

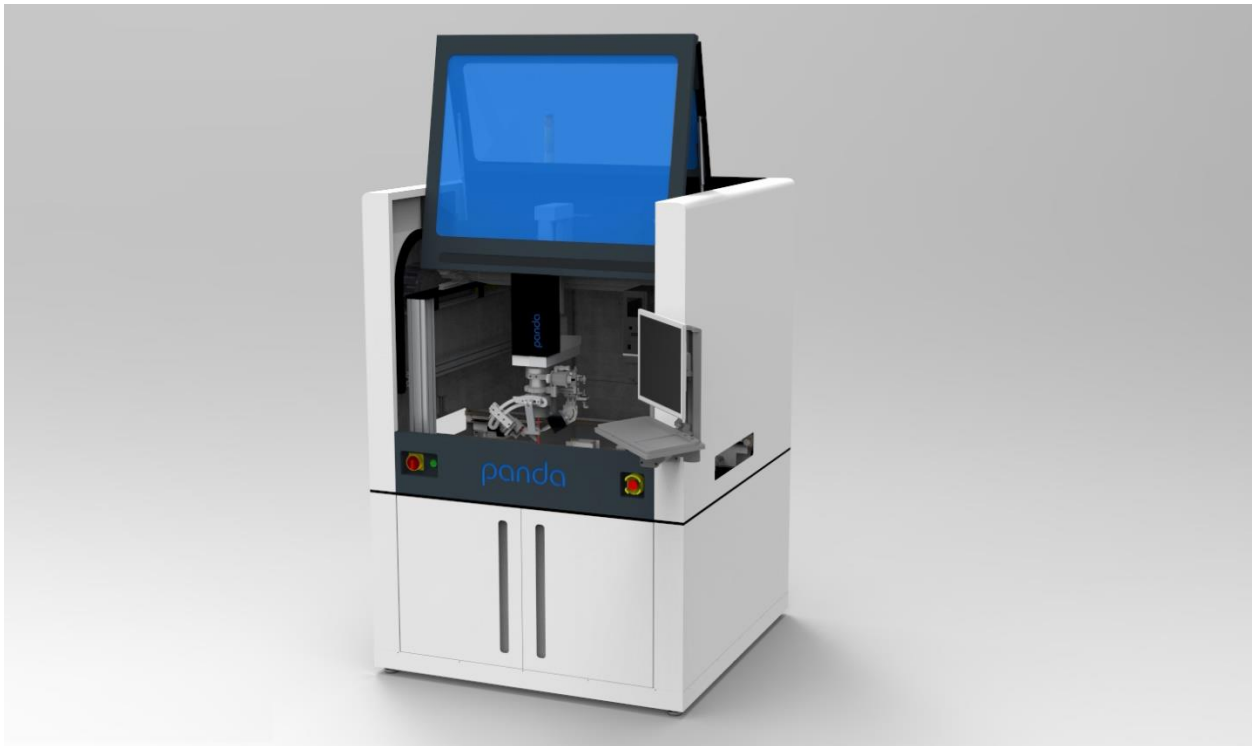


panda



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Panda Soldering Platform

The All New **Panda System** has been designed to feature next generation machine intelligence while utilizing the best soldering technologies available for in-line production applications. Built on a rugged steel welded base, the system is packed with feature rich technology while continuing to maintain the lowest cost of ownership in its class. The **Panda System** utilizes a robust 180Watt Soldering System with Integrated Heated Nitrogen Output, Vision Guidance Programming, Internet Based Remote Support Features, full network capability, Beautiful Panoramic Glass Window/Roof, and Optional Barcode Scanner with Auto Recipe Selection.

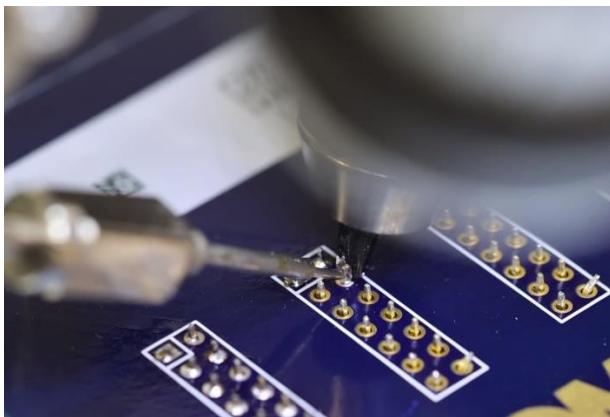
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Standard Features Include:

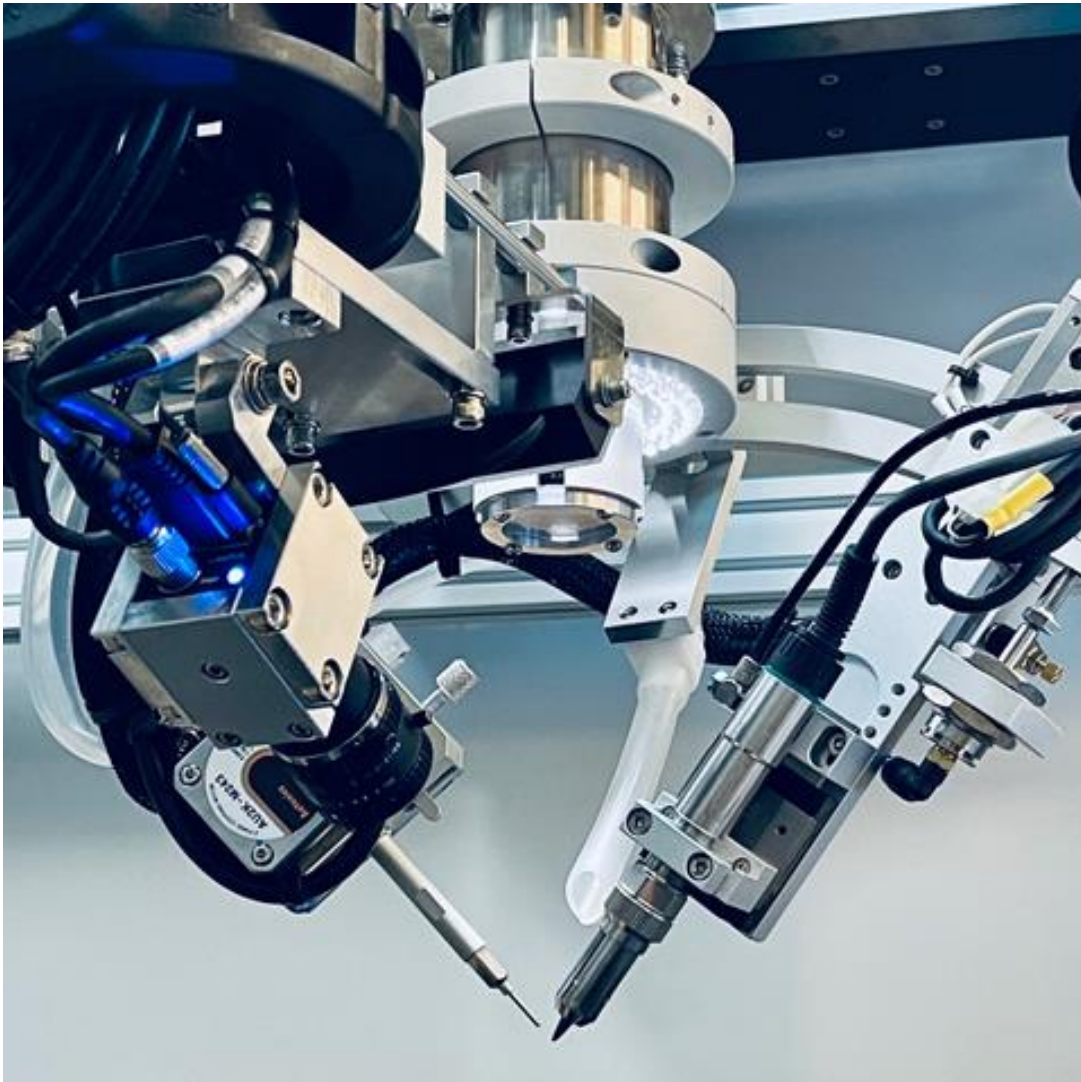
- ✓ High-Speed Precision Gantry (+/- .01mm)
- ✓ 500mm x 500mm Motion Area
- ✓ On-Screen Vision Assisted Programming
- ✓ Dynamic Vision Alignment
- ✓ Symmetrical Array Programming
- ✓ Master Offset of Soldering Locations
- ✓ Automatic Width Adjust up to 458 mm – High speed type
- ✓ Pin Chain Conveyor System (5mm edge contact)
- ✓ Single Segment conveyor w/Dual Transport Speeds
 - Can accept at a slower speed for loose components
- ✓ Re-designed soldering head
 - Independent Action Hot Iron / Solder Feeder
- ✓ WIN10 PC Operating System with Touch Screen Display
- ✓ Multi-level Program Access (Password Protected)
- ✓ High Resolution Solder Process Witness Camera
- ✓ On-Board Nitrogen Generation System
- ✓ Heated Nitrogen at Soldering Location
- ✓ On-Board Fume Extraction System
- ✓ Localized Solder Fume Extraction at Solder Tip

Additional Standards:

- ✓ 180W Power Supply and N2 Ready Soldering Iron
- ✓ Dual Solder Tip Cleaning System (Air and Brass Brush)
- ✓ Large Process Viewing LCD – Real-time Process Viewing
- ✓ Fiducial Alignment
- ✓ PCB Orientation Validation
- ✓ Black Chrome Plated Solder Tips (Localized Reflow Area)
- ✓ Log File Reporting / Production Tracking Software and Network Output
- ✓ Maintenance Reminder Scheduling
- ✓ Remote Technical Support – with Internet Connection
- ✓ Optional Integrated Bar Code Scanner and Auto Recipe Load



New Innovative & Award Winning End-Effector Design



- ✓ Independent Control of Soldering Iron and Solder Feeder (Up/Down Approach)
- ✓ Center Mounted Vision Camera – Precision Alignment
- ✓ High Resolution Process Viewing Camera – Adjustable
- ✓ Precise, Shortened Length Solder Feeding System
- ✓ Completely Adjustable End-effector with 420° of Head Rotation
- ✓ 11lb Solder Spool – Self Orientating with Solder Wire Out Alarms and Jam Protection

Stunning WIN10 Based PC Programming Platform

- Fiducial Alignment Targeting
- Point-to-Point Programming
- Slide/Drag Solder Programming
- Symmetrical Array Programming
- Precise Solder Flow Programming
- Pre-tin Solder Tip or Preheat Joint
- Multi-shot Solder Feed at a Single Location
- Fast / Slow Motion Control
- Unique Individual Solder Profile for Each Location
- Multi-level Access Screens
- Maintenance Notifications

Additional Software Features:

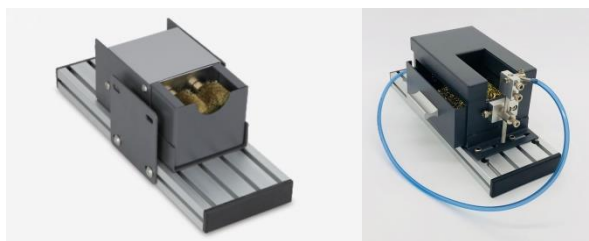
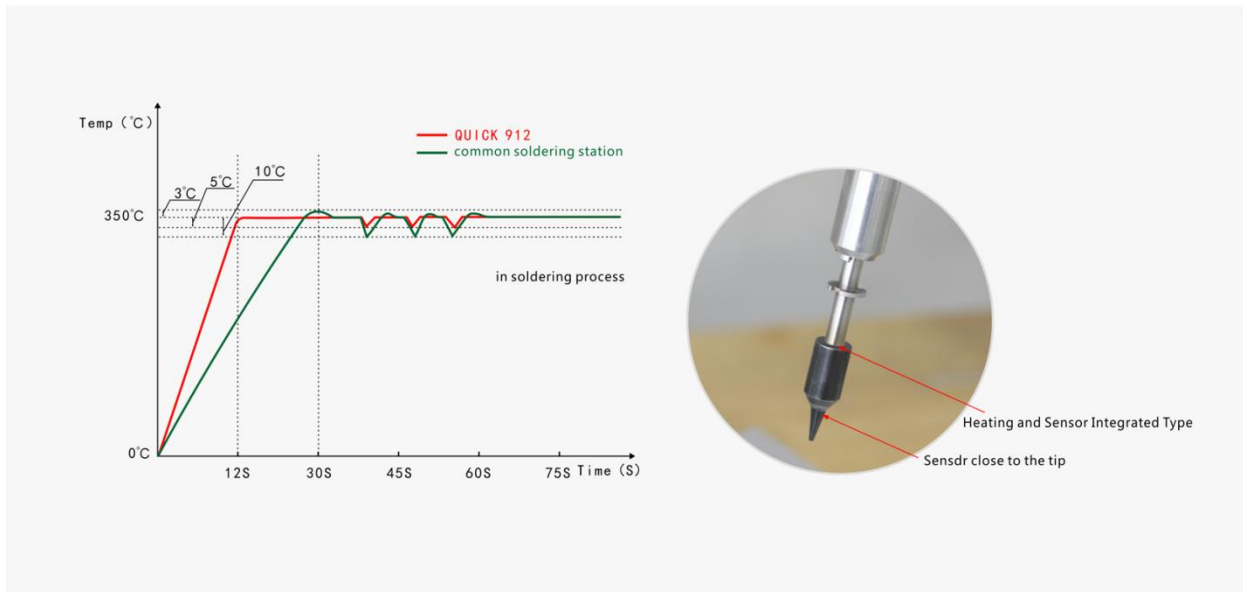
- Unlimited Recipe Storage
- TeamView Remote Technical Support Access
- MES Network High Speed Data Transfer Ready



World Class Soldering Technology



The **Upgraded 180 Watt Soldering Solution** is an industrial grade soldering iron that allows for increased heating capacity for heat dissipative applications or difficult to solder assemblies. The new 9012 Series soldering iron also features a reduction of size featuring a much slimmer profile for hard to reach soldering areas; the outer diameter of the soldering iron has been reduced by 33%; while power output has increased by 30%. The slimmer pencil style design is also available with our heated nitrogen output system that creates for incredible soldering quality of lead-free soldering applications. Furthermore, the system uses an embedded thermal feedback loop sensor that decreases response time from the power supply to ensure rapid thermal recovery and ultimate overall process stability. The slim profile heating solution is a step above the traditional 150-Watt Solutions featured on most all standard robotic soldering solutions. The new heating technology has been rounded out with a new sleek power supply with digital touch screen interface.



High Performance Solder Tip Cleaning:

Panda offers both a non-contact compressed air (or compressed n2) solder tip cleaning station, and a dual rotating brass brush solder tip cleaning station for hard to remove contaminants or flux build-up.

Now users can select which tip cleaning technology

to use in their program or use both technologies within a single soldering program.

– Dual rotating wet sponge solution is also available!

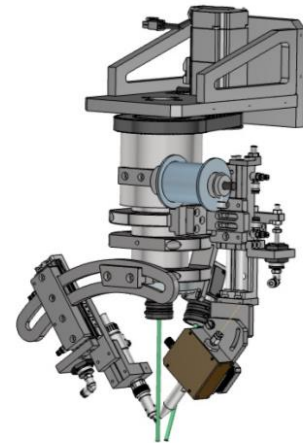
Heated Nitrogen Output System:

– Available in Various Dispersion Rates and Flow Sizes with On-Board Compact Nitrogen Generator



High Resolution Dual Vision Alignment & Process Viewing Cameras:

For clients who view their manufacturing technology as a “Show-piece” we have pair a High Resolution Basler Vision Camera with our Signature Process Viewing Witness Camera.



Integrated Fume Extraction Solution:

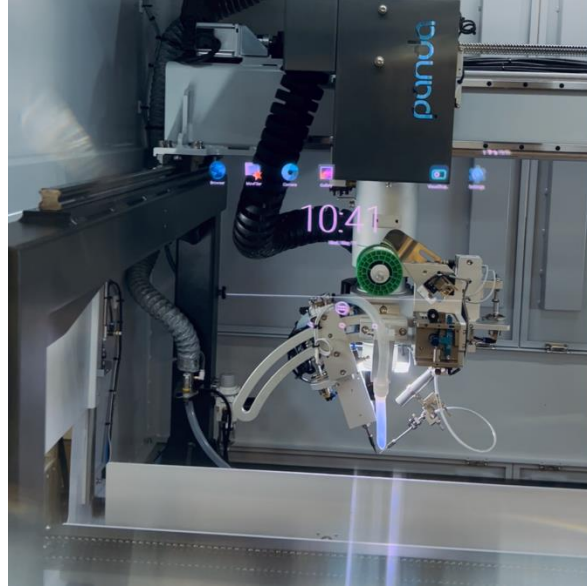
Keeping the work environment safe is at the forefront of what we do. Featured on the in-line work cell is localized fume extraction to pull hazardous fumes away from the soldering iron and operator; this aids to improve soldering area cleanliness and remove harmful fumes creating during the soldering process.



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**** Optional AR Remote Support Ready**

- Next Generation Augmented Reality Virtual Support Agent allows for trained and experienced eyes to look into the soldering process from a remote location for reduced support time and quicker process improvements.



Technical Data Overview

| | | | | |
|--------------------------|---|--------|--------------------------|-------------|
| MODEL: | panda series | | | |
| Construction: | Welded Steel Frame Base / Extruded Aluminum | | | |
| Exterior: | Sheet Metal / Gray and White powder coat paint | | | |
| Integrated Conveyor: | Pin Chain / Single Segment | | | |
| | Variable Speed Controller – Dual Speed | | | |
| Width Control | Automatic | | | |
| Robot Type: | Cartesian Gantry | | | |
| Robot Motion Control: | Servo / 0.01 mm | | | |
| Moving Area: | X-Axis | Y-Axis | Z-Axis | R-Axis |
| | 500mm | 500mm | 150mm | 420° |
| Moving Speed: | 0-600mm/sec | | 0-200mm/sec | 0-300mm/sec |
| Working Area: | X-Axis | Y-Axis | Z-Axis | R-Axis |
| | 458mm | 458mm | 150mm | 420° |
| Soldering Iron: | (180 Watt) / 912 Type Tips | | | |
| Solder Feed Station: | Custom design / Wire grip type / Self guiding / 1 lb. spool | | | |
| Teach Method: | On-Screen Vision Assist | | | |
| Program Storage: | On-board Storage / Unlimited | | | |
| Heat Source | 180 W | | Black Chrome Solder Tips | |
| | 50 ~ 500C | | Assorted | |
| Nitrogen | On-board System | | Heated Nitrogen at tip | |
| Fume Extraction | On-board System | | Draw at tip | |
| Process Viewing: | HD Witness Camera w/On-screen viewing | | | |
| Safety: | NFPA79 or CE Compliant | | | |
| | Sliding Front Door / Panoramic Windows | | | |
| Operating System | WIN 10 Pro | | | |
| Tip Cleaning Method: | Dual Tip Cleaning System (Air & Brush) | | | |
| Product/Fixture Area | 75 mm W x 75 mm L ~ 458 mm W x 458 mm L | | | |
| Product Location Method: | Vision / Fiducial Alignment | | | |
| | Product Orientation Validation | | | |
| Power Requirement | Dual 110V – 3 prong | | | |
| Total Wattage | 3.7K W +/- 5% | | | |
| Air Requirement: | 72 PSI / Single Air Regulator / 8 mm hose | | | |
| Overall Dimensions: | 1250mm(L) x 1300mm(D) x 2127mm(H) | | | |
| Communication | SMEMA 1.2 | | | |
| Pass Line Height | 950 mm +/- 50 mm | | | |
| Work Cell Leveling | Roller Wheels | | Leveling Feet | |

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