



Economical, compact, single point selective soldering system



Pilot system with optional Pillargen 30 nitrogen generator and fume extraction unit













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The all new ultra low cost Pilot machine has been designed as an entry level, hand load, benchtop machine for small to medium batch manufacturers combining high levels of production flexibility with economic running costs. Offered with two universal, quick change tooling carriers, each one can be exchanged to optimise cycle time. Each carrier is capable of handling a board size up to 330mm x 250mm.

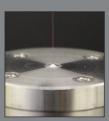
The Pilot incorporates as standard, our patented Drop-Jet fluxer for quick, accurate flux deposition. An optional bottom-side IR preheat is also available, this is particularly useful when processing multi-layer PCB's or using water based flux types.

Although a low cost system, the Pilot is offered with the ability to run the acclaimed highly flexible Pillarhouse AP nozzle technology, together with our patented market leading 1.5mm micro nozzle. The process is enhanced by a localised hot nitrogen environment at the point of soldering. An optional nitrogen generator is built into the base of the unit and can be used to supply nitrogen at the required levels, whilst acting as a machine stand. Designed for low maintenance, the Pilot offers a slide in/out solder bath design for ease of access. This in conjunction with our proven impellor driven pump technology, makes a highly reliable low maintenance system. By carrying product over the flux, solder and optional preheat stations, the Pilot offers a light, highly accurate X, Y system.

Programming is accessed through the world leading Pillarhouse 'Point and Click' PillarCOMM software package. Optional offline programming is available via PillarPAD which allows programs to be generated independently from the machine using Gerber data.



JET-TIP NOZZLE



DROP-JET FLUX HEAD



HAND LOAD QUICK CHANGE TOOLING CARRIER ASSEMBLY



1.5MM MICRO NOZZLE



#### **OPERATION**

The Pilot is controlled by a PC, through PillarCOMM LITE, 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.

#### PILLARGEN 30

Nitrogen generator and machine stand option









**BOTTOM-SIDE IR PREHEAT OPTION** 



SLIDE IN/OUT SOLDER BATH

## STANDARD FEATURES

Machine mounted TFT monitor with integral PC

Inerted nitrogen system

Drop-Jet fluxer

Two AP style solder nozzle tips

Internal fume extraction

Colour programming camera

Two universally adjustable tooling carriers

PillarCOMM LITE

- Windows® based 'Point & Click' interface

Lead-free compatible

Day-to-day service kit

## SYSTEM OPTIONS

Fume filtration system

Manual fiducial correction

Solder wave height measurement & correction

Micro nozzle assembly

PillarPAD offline programming system

Multiple level password protection

Bottom-side preheater

Combined nitrogen generator & machine stand





### **SPECIFICATIONS**

Height With monitor 1050mm / 42"

With cowling 750mm / 29" - without 695mm / 27"

Width: With flux bottles 1090mm / 43"- without 915mm / 36"

& with solder bath out 1380mm / 54"

Depth: 700mm / 28" to 963mm / 38" with keypad tray out

Weight: 170kg (table-top format)

Board size: 330mm x 250mm / 13" x 10"

Edge clearance: Above / below 3mm

Height clearance: Above / below 40mm nominal

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

Solder pot capacity: 6kg

Flux:

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 20mm dia.

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: 0.1mm Repeatability: +/- 0.05mm

Nitrogen usage: 30 litres gas/min. 5 bar pressure

Nitrogen purity: 99.99% or better
Power supplies: Single phase + PE
Voltage: 208V - 250V
Frequency: 50/60Hz

Power: 4kVA including bottom-side IR preheat

Transport: Hand load

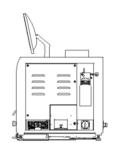
Tooling: Integral adjustable board guides, includes

finger extensions and board clamps

Programming: Windows® based PillarCOMM Lite 'Point & Click'

interface





Pillarhouse International Ltd.

Rodney Way, Widford, Chelmsford, Essex CM1 3BY UK Pillarhouse USA, Inc.

201 Lively Blvd, Elk Grove Village, IL 60007 USA Pillarhouse (Suzhou) Soldering Systems Co., Ltd. 11 Yuanqi Road, Xiancheng, Suzhou, China 215131 www.pillarhouse.co.uk

Tel: +44 (0) 1245 491333 Fax: +44 (0) 1245 491331

www.pillarhouseusa.com

Tel: +1 847 593 9080 Fax: +1 847 593 9084

www.pillarhouse.cn

Tel: +86 512 6586 0460 Fax: +86 512 6959 0567