 x 20 +/- 0.02 in.)
- Thickness: 0.4 – 6.4 mm (0.016 -0.25 in ) +/- 10%
- Fiducial size: 0.5 – 3.5mm (0.02 – 0.14 in)
- Alignment repeatability: 6 Sigma at 25 microns
- Print accuracy: 3 Sigma at 25 microns.
- New product setup: 10 minutes
- Temperature control unit: 10- 35 Degree centigrade



# Facility Specification

## PCB LOADER LSB 03 ASYS

- The stack is processed from above which ensures gentle separation of the PCBs.
- The machine can be equipped with various methods of separation depending on the type of PCB used.
- Colour display with graphical user
- interface Product parameters can be changed during running operation
- Product memory function
- Separation with either a clamp or vacuum mechanism  
Processing of stack from above PCB alignment before separation
- No PCB length or thickness data required
- Electrical width adjust 2 colour signal lamp (LED) and alarm horn
- Small footprint



# Facility Specification

## SOLDER PASTE PRINTER INF 01 DEK

- Basic Solder Paste Inspection Features: Green Camera, Temperature and humidity sensor, 580mm x 508mm long board handling, Squeegee pressure feedback
- Board Clamp Regulator, Standard - magnetic pin tooling, Tooling Deviation Monitor enabled,
- Small 0.1mm Fiducial, Blue Under Stencil Cleaner W/D/V
- Specifications:
  - PCB Size: 50 mm to 508 mm
  - ASM: Adjustable Stencil Mount With Additional Adaptor
  - This is a Single / Dual Track Conveyor

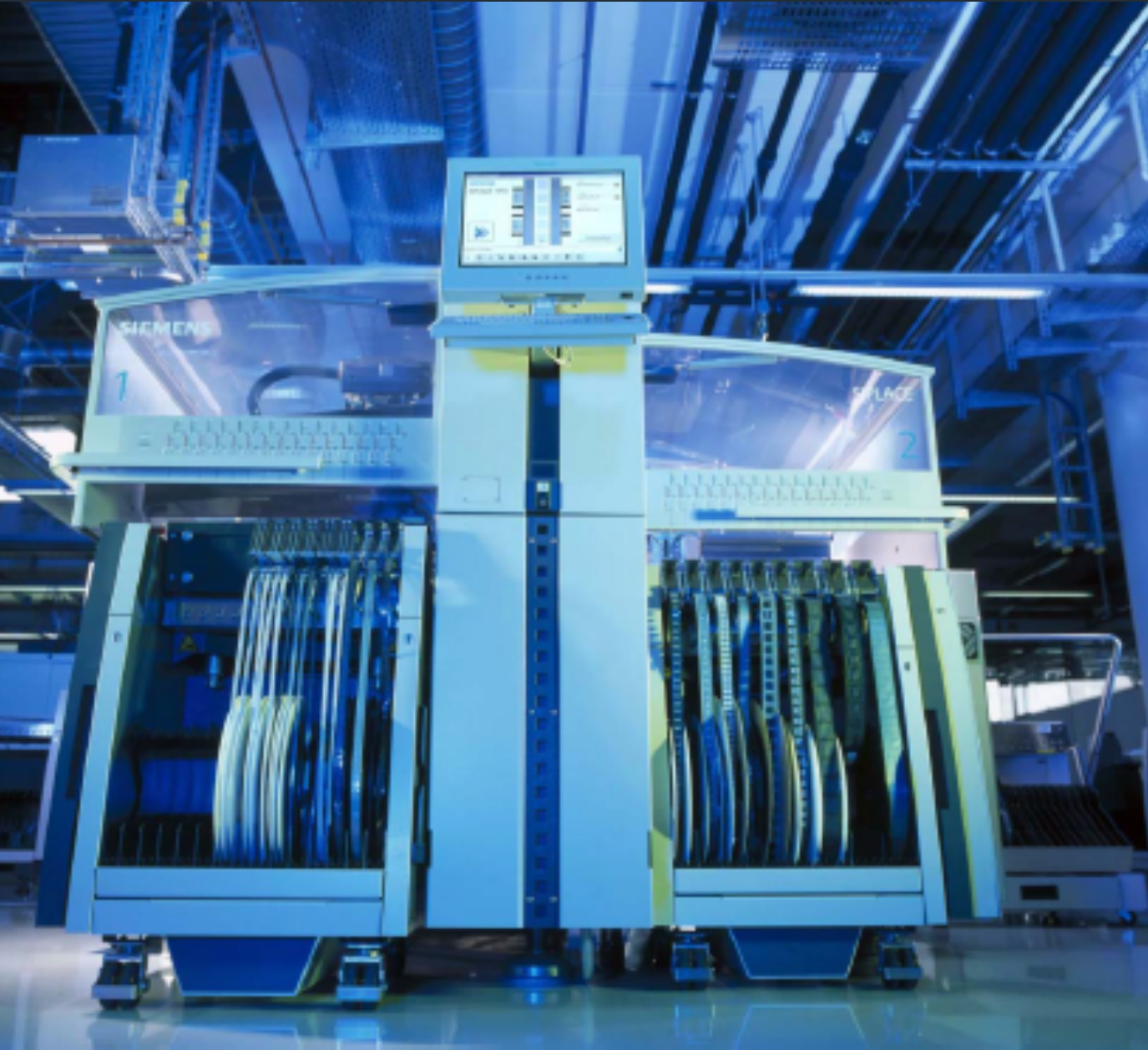




# Facility Specification

## CHIP SHOOTER SIPLACE HS60 - SIEMENS

- Head type: RV12 heads
- Number of gantries: 4Component range: 0.6 x 0.3 mm (0201) to 18.7 x 18.7 mm
- Dimensions machinery handles: 50 x 50mm to 368 x 460 mm
- Feeding capacity: 144 tracks, 8mm tape
- Component table details: Quick changeover table with integrated wheels, reel holders and scrap bin
- Feeder module type: Tapes, Bulk cases, surf tape feeders
- Specifications: Very high speed with both, accuracy and flexibility
- Equipped with 4 X-Y-main gantries; each gantry features a star-shaped 12-Nozzle Collect & Place Head
- Placement rate of 60,000 cph



# Facility Specification

## CHIP SHOOTER SIPLACE HF/3 - SIEMENS

- Higher placement rate and greater flexibility when configuring the placement heads
- Linear drives on every gantry Gantry extensions constructed from carbon fiber composite, 5 times lighter than steel and twice as rigid → increased speed and accuracy
- Short down times for refill-ing or splicing
- Even the smallest components (e.g. 0201) are picked up reliably
- Minimal traversing paths
- PCB thickness: 0.3 - 4.5 mm Component feeding: 4 component changeover tables with tape roll holders and integral waste containers 15 slots, 30 mm wide per changeover table or matrix tray changer, rather than a CO changeover



# Facility Specification

IC PLACER SIPLACE HF/3 WITH MTC 2- SIEMENS

- Linear motor positioning(x, y, z) for high placement
- 180 feeder inputs to shorten changeover time
- Advanced component vision camera
- Proven revolver head places







# Facility Specification

## REFLOW OVEN Speedline Omni excel 7 ELECTROVERT

- 10 heated zones & 3 cooling zones
- Pressurized auto chain oilers
- SMEMA
- Left to Right
- Edge with center rail support
- Air Cooled, no chiller required



# Facility Specification

## ULTRA SONIC WELDING MACHINE HPW2AN - JOHNSON PLASTOSONIC

- Frequency: 20 KHz
- Power Source: Electric
- Phase: Single Phase
- Voltage: 230 V AC
- Speed: 2800 RPM
- Ultrasonic Power: 1500 W
- Automation Grade: Automatic
- Model Number: UPWM-2015
- Timer Least Count: 0.01 Sec



# Facility Specification

## SIPLACE 80S20 MACHINE

- Placement Rate: Max. 20,000 components per hour
- Placement Accuracy:  $\pm 90 \mu\text{m}$ , 4 Sigma,  $\pm 67.5 \mu\text{m}$ , 3 Sigma
- Component Vision System: For component recognition
- PCB Vision System: For PCB and bad board marking
- Range of Components: 0.6 x 0.3 mm (0201) to 18 x 18 mm – PLCC 44, incl. DRAM, BGA, CSP
- Component Height: Max. 6 mm
- Component Feeder Capacity: 80 tracks 8 mm tapes
- Feeder Capacity: Tape feeders (8 mm – 32 mm)
- Feeder type: Tray, Reel feeders
- PCB Transport: PCB Size from 50 mm x 50 mm to 460 mm x 460 mm
- PCB Changeover Time: 2.5 sec





# Facility Specification

## SIPLACE F4 MACHINE

- Placement Rate: Max. 8000 components per hour
- Placement Accuracy:  $\pm 52.5 \mu\text{m}$ , 4 Sigma,  $\pm 70 \mu\text{m}$ , 3 Sigma
- Component Vision System: For component recognition
- PCB Vision System: For PCB and bad board marking.
- Range of Components:  $0.6 \times 0.3 \text{ mm}$  to  $32 \times 32 \text{ mm}^2$
- Component Height: Max. 12 mm
- Component Feeder Capacity: 80 tracks, 8 mm tapes
- Feeder Capacity: Tape feeders (8 mm – 44 mm)
- Feeder type: Reel, Tray, Vibratory feeders
- PCB Transport: PCB Size from  $50 \text{ mm} \times 50 \text{ mm}$  to  $460 \text{ mm} \times 460 \text{ mm}$
- PCB Changeover Time: 2.5 sec

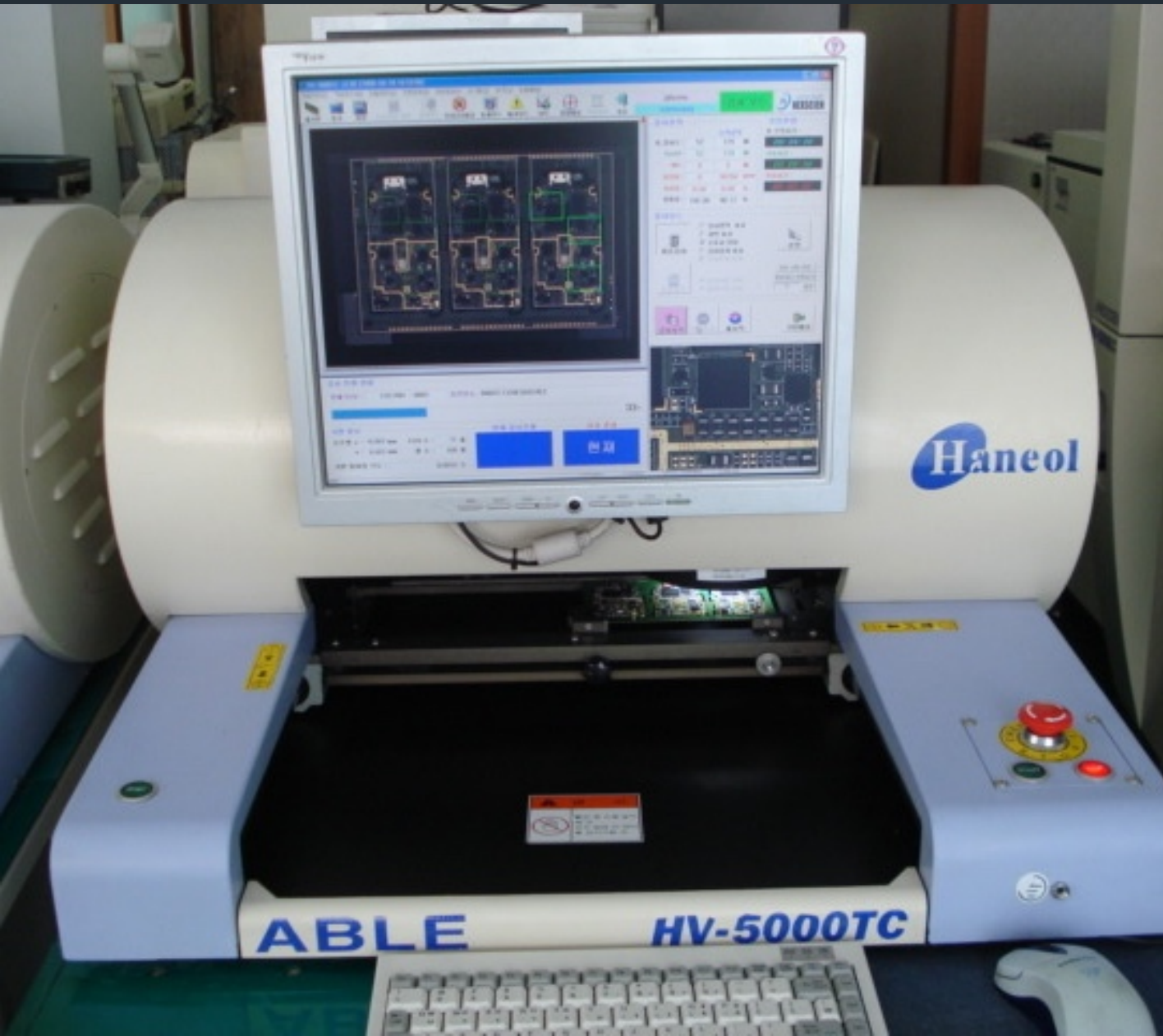


# Facility Specification

## OMNIFLOW 7 REFLOW MACHINE

- PCB Size: 60mm – 510 mm
- Inlet height: 905mm +/- 10
- Number of zones: 7 heating zones + 2 Cooling zone (Lead free compatible.)
- Nitrogen option: N2 option available
- Cooling system: Chiller unit
- Component Height: Max. 12 mm
- Support: Mesh and Chain
- Pass through height (Top/bottom): 30/30mm
- Maximum load: 3 Kg



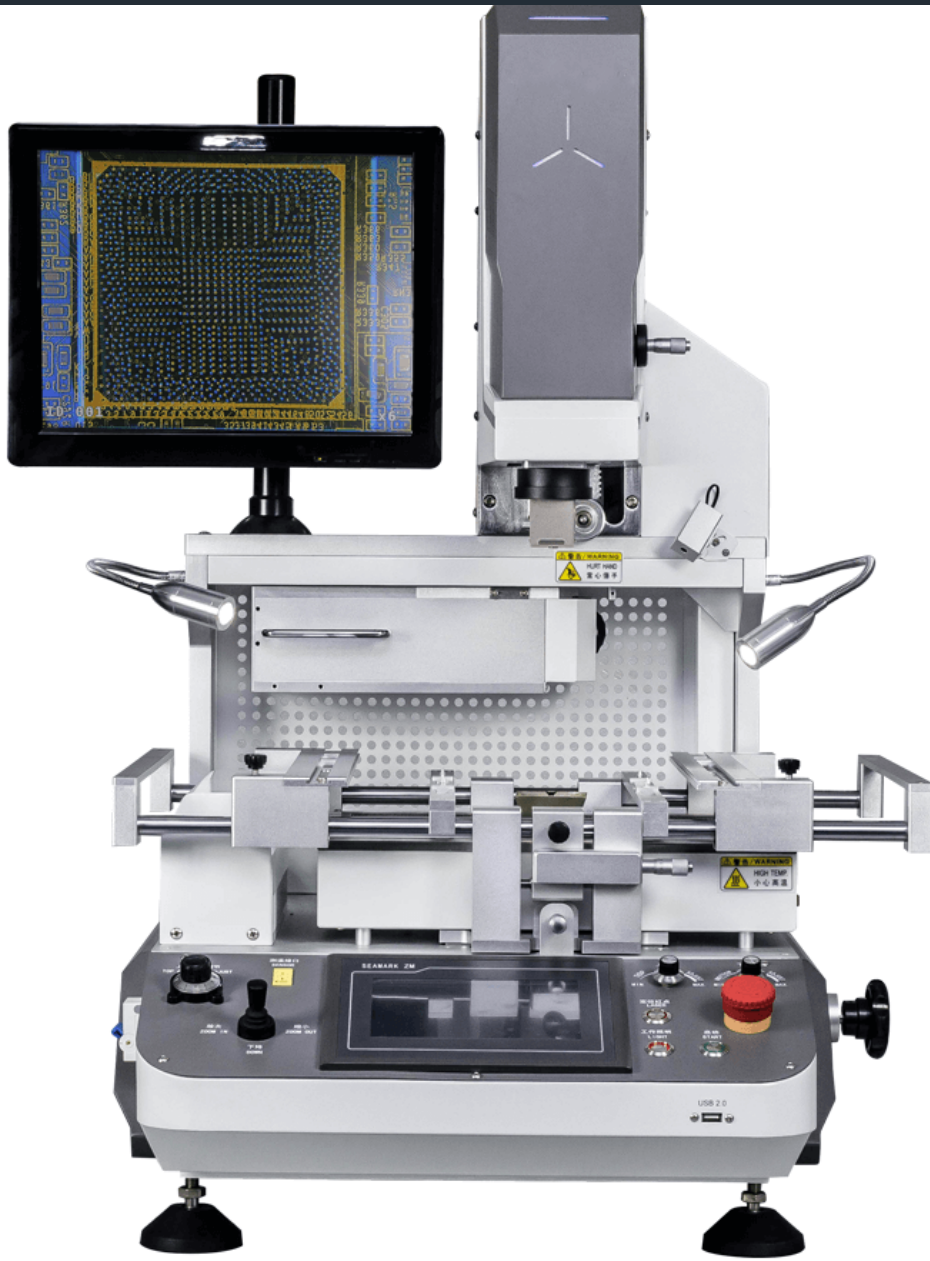


# Facility Specification

## HANEOL HV-5000 TC

- Inspection Range: Chip, flexible components placement and post re-flow soldering inspector (Table type; Desktop type)
- Programming
  - Auto teaching with CAD, Pick and Place Machine Data
  - Inspect COF (Chip on Film), 0603 chip, 0.3 mm fine pitch IC soldering state
  - SPC (Statistical Process Control) data support can ensure efficient process management.





# Facility Specification

## BGA REWORK MACHINE

- Make: Seamark ZM
- Model: ZM-R7220A
- PCB size: Min 6×6 mm , Max 415×370 mm
- Heaters: Top hot-air heater, Bottom hot-air heater, Bottom IR heater
- Temperature: Top heater and Bottom heater max 350 degree
- Component size: Max 60×60mm Min 2×2 mm
- Cooling system: Fan unit
- Others: Both side camera (Bottom & Top)



# Facility Specification

## EMS WAVE SOLDERING

- PCB Size: Min 50 X 50mm & Max 300 X 410 mm
- Number of zones: 2 heating zones (1 IR Heater & 1 Hot Air Both PID Controlled (Leaded compatible.)
- Flux unit: Foam fluxer, bath capacity 5 Liters(1.1gal)  
Required external compressed air.
- Soldering Pot: Soldering Pot capacity 170kg(370lb)  
Roll out solder pot, O-wave option for SMT soldering
- .Conveyor: Pallet(carrier) type conveyor



# Facility Specification

## AIR COMPRESSOR

- Make: Chicago Pneumatic CPA 20D
- Compressor Type: Rotary Screw
- Maximum working pressure in Bar: 7 bar
- Functionality: Direct Drive Screw Air Compressor
- CFM: 71 Noise Level: 68 dB
- Other Features: The motor that is used in this model has a power of 20 H.P. and this show how effective and powerful is the equipment, it provides a stable and compressed source of air, An automatic drain, An Inline filter





# Facility Specification

## DIESEL GENERATOR

- Machine: Kirloskar KG1-125W
- Fuel Type: Diesel
- Phase: Three Phase(415V)
- Power Rating Range: 125KVA
- Fuel Tank Capacity Range: 200 Litres
- Noise Level: < 75 dBA
- Cooling System: Air Cooled and Water Cooled
- Battery Capacity: 115 Ah
- Other Features: Load dependent start stop, auto synchronization, remote monitoring and control are some of the other features of this set. The engine has 4 cylinders and offers 152 BHP, High Reliability, High Durability



## Facility Specification

### UPS

- Make: Hykon GETT 30000
- Capacity: Power 30 KVA
- Output Voltage: 380 / 400 / 415 VAC ; 3 Phase, N
- Battery Test: Automatic and manual battery test system
- Battery Charge Time: 8 hours to 90% capacity after deep discharge
- LED Display: Load on Bypass, Load on UPS, Alarms and operation by battery leds.
- Alarms : Battery Low, Over Load Noise Level < 60 to 62 dB (1 Meter)
- Cooling: Fan
- Other Features: Battery low alarm occurs on the LCD. Sound alarm is given after 15 second



# Why Choose Us?

Cost effective solutions

DFM guidelines for  
effective manufacturing

Absolute adherence to  
delivery timelines

Qualified and experienced  
engineering staff  
monitoring product  
quality

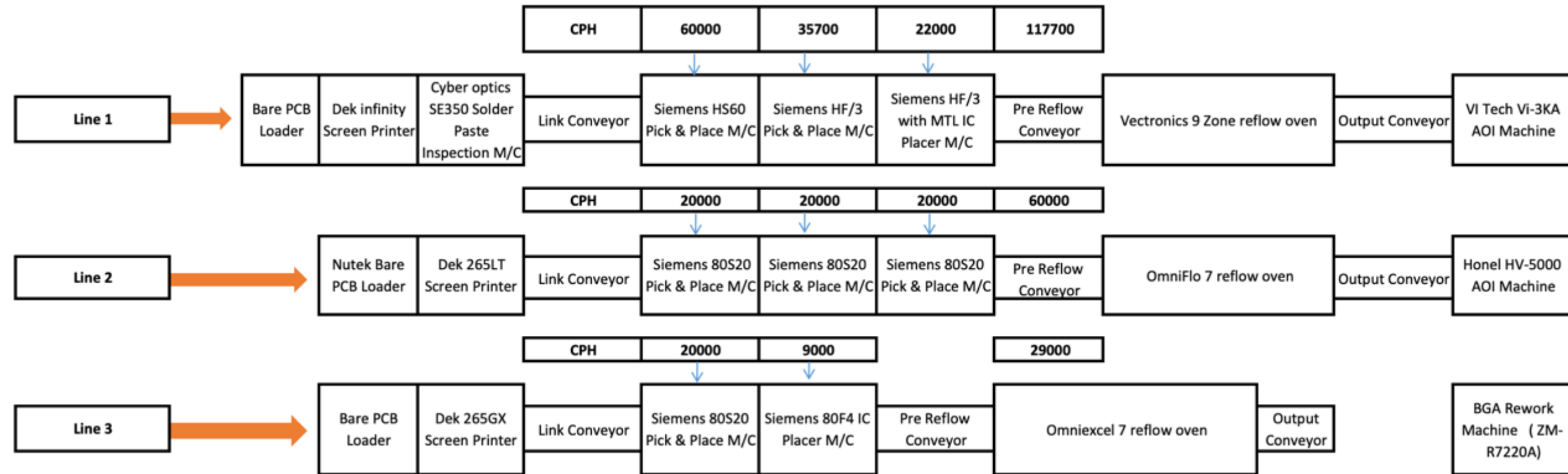
Quick manufacturing turn  
around time

High first pass yield



# SMT Line Configuration & CPH Details

Total Line Capacity in CPH 206700



# Our Certifications

## Certificate

Standard **ISO 9001:2015**

Certificate Registr. No. **01 100 2036301**

Certificate Holder: **Vishesh Innovative Technologies**  
# 555, 3rd Cross,  
Govinda Reddy Layout,  
Near Arekere Mico Layout,  
Bannerghatta Road,  
Bangalore 560076  
India

Scope: **Assembly of Printed Circuit Boards**

Proof has been furnished by means of an audit that the requirements of ISO 9001:2015 are met.

Validity: **The certificate is valid from 2020-10-22 until 2023-10-21.  
First certification 2020**

2020-10-22

*[Signature]*  
TÜV Rheinland Cert GmbH  
Am Grauen Stein · 51105 Köln

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IAF

DAkkS  
Deutsche  
Akkreditierungsstelle  
D-226-28000-03-00

TÜVRheinland®  
Precisely Right.

## Certificate

Standard **IATF 16949:2016**  
(1st edition, 2016-10-01)

Certificate Registr. No. **01 111 2036301**  
IATF Certificate No. **0366777**

Certificate Holder: **Vishesh Innovative Technologies**  
# 555, 3rd Cross, Govinda Reddy Layout,  
Near Arekere Mico Layout, Bannerghatta Road,  
Bangalore - 560076, India

Scope: **Assembly of Printed Circuit Boards**

**Excluding Product Design**

Proof has been furnished by means of an audit that the requirements of IATF 16949:2016 are met.

Validity: **The certificate is valid from 2020-03-27 until 2023-03-26.**

Release date: **2020-03-27**

*[Signature]*  
TÜV Rheinland Cert GmbH  
Am Grauen Stein · 51105 Köln  
Germany · NRW

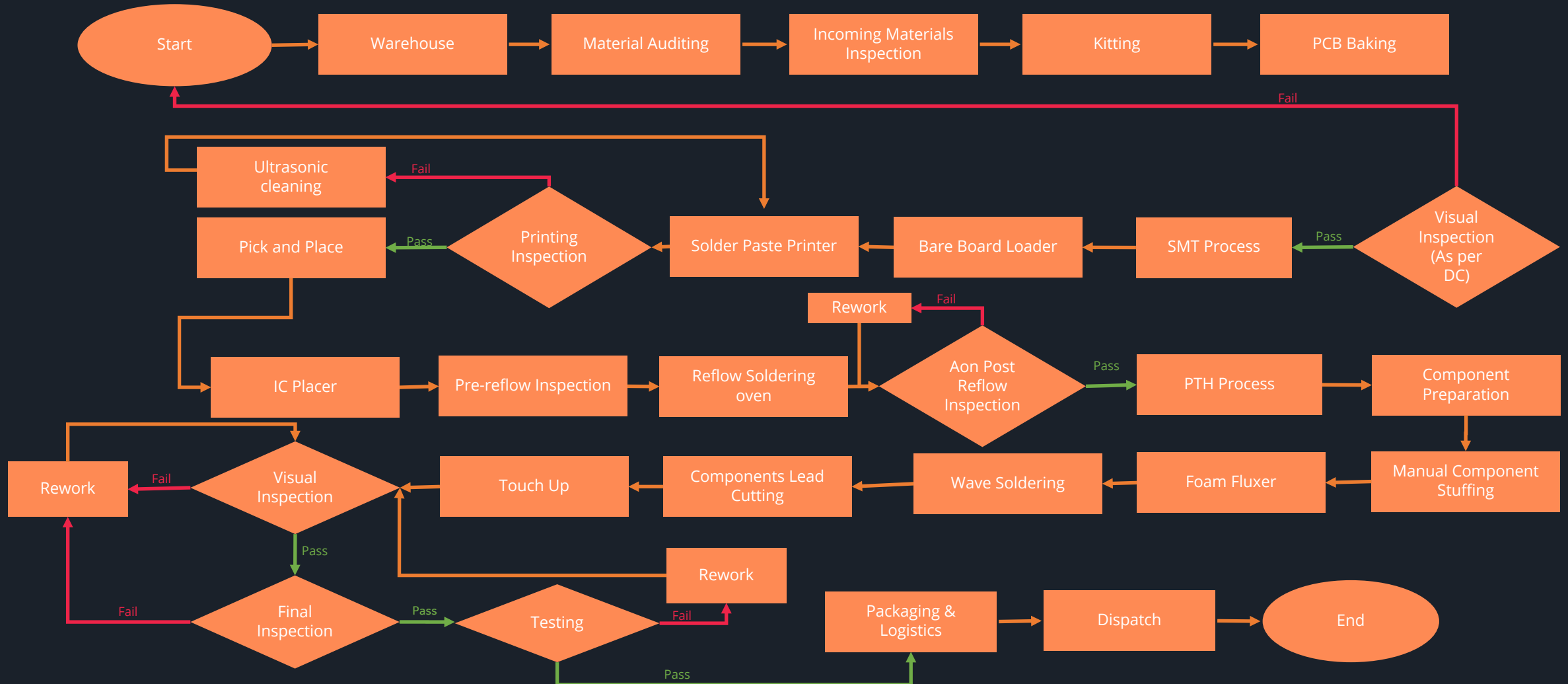
  
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Precisely Right.

# Our Process







## — Our Clients

| Customer Name                                                                                    | Application                          |
|--------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>Melange Systems Pvt. Ltd.</b><br>(Napino Auto & Electronics Ltd)<br>(L&T Technology Services) | IT, Energy Meter, Telecom and IOT    |
| <b>eNarka India Pvt. Ltd.</b>                                                                    | Power Energy & Industrial Automation |
| <b>ZIV Automation India Pvt. Ltd.</b>                                                            | Power Energy & Industrial Automation |
| <b>Invendis Technologies India Pvt. Ltd.</b>                                                     | IOT, Energy Meters, Sensors & Solar  |
| <b>ConnectM Technology Solutions Pvt. Ltd.</b>                                                   | Industrial Automation and IOT and EV |
| <b>RaceDynamics Pvt. Ltd.</b>                                                                    | Automotive                           |
| <b>EmbTech Innova Pvt. Ltd.</b>                                                                  | IOT, EV                              |
| <b>Emsys Technology Pvt. Ltd.</b>                                                                | Defence & Aerospace                  |
| <b>IndArka Energy Pvt. Ltd.</b>                                                                  | Power Energy & Industrial Automation |
| <b>Hemaadri Elex Systems Pvt. Ltd.</b>                                                           | Railways                             |
| <b>Vishista Technologies Pvt. Ltd.</b>                                                           | Automotive                           |

# Visuals



# Visuals



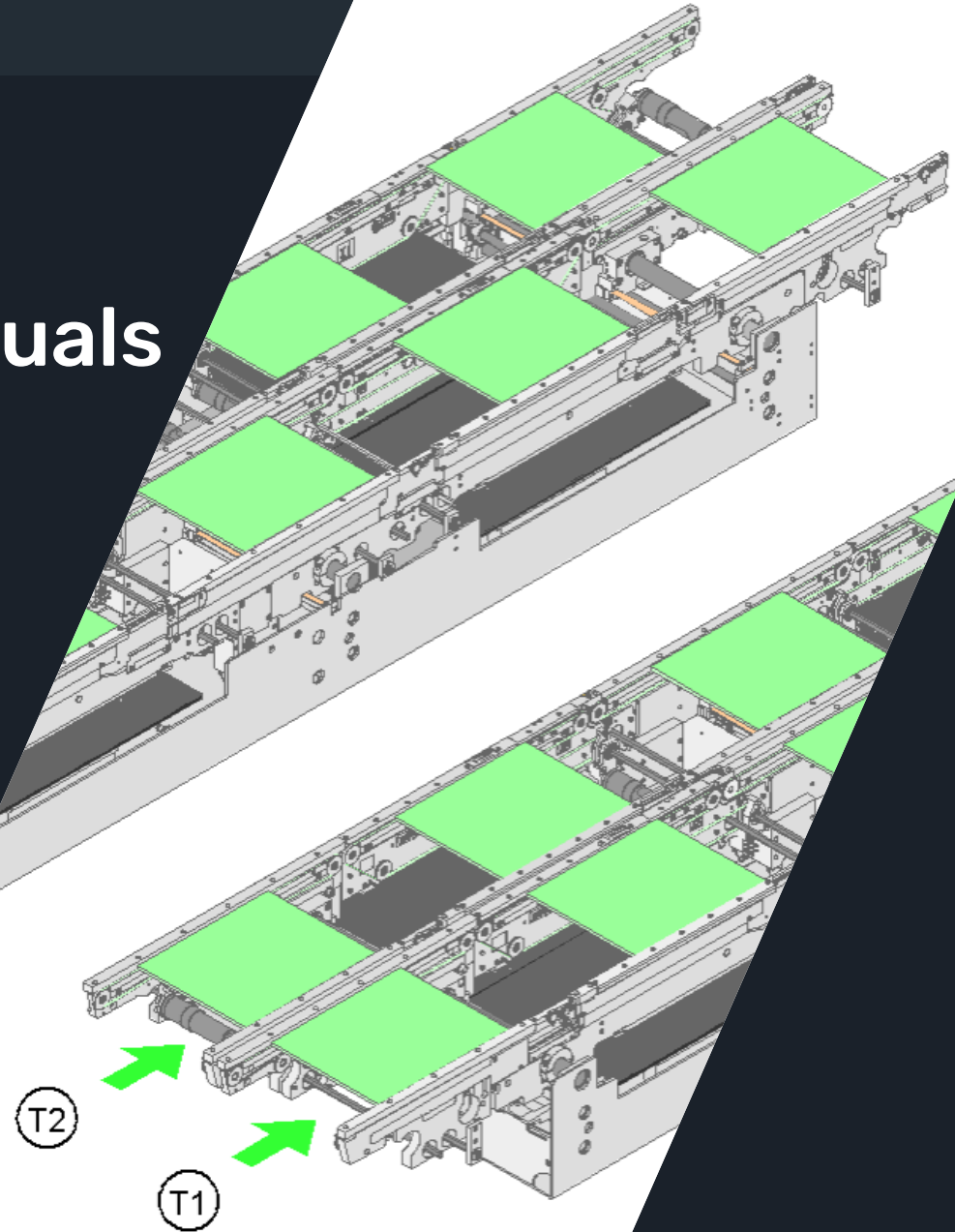


# Visuals





# Visuals



# Visuals





# Contact us

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