

# JADE HANDEX

# Pillarhouse

#### **SPECIFICATIONS**

Flux:

Height: 1627mm / 64" - excluding light stack

Width: 1900mm / 74" Depth: 2508mm / 90"

Board size: Max. - 457mm x 508mm / 18"x 20"

Edge clearance: Above/below 3mm

Height clearance: Above 95mm / below 45mm nominal

Solder: Most commonly used solder types - includes lead-free

Solder pot capacity: 15kg standard - 25kg large bath Applicators: AP style - 2.5mm to 16mm dia.

Extended AP style - 2.5mm to 20mm dia.

Micro nozzle - 1.5mm to 2.5mm Jet-tip style - 6mm to 40mm dia.

Jet-Wave noxxle - up to 25mm width

Special dedicated nozzles available upon request Low maintenance Drop-Jet system. Low solids (below

8%), no clean flux, pressurised and inerted system,

optional water soluble system available.

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

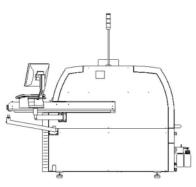
Nitrogen purity: 99.995% or better Air supply pressure: 5 bar / 72 psi

Air usage: 10 litres/min. / 0.35 CFM Power Supplies: Single phase + PE

Voltage: 230V Frequency: 50/60Hz

Power: 10.5 kVA max. - machine configuration dependent
Programming: PillarCOMM Windows® based 'Point & Click' interface









# JADE HANDEX

Quick load twin PCB rotary table selective soldering system





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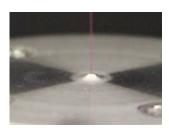
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## JADE HANDEX





# Quick load twin PCB rotary table selective soldering



Designed to meet the needs of lean manufacturing, the Jade-Handex offers high speed flexible throughput at minimal cost.

The Jade-Handex is equipped with a revolutionary twin PCB rotary table transport system to allow simultaneous load / unload during product processing.

Our new generation patented drop-jet design fluxer offers quick and effective flushing of the pressurised flux chamber. This helps to keep maintenance levels to a minimum whilst enabling use of higher solids content fluxes as well as water soluble fluxes.

As part of the entry level philosophy for this system, a newly designed low maintenance solder bath and pump mechanism has been developed which moves in three axes of movement whilst not limiting access to the PCB. Solder is applied using proven technology through our AP-1 nozzle design or custom specialised nozzles, incorporating patented spiral solder return to bath technology offering reduced solder balling

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



SLIDE IN/OUT BOTTOM-SIDE IR PREHEAT



#### **OPERATION**

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

### **BOTTLE ASSEMBLY**



# TWIN INDEPENDENT FLUX





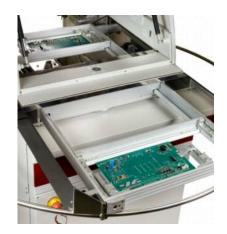
#### STANDARD FEATURES

Integral PC and machine mounted TFT monitor Auto solder top up & level detect Inerted nitrogen system Drop-jet fluxer Two AP-1 solder nozzle tips Internal fume extraction Colour programming camera Rotary indexing table with twin work holding positions PillarCOMM Windows® based 'Point & Click' interface Light stack Flux level sensor Process viewing camera with record feature

#### MONITORING OPTIONS

Lead free capability Day-to-day service kit

Flux presence sensor - thermistor style Flux spray monitoring Flux flow monitoring Flux spray & flow monitoring O<sub>2</sub> ppm monitoring Solder wave height measurement and correction



JADE-HANDEX ADJUSTABLE **TOOLING ROTATE MECHANISUM** 

#### SYSTEM OPTIONS

Ultrasonic fluxing Dual drop-jet / ultrasonic fluxing Top-side instant IR preheat Bottom side slide in / slide out IR preheat Pyrometer closed loop temperature control Solder reel identification Solder bath coding (identifies correct bath for program) Fiducial recognition and correction system Laser board warpage control Multiple level password protection PillarPAD offline programming system Encoders on X, Y and Z axis







