

#BETTETZ SOLUTIONS





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.

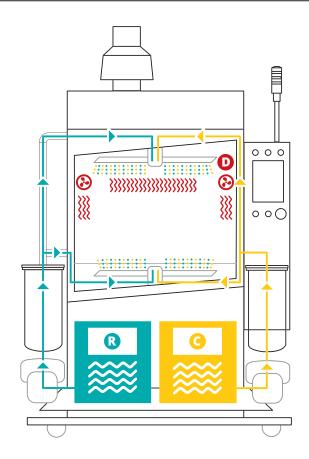


3 INDIVIDUAL PROCESSES



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

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



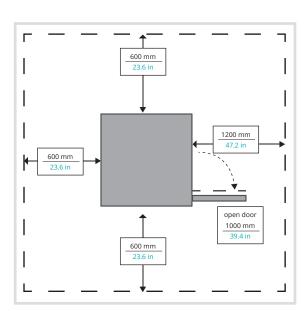
TECHNICAL PARAMETERS

	metric units	imperial units	
Dimensions (w x l x h) 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	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	851	22,4 gal	

^{*} Maximum dimension in operation condition



DIMENSIONS



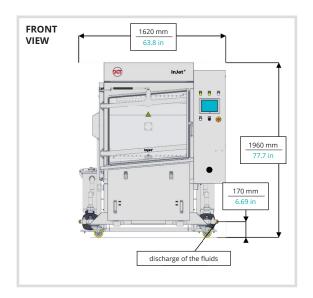
MINIMUM SERVICE SPACE AROUND THE MACHINE

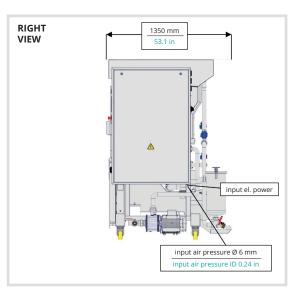


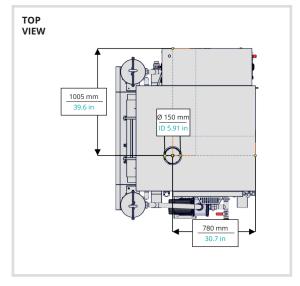
INSTALLATION REQUIREMENTS

	metric units	imperial units
Power supply	400V, 32A, 50Hz (3+N+PE)	UL 400V, 32A, 60Hz* (3+N+PE)
Pmax	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
ervice space required around the device 600 mm 23.6 in		23.6 in

^{*} When using frequency convertor









STANDARD HARDWARE EQUIPMENT

1 process chamber – fully automatted 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



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

Spare parts (base kit)



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 fulids 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.

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 cleaning systems are designed and manufactured

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: **4/2021 InJet®** is a registration trademark of DCT Czech s.r.o.

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