TECHNICAL DATA SHEET

InJet® 388 TRIPLE CRRD

#Better Solutions

InJet®

3 CHAMBER

★★★ **STENCIL, MISPRINT, SQUEEGEE** cleaning
★★★ **PUMPRINT** cleaning
★★★ **PCB** cleaning

GENERAL INFORMATION

The InJet 388 series cleaning systems represent unique vertical Spray-In-Air technology developed and manufactured by DCT.

The vertically installed Spray-In-Air device minimizes the shadowing effect commonly seen in horizontal cleaners, and maximizes the efficiency of the cleaning process as the cleaning fluid is sprayed directly onto the cleaned component.

The InJet® 388 TRIPLE CRRD, including a 100% closed loop, with cleaning, rinsing and drying technology processes.

All of the processes are fully automated, and take place in 3 process chambers, whereby the cleaning takes place in the first inlet chamber, after which the part which is being cleaned is automatically transported to a central chamber where the first rinsing process takes place. The third, and last, outlet chamber is designed for the final rinsing and the drying process.

All 3 chambers can be used in parallel, which increases the machine's capacity and reduces cross-contamination when compared with single-chamber devices.

Depending on your cleaning requirements, the DCT project manager, in collaboration with a local distributor, will advise you on a suitable water-based cleaning fluid and the correct setup of the entire process.

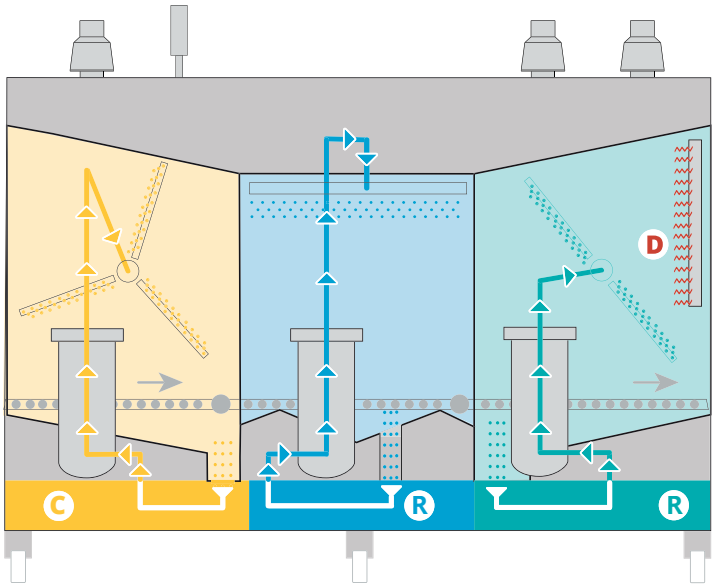
4 INDIVIDUAL PROCESSES

C CLEANING

R PRE-RINSING

R RINSING

D DRYING



CLEANING PARAMETRES

Application name	Recommended application	Recommended temperature		Total cleaning process time	Capacity per 8 hours
Stencil, misprint, squeegee	★★★	20 – 40°C	68 – 104 °F	20 min.	48
PumPrint	★★★	40 – 55°C	104 – 131 °F	20 min.	48
PCB	★★★	35 – 55°C	95 – 131 °F	32 min.	768 *

LEGEND: ★★★ highly recommended ★★ recommended ★ applicable

* PCB eurocards / per 8 hours (calculated for dimension of 100 x 160 mm / 3.94 x 6.3 in)

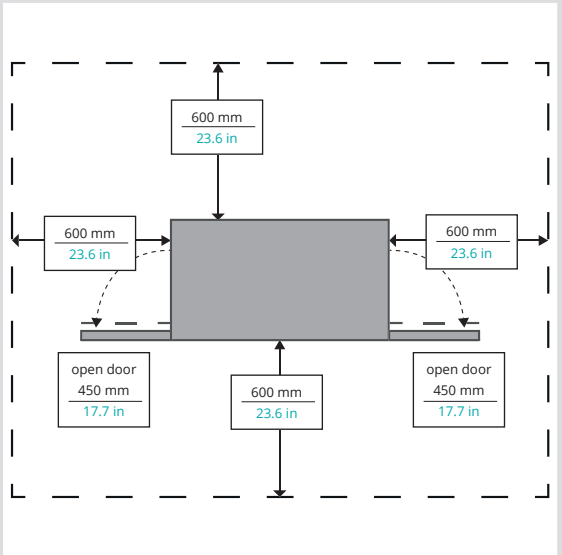
* * Parts in soldering palette / per 8 hours (320 x 500 x 50 mm / 12,6 x 19,7 x 1,97 in)

* * * Stencils, pumpprints larger than 736 x 736 mm / 29 x 29 in

TECHNICAL PARAMETERS

	metric units	*imperial units*
Dimensions (w x l x h)	1205 x 3200 x 1860 mm	47.4 x 126 x 73.2 in
Weight	890 Kg	1962 lbs
Ø energy consumption per cycle	1,65 kWh	1.65 kWh
Cleaning and rinsing fluid consumption per cycle	0,05 – 0,3 l	0.01 gal – 0.08 gal
Compressed air consumption per cycle	2 l / 5 Bar	0.52 gal / 72.5 PSI
Max. dimensions of the cleaned parts	100 x 810 x 740 mm	3.93 x 31.89 x 29.13 in
Exchangeable mechanical filter of cleaning and rinsing fluid	5 – 200 µm	5 – 200 µm
Operating pressure / 45 °C / 113 °F Cleaning	0,3–2,8 bar	4.35–40.61 PSI
Operating pressure / 45 °C / 113 °F Rinsing	0,0–1,5 bar	0.0–21.76 PSI
Cleaning fluid flow rate	200 l / min	52.8 gal / min
Temperature range setting of the cleaning and rinsing fluid	From ambient temperature to 60°C	From ambient temperature to 140°F
Conductivity range settings of the rinsing fluid in the tanks.	0 – 2000 µS/cm * optional	0 – 2000 µS/cm * optional
Temperature range setting of the drying	From ambient temperature to 80°C	From ambient temperature to 176°F
Noise level	< 70 dB	< 70 dB
Device control	PLC + 8,4" touchscreen	PLC + 8.4" touchscreen
Volume of the storage tanks	75 l	19,81 gal

DIMENSIONS



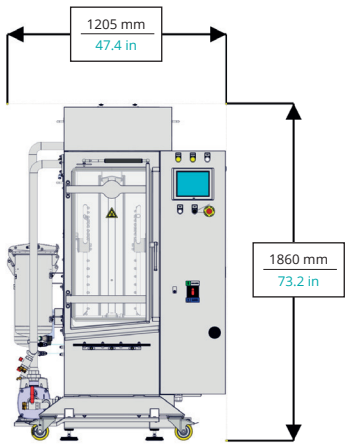
MINIMUM SERVICE SPACE AROUND THE MACHINE

INSTALLATION REQUIREMENTS

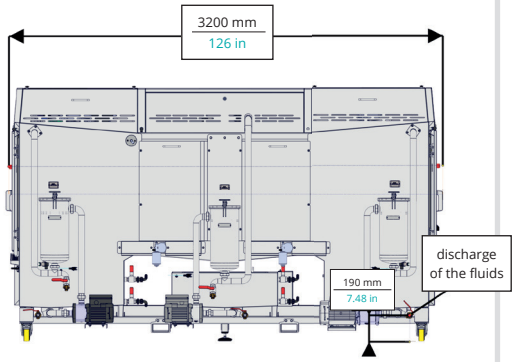
	metric units	*imperial units*
Power supply	400V, 32A, 50Hz (3+N+PE)	400V, 32A, 60Hz* (3+N+PE)
Pmax	16 kW	16 kW
Compressed air connection	Pipe Ø 6 mm and Ø 10 mm	Pipe ID 0.24 and 0.39 in
Recommended working pressure	4,5 – 6 Bar	65.25 – 87 PSI
Exhaust pipe diameter	3 x Ø 100 mm	3 x ID 3.94 in
Exhaust pipe capacity	580 m³/h	20450 ft³/h
Minimum liquid for first run	3 x 75 l	3 x 19.8 gal
Service space required around the device	600 mm	23.6 in

* When using frequency convertor

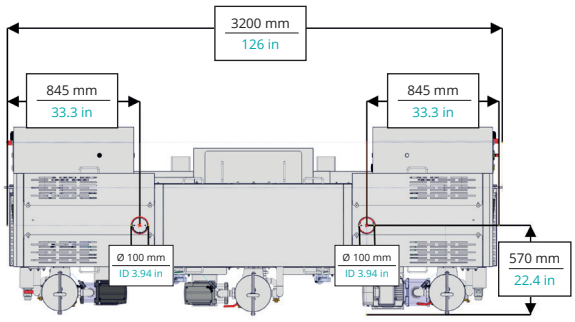
FRONT VIEW



LEFT VIEW



TOP VIEW



STANDARD HARDWARE EQUIPMENT

3 process chamber – fully automatted solution
100% closed loop fluid system
3 arm rotation – fluid powered - cleaning
2 arm rotation – fluid powered - rinsing
Cleaning and rinsing fluid heating
High-capacity mechanical filtration on all cycles
2 hot air blowers – drying
Chimney flap – electronically controlled
Pneumatic door lock
Emergency stop button
Adjustable legs – 4 pcs
PLC controller + 8,4" touchscreen display
Spare parts (base kit)

STANDARD SOFTWARE EQUIPMENT

Electronic monitoring of fluid level
Electronic monitoring of fluid pressure
3 levels of logging – operator, maintenance, engineer
Spraying fluid pressure - continuous measurement
Standard software language mutation – CZ, ENG
Liquid and filter replacement notification – cycle counting
Possibility of 5 programs – setting option
Smart warning – low or high pressure level
Smart warning – low fluid level

OPTIONAL HARDWARE EQUIPMENT

Manipulation wheels – lockable
Common fluids draining- manual control
Automatic fluids refilling (without pump)
Automatic fluids discharging (without pump)
Tanker 200 or 400 lit – cleaning/rinse fluid
Filtration 2PR sandwich – integrated
Filtration sandwich – external
Conductivity measurement – pre-rinse/rinse 0-2000 µS – blocking optional
and other equipment ...

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OPTIONAL ACCESSORY – FRAMES AND OTHERS

Mechanical carrier frame – PCB
Mechanical carrier frame – frameless stencils
Mechanical carrier frame – frame stencils
Mechanical carrier frame – VectorGuard stencils
Mechanical carrier frame – squeegees

OPTIONAL TRACEABILITY

Traceability OFF line, CSV to SD card
Traceability OFF line, Reader, CSV to SD card
Traceability ON line, PC WIN, file
Traceability ON line, READER, PC WIN, file
Traceability ON line, PC WIN, OPC Server CD, no file
Traceability ON line, PC WIN, READER, OPC Server CD, no file

DCT QUALITY

All of the InJet®, AirJet® and Sonix® cleaning systems developed by DCT are characterised by the highest quality on the market, high reliability, ease of use, simple maintenance, an extremely long lifespan, and the longest warranty on the cleaning system market.

These afore-mentioned benefits are achieved by the **precise manual production** of the machines in the Czech Republic, and thanks to the superior quality of the used materials and components.

Cleaning systems boast a **unique all-stainless-steel construction**, which is welded manually from AISI 304 and AISI 316 stainless steel and then chemically passivated.

The cleaning systems are designed and manufactured with a focus on **ease of use** by operators, **simple maintenance**, and **smart process parameter setting**. They are equipped with industrial PLC IDEC, a well arranged colour touch display with 3-level access (operator, maintenance, engineer), and with 5 adjustable cleaning programmes as standard.

The device **automatically and permanently checks** all **processes**, **operating fluid levels** and **process temperatures,** and also gives timely notification of the need to replace individual consumables or fluids.

Monitoring of the cleaning process history, whether offline or online, is ensured by an optional traceability function.

A wide range of **standard hardware** and **software equipment** is available for every cleaning system. However, DCT also excels by its **flexibility when resolving non-standard** machines and their accessories.

Our machines, together with our cleaning fluids and local application and technical support, bring you a long-term reliable, powerful and stable cleaning process, even under the most demanding continuous operation conditions.

With all its cleaning systems, DCT offers a **wide range of hardware and software equipment**, special frames with hitches for the parts you want to clean, and countless variants in addition to the basic process monitoring options which use traceability.

For more information, a list of options and a selection of suitable equipment, please contact a DCT specialist in your country or the manufacturer directly.

STAINLESS STEEL DESIGN:

- **main support frame**
- **storage tanks**
- **process chambers**
- **fluid and air distribution systems**
- **spray arms and nozzles**
- **mechanical high-capacity filters**
- **process chamber door frame and handle**
- **external shielding**
- **active filters for rinsing DI water**

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DCT Czech s.r.o., Tovární 85, 679 21 Černá Hora, Czech republic
e-mail: info@dct.cleaning, **www.dct.cleaning**