



# BETTER SOLUTIONS



CHAMBER

TECHNICAL DATA SHEET

## InJet® 888 CRD - 1F



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



## GENERAL INFORMATION

---

**The InJet® 888 CRD - 1F, including a 100% closed loop, with cleaning, rinsing, and drying technology processes.**

All of the processes are fully automated, and take place in one process chamber.

**The InJet® 888 CRD-1F** is developed primarily for the removal of smelting residues from soldering frames, and the maintenance cleaning of soldering equipment components.

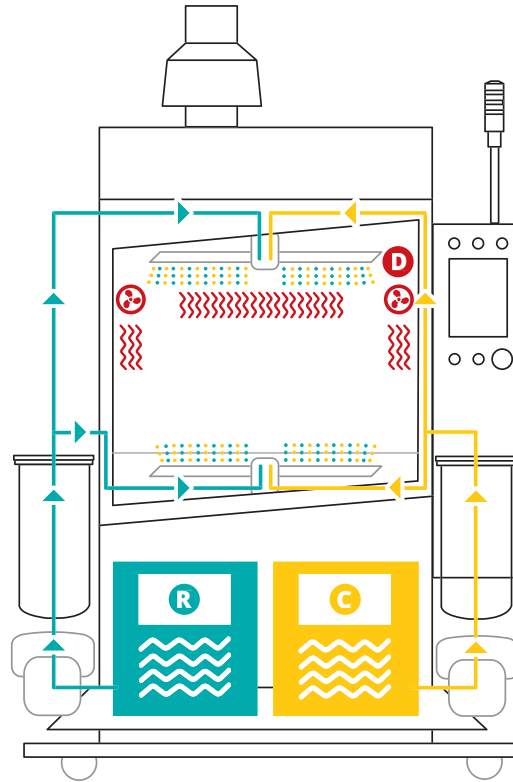


*Depending on your cleaning requirements, the DCT project manager, in collaboration with a local distributor, will advise you on a suitable water-based cleaning fluid and the correct setup of the entire process.*



### 3 INDIVIDUAL PROCESSES

- C** CLEANING
- 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 | 55 min.                     | 1100 *               |
| Stencil, misprint, squeegee | ★                       | 20 – 40°C               | 68 – 104 °F | 20 min.                     | 24                   |

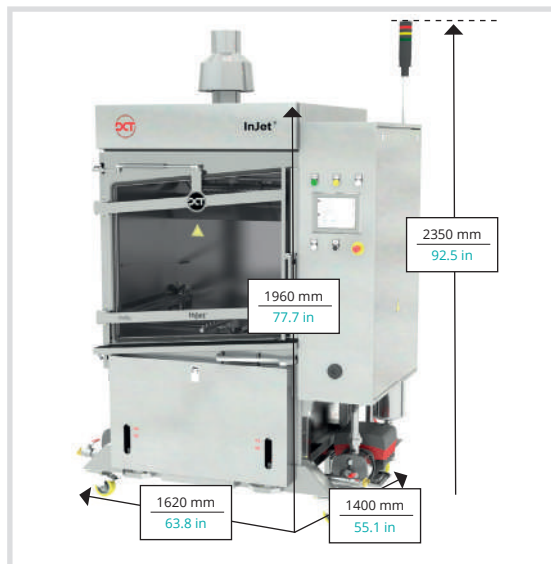
LEGEND: ★★★ highly recommended   ★★ recommended   ★ applicable  
 \* PCB eurocards / per 8 hours (calculated for dimension of 100 x 160 mm / 3.94 x 6.3 in)  
 \*\* Parts in soldering palette / per 8 hours (320 x 500 x 50 mm / 12,6 x 19,7 x 1,97 in)  
 \*\*\* Stencils, pumpprints larger than 736 x 736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



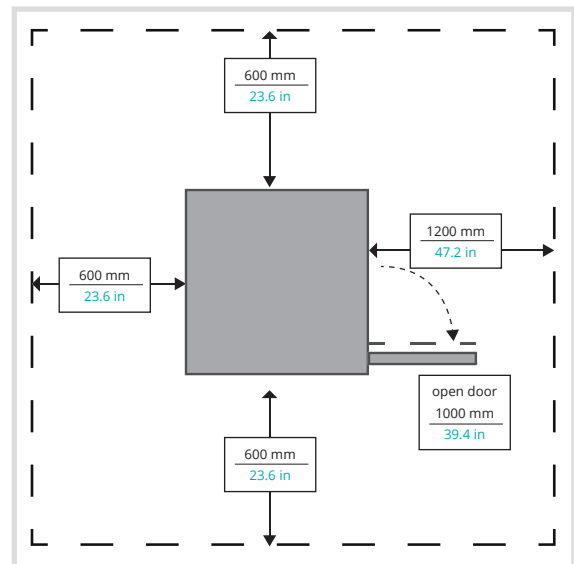
## TECHNICAL PARAMETERS

|  | <i>metric units</i>              | <i>imperial units</i>             |
|--|----------------------------------|-----------------------------------|
| Dimensions (w x l x h) ZKOUSK                                  | 1620 x 1400 x 2350* mm           | 63.8 x 55,1 x 92,5* in            |
| Weight   | 660 kg                           | 1455 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                        |
| 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 operation condition



**DIMENSIONS**



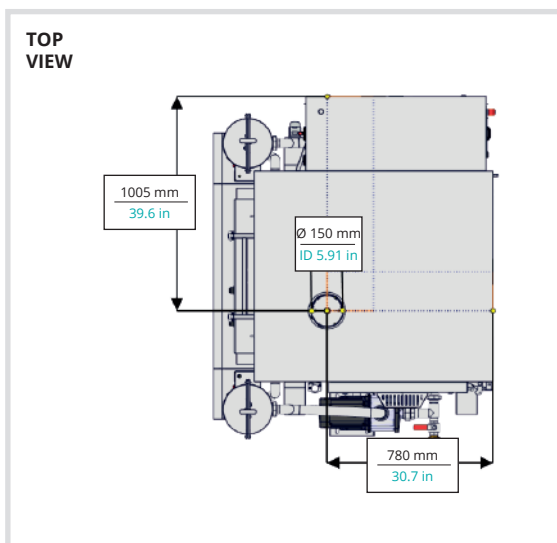
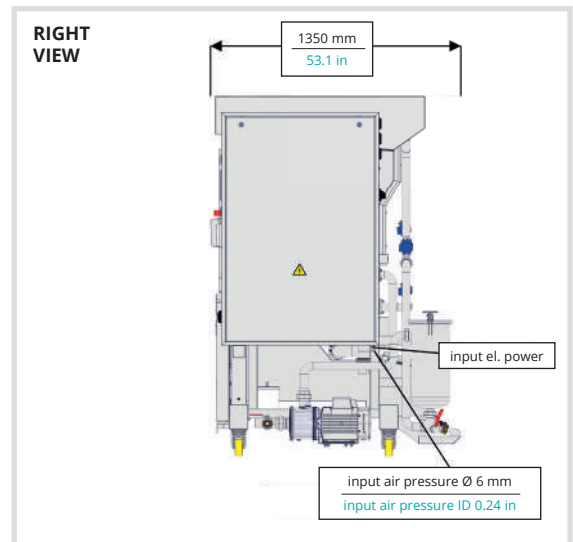
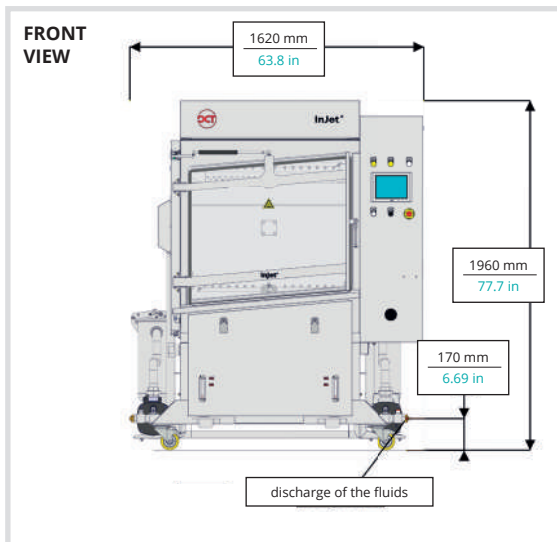
**MINIMUM SERVICE SPACE AROUND THE MACHINE**



## 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                                     | 13 kW                    | 13 kW                        |
| Compressed air connection                | Pipe Ø 6 mm              | Pipe ID 0.24 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 m³/h                 | 13400 ft³/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

---

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

---

Preparing for external sandwich filtration

---

PLC controller + 8,4" touchscreen display

---

Spare parts (base kit)



## STANDARD SOFTWARE EQUIPMENT

---

Electronic monitoring of fluid level ZK

---

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)

---

Tanker 200 and 400 L – cleaning/rinsing fluid

---

Conductivity measurement – rinse 0-2000 µS – blocking optional

---

Heating the fluids in tanker

---

Filtration sandwich – external

---

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 (5-8 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



Date of issue: **3/2021**

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

DCT Czech s.r.o., Tovární 85, 679 21 Černá Hora, Czech republic  
 e-mail: info@dct.cleaning, [www.dct.cleaning](http://www.dct.cleaning), [www.dctcleaning.us](http://www.dctcleaning.us)