

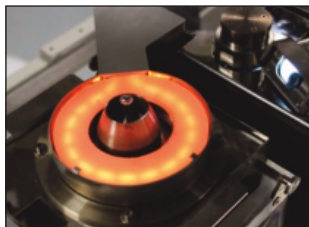
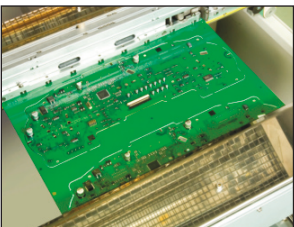
ORISSA SYNCHRODEX



Flexible, in-line, modular selective soldering system



Pillarhouse
INTERNATIONAL



ORISSA SYNCHRODEX



Flexible, in-line, modular selective soldering system



Designed as a modular system, the SynchroDEX range of in-line equipment offers the ultimate in flexibility with the ability to upgrade to high-speed throughput when multiple modules are placed together.

Supplied as standard with our patented design Drop-Jet fluxer, this system offers accurate, controlled flux deposition either prior to or during the optional top side pre-heat function. Pre-heat can be controlled via an optional top side closed-loop pyrometer system for optimum temperature profile regulation.

Our low maintenance solder bath and pump mechanism moves in three axes. Solder is applied using our proven technology - single point AP nozzle design - incorporating patented spiral solder return-to-bath technology, offering increased wave stability with reduced potential for solder balls. The system can also accommodate our latest generation Micro Nozzle, together with Jet-Wave, Wide-Wave and dedicated multi-tube single dip solder technology.

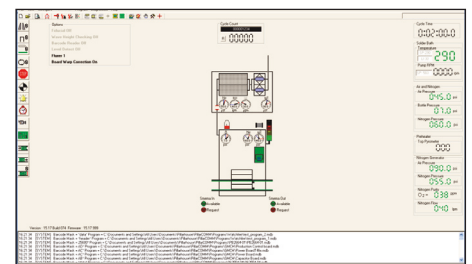
As with all Pillarhouse systems, the soldering process is enhanced by a hot Nitrogen curtain which provides an inert atmosphere for the soldering process and assists in the prevention of oxidisation. This process provides a local pre-heat to the joint, thus reducing thermal shock to localised components.



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TOP SIDE PRE-HEAT OPTION

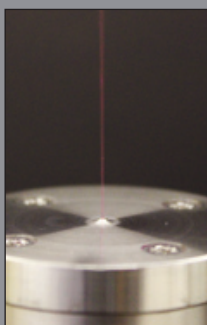


OPERATION

The SynchroDEX is controlled by a PC through PillarCOMM, a Windows® based 'Point & Click' interface with PCB image display, as illustrated above. Additionally, our PillarPAD offline package allows the operator to produce programs independently from the machine using Gerber data.



JET-TIP NOZZLE



DROP-JET
FLUX HEAD



150MM WAVE NOZZLE



PILLARGEN 80
Nitrogen generation system



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STANDARD FEATURES

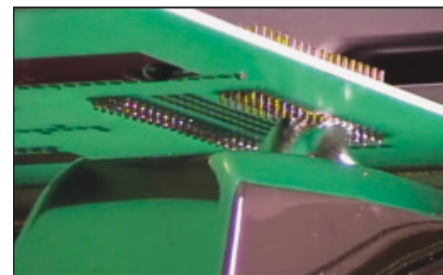
- In-Line Motor Driven Auto Width Adjust Throughfeed Synchronous Movement Conveyor
- Conveyor Side Clamping
- Integral PC & Machine Mounted TFT Monitor
- Auto Motorised Solder Wire Feed & Level Detect
- Heated Inerted Nitrogen System
- Drop-Jet Fluxer
- Set of AP Solder Nozzle Tips
- Internal Fume Extraction
- Solder Wave Height Measurement & Correction System
- Colour Programming Camera
- Light Stack Tower
- Windows® based PillarCOMMX 'Point & Click' interface
- PillarPAD Offline Programming System
- Auto Fiducial Recognition & Correction System
- Flux Level Sensor
- Multilevel Password Protection
- SMEMA Compatible
- Process Viewing Camera with Record Feature
- Lead-Free Solder Capability
- Day-To-Day Service Kit

MONITORING OPTIONS

- Flux Presence Sensor - Thermistor Style
- Flux Spray and/or Flow
- Pump RPM
- O₂ PPM
- Nitrogen Flow

OPTIONS

- Ultrasonic Fluxing
- Dual Drop-Jet/Ultrasonic Fluxing
- Top Side Instant IR Pre-Heat
- Closed-Loop Pyrometer Temperature Control
- Bottom Side Hot Nitrogen Selective Pre-Heat
- Laser PCB Warp Correction
- Solder Reel Identification
- Solder Bath Coding (identifies correct bath for program)
- Encoders on X, Y and Z Axis
- Nitrogen Generator



JET-WAVE SOLDER NOZZLE



TWIN FIXED PITCH
AP SOLDER NOZZLE



ADDITIONAL SYSTEM OPTION - PillarCARE
Pillarhouse's comprehensive after-sale service and process programme, available for all machines



Pillarhouse... Expect innovation
www.pillarhouse.co.uk

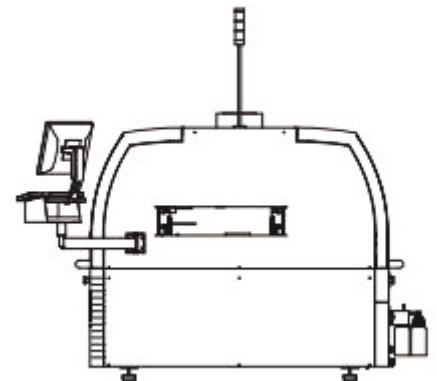
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SPECIFICATIONS

Height:	1615mm / 63" - excluding light stack
Width:	813mm / 32"
Depth:	2024mm / 80"
Board size:	Max. - 457mm x 610mm / 18"x 24" Min. - 102mm x 102mm / 4"x 4"
Edge clearance:	Above/below 3mm
Height clearance:	Below 40mm - above 45mm 100mm - upon request
Extraction:	Fan: 276mm dia.
Rating:	1000m ³ /hr / 589 CFM
Solder:	Most commonly used solder types - including lead-free
Solder pot capacity:	15kg standard - 25kg large bath
Applicators:	AP style - 2.5 - 16mm dia. Extended and Jet-Tip nozzles - up to 25mm dia. Jet-Wave nozzles - up to 25mm width 150mm Wave nozzle
Flux:	Low maintenance Drop-Jet system. Low solids (below 8%), no clean flux, pressurised and inerted system, optional water-soluble system available
Flux tank capacity:	1 litre
Fluxer speed:	50 dots/second
Deposition size:	4.0-6.0mm / 0.16-0.24"
X, Y & Z axis resolution:	0.15mm
Repeatability:	+/- 0.05mm
Nitrogen supply pressure:	5 bar / 72 psi
Nitrogen usage:	30-100 litres/min. - solder nozzle configuration dependent
Nitrogen purity:	99.995% or better
Air supply pressure:	5 bar / 72 psi
Air usage:	10 litres/min. / 0.35 CFM
Power Supplies:	Single phase + PE
Voltage:	230V
Frequency:	50/60Hz
Power:	Max. power is machine configuration dependent
Transport:	Conveyor
Programming:	PillarCOMMX Windows® based 'Point & Click' interface



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