

#BETTETZ SOLUTIONS





InJet® 388 CD



*** STENCIL, MISPRINT, SQUEEGEE cleaning

★★ PUMPRINT 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 CD** including 100% closed loop with processes of cleaning and drying technologies. Both processes are fully automated, and take place in one process chamber.

The **Injet® 388 CD** is a basic cleaning system designed to remove solder pastes from stencils, squeegees and one-sided misprints, or can be used for PumPrint cleaning after consultation.



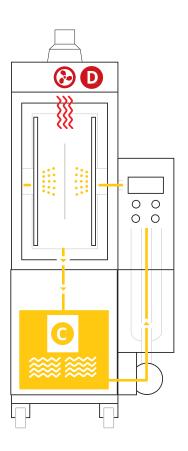
Depending on your cleaning requirements, the DCT project manager, in collaboration with a local distributor, will advise you on a suitable water-based cleaning fluid and the correct setup of the entire process.



2 INDIVIDUAL PROCESSES









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	15 min.	32
PumPrint	**	40 – 55°C	104 – 131 °F	15 min.	32

LEGEND: $\bigstar \star \star$ highly recommended $\star \star$ recommended \star applicable

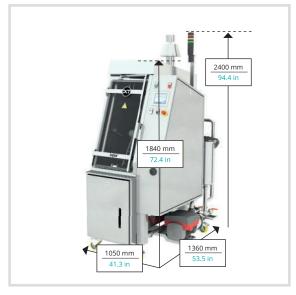
- * PCB eurocards / per 8 hours (calculated for dimension of 100 x 160 mm / 3.94×6.3 in)
- * * Parts in soldering palette / per 8 hours (320 x 500 x 50 mm / 12,6 x 19,7 x 1,97 in)
- * * * Stencils, pumpprints larger than 736 x 736 mm / 29 x 29 in



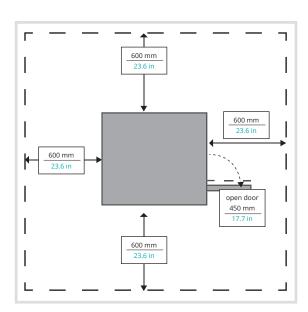
TECHNICAL PARAMETERS

	metric units	imperial units
Dimensions (w x l x h)	1050 x 1360 x 2400 mm	41.3 x 53.5 x 94,4 in
Weight	420 kg	926 lbs
Ø energy consumption per cycle	1,5 kWh	1.5 kWh
Cleaning fluid consumption per cycle	0,05 - 0,2	0.01 – 0.08 gal
Compressed air consumption per cycle	900 I / cycle	237 gal/cycle
Max. dimensions of the cleaned parts	190 x 800 x 760 mm	7.48 x 31,5 x 29,92 in
Max. dimensions of the cleaned part with used air knife	100 x 800 x 760 mm*	3,94 x 31,5 x 29,92 in
Exchangeable mechanical filter of cleaning fluid	5 – 200 µm	5–200 μm
Operating pressures	1,5 – 2,8 Bar	21.75 – 40.6 PSI
Cleaning fluid flow rate	200 I / min	52.8 gal / min
Temperature range setting of the cleaning 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 + 5,7" touchscreen	PLC + 5.7" touchscreen
Volume of the storage tank	75	19,8 gal

^{*} Air knife is optional accessory



DIMENSIONS



MINIMUM SERVICE SPACE AROUND THE MACHINE

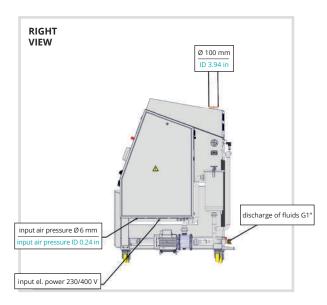


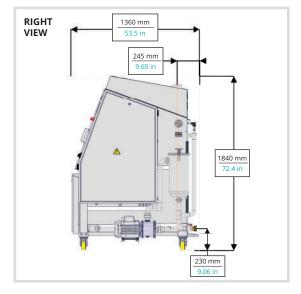
INSTALLATION REQUIREMENTS

	metric units	imperial units
Power supply	400V, 32A, 50Hz (3+N+PE)	UL 400V, 32A, 60Hz* (3+N+PE)
Pmax	7,5 kW	7.5 kW
Connection to central air pressure	Pipe Ø 6 mm	Pipe ID 0.24 in
Recommended working pressure	4,5 – 6 Bar	65.25 – 87 PSI
Exhaust pipe diameter	Ø 100 mm	ID 3.94 in
Exhaust pipe capacity	380 m³/h	13400 ft³/h
Minimum liquid for first run	1 x 50 l	2 x 19.8 gal
Service space required around the device	600 mm	23.6 in

^{*} When using frequency convertor









STANDARD HARDWARE EQUIPMENT

1 process chamber – fully automatted solution	
100% closed loop fluid system	
2 arm rotation – fluid powered	
Cleaning fluid heating	
Mechanical filtration	
Hot air drying	
Chimney flap – electronically controlled	
Pneumatic door lock	
Emergency stop button	
Adjustable legs – 4 pcs	
PLC controller + 5,7" touchscreen display	

Spare parts (base kit)



STANDARD SOFTWARE EQUIPMENT

Electronic monitoring of fluid level	
Electronic monitoring of fluid pressure	
Electronic process cycle counter	
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)

2 arm rotation - electric powered

Upgrade for 3 arm electric powered rotation

and other equipment ...



OPTIONAL SOFTWARE EQUIPMENT

SW for CVA calculation (android, machine)

Adjustable timer of cleaning fluid heating

Upgrade machine for PROTON

Language mutation (CZE, ENG, GER, POL, CHI, RUS, ITA, SPA, MAY, HUN)

ONLINE access to cleaning device



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

Mechanical carrier frame – frame and VG stencils (reduction)

and other equipment ...



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



Date of issue: **3/2021 InJet®** is a registration trademark of DCT Czech s.r.o.

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