



BETTER SOLUTIONS



CHAMBER

TECHNICAL DATA SHEET

InJet® 888 CRRD - 1F



- ★★★ **REFLOW** and **SOLDERING PARTS** cleaning
- ★★★ **PCB** cleaning
- ★ **STENCIL, MISPRINT, SQUEEGEE** cleaning



GENERAL INFORMATION

The InJet® 888 series cleaning systems represent unique horizontal Spray-In-Air technology developed and manufactured by DCT.

Systems with horizontal spraying technology excel in high pressure and high liquid flow. Thanks to their large process chamber they have a large capacity basket, which also facilitates loading and unloading of the cleaned parts.

The basket can be pulled out of the cleaning chamber on built-in rails or onto a separate loading and handling trolley.

The **InJet® 888 CRRD-1F** is designed primarily to remove flux residues from solder boards.

The **designation 1F indicates a 1-storey solution**, primarily intended for cleaning larger parts. It is possible to insert and clean a stencil or misprints at the same time.

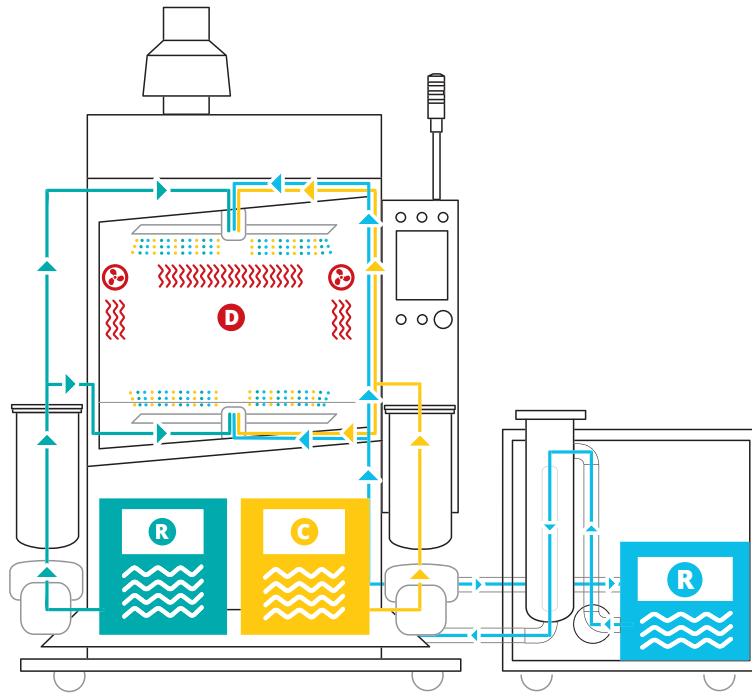


Depending on your cleaning requirements, the DCT project manager, in collaboration with a local distributor, will advise you on a suitable water-based cleaning fluid and the correct setup of the entire process.



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
Reflow and soldering parts	★★★	30 – 50°C	86 – 122 °F	40 min.	240 *
PCB	★★★	35 – 55°C	95 – 131 °F	60 min.	1008 *
Stencil, misprint, squeegee	★	20 – 40°C	68 – 104 °F	20 min.	24

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



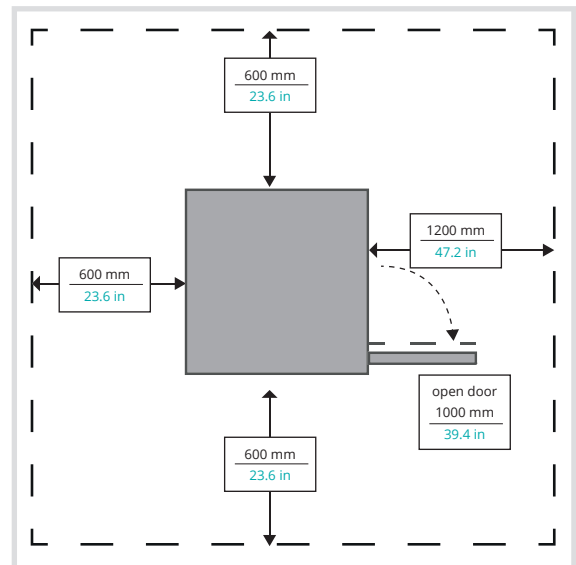
TECHNICAL PARAMETERS

	<i>metric units</i>	<i>imperial units</i>
Dimensions (w x l x h)	1620 x 1400 x 2350* mm	63.8 x 55.1 x 92.5* in
Weight	775 kg	1708 lbs
Ø energy consumption per cycle	3,3 kWh	3.3 kWh
Cleaning and rinsing fluid consumption per cycle	0,2 – 0,5 l	0.05 – 0.13 gal
Compressed air consumption per cycle	1500 l / cycle	396.26 gal / cycle
Max. dimensions of the cleaned parts	850 x 800 x 600 mm	33.46 x 31 x 22.7 in
Exchangeable mechanical filter of cleaning and rinsing fluid	5 – 200 µm	5 – 200 µm
Spraying pressure – cleaning – without FC	1,8 Bar	26.1 PSI
Spraying pressure – cleaning – with FC	1,1 – 2,2 Bar	15.95 – 31.9 PSI
Operating pressures frequency converter	2,4 Bar	34.8 PSI
Cleaning fluid flow rate	210 l / min	55.5 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	85 l	22,4 gal

* Maximum dimension in operating condition



DIMENSIONS



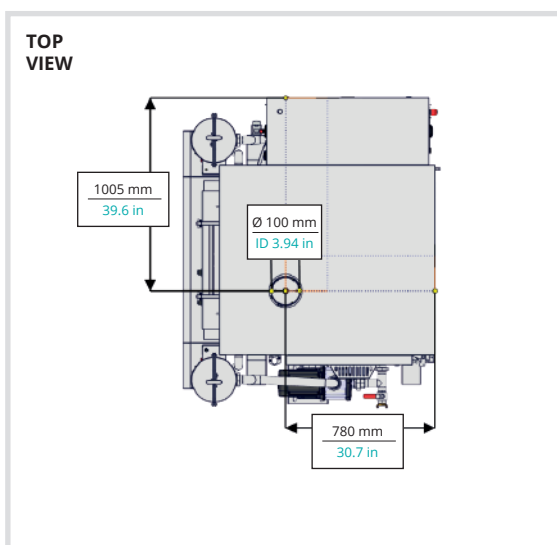
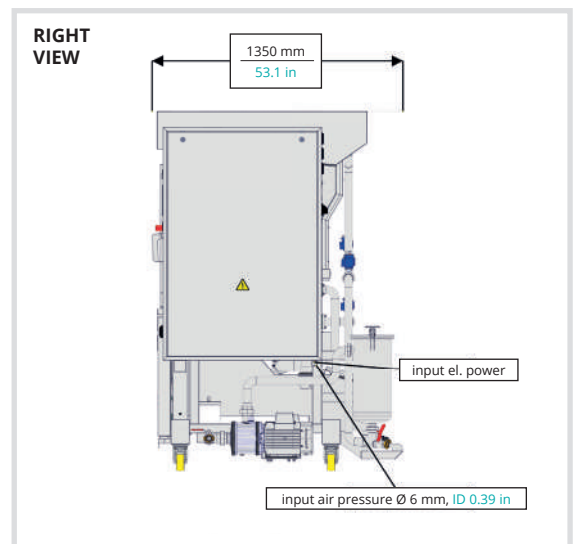
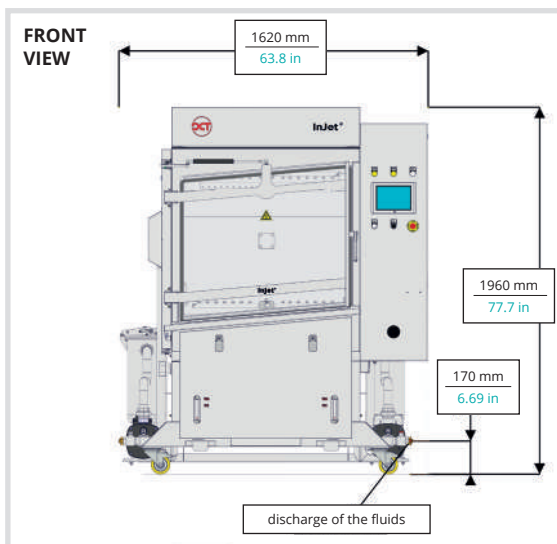
**MINIMUM SERVICE SPACE
AROUND THE MACHINE**



INSTALLATION REQUIREMENTS

	<i>metric units</i>	<i>imperial units</i>
Power supply	400V, 32A, 50Hz (3+N+PE)	UL 400V, 32A, 60Hz* (3+N+PE)
Pmax	14 kW	14 kW
Compressed air connection	Pipe Ø 6 mm, Ø 10 mm	Pipe ID 0.24 in, ID 0.39 in
Recommended working pressure	4,5 – 6 Bar	65.25 – 87 PSI
Exhaust pipe diameter	Ø 150 mm	ID 5.91 in
Exhaust pipe capacity	380 m ³ /h	13400 ft ³ /h
Minimum liquid for first run	2 x 75 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 automated solution

100% closed loop fluid system

4 arm rotation – electric powered

External 75 l tank for pre-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

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 fluid refilling (without pump)

Automatic fluids discharging (without pump)

Tanker 200 and 400 l – cleaning or rinse fluid

Filtration 1PR sandwich – integrated

Filtration sandwich – external

Conductivity measurement of rinse/pre-rinse 0-2000 µS – blocking option

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 basket

Mechanical basket – PCBs + 4 comb holders

Mechanical basket – PCBs without comb holders

Mechanical basket – soldering frames + paletts

Mechanical carrier stand – soldering frames + paletts (5 holders)

Mechanical comb holder (18 slots)

Mechanical table holder – stencil or PCB carrier frame

Mechanical manipulation trolley – one floor

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



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InJet® is a registration trademark of DCT Czech s.r.o.

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