



# BETTER SOLUTIONS

TECHNICAL DATA SHEET

# InJet® 888 CRRD-2F CUSTOMLINE



**InJet®**

SPRAY IN AIR  
TECHNOLOGY



CHAMBER



INDIVIDUAL  
PROCESSES



STAINLESS  
STEEL  
DESIGN

AISI 304/316



## APPLICATION

REFLOW and SOLDERING PARTS  
PCB  
STENCIL, MISPRINT, SQUEEGEE

## REMOVING

→ Smelting residues  
→ Flux  
→ Solder pastes



## GENERAL INFORMATION

### CUSTOMLINE CLEANING SYSTEM

The **Customline section** is meant for customers who have specific requirements. Together we will configure the cleaning system to achieve the highest efficiency and quality of cleaning according to your wishes and expectations.

### DEVELOPED AND INTENDED FOR RECOMMENDED

#### APPLICATION

#### REMOVING

<b>REFLOW and SOLDERING PARTS</b>	→	<b>Smelting residues</b>
<b>PCB</b>	→	<b>Flux</b>
<b>STENCIL, MISPRINT, SQUEEGEE</b>	→	<b>Solder pastes</b>

### CLEANING TECHNOLOGY

The InJet® 888 series cleaning systems represent unique **horizontal Spray-In-Air technology** developed and manufactured by DCT. Horizontal Spray- In-Air technology excel in high pressure and high liquid/fluid flow.

### CHAMBERS & PROCESSES

**1 PROCESS CHAMBER (2-floor solution)**  
**4 PROCESSES - CLEANING, PRERINSING or 2. CLEANING, RINSING, DRYING**

### PROCESS CONTROL

- **Real-time cleaning fluid pressure monitoring**
- **Control system of fluids limit pressures**
- **Liquid and filter replacement notification** - cycle counting
- **Minimum level warning** - cleaning and rinsing fluid
- **Conductivity measurement - rinse/pre-rinse**

### BENEFITS

The external tank with 75l capacity for (pre-)rinsing/2. cleaning fluid with **mechanical/sandwich filtration.**

CLEANING SYSTEMS

InJet® 888 CRRD 2F

Watch our video

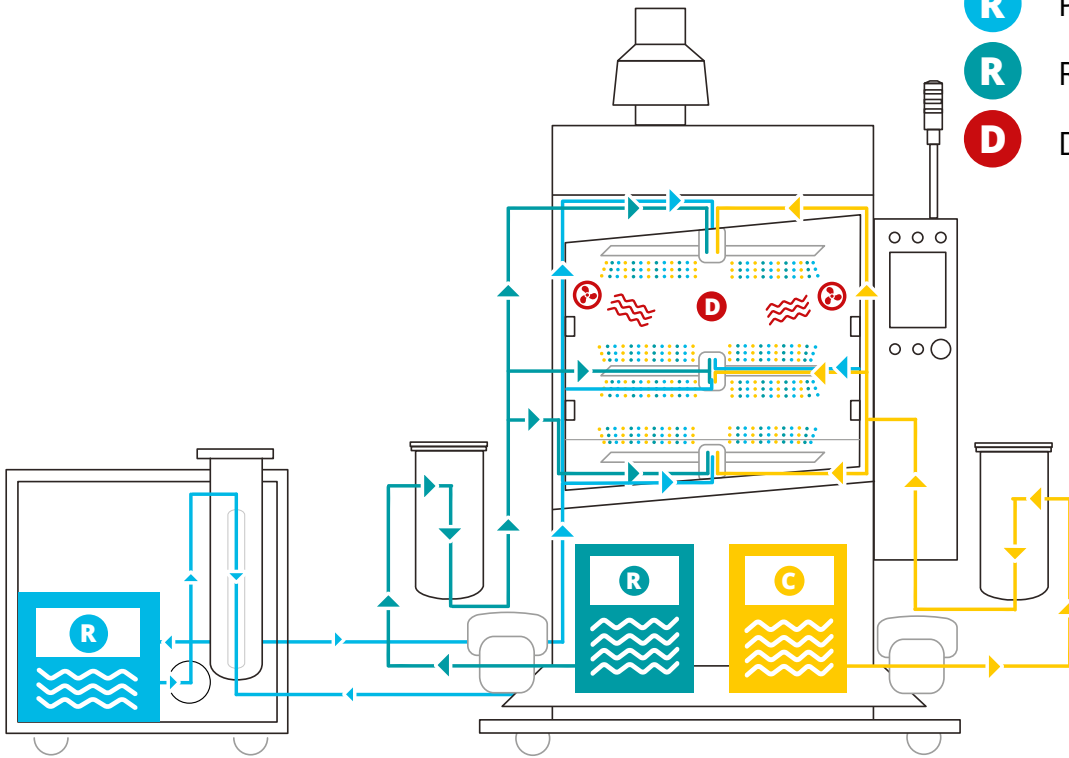


**1 PROCESS CHAMBER (2-FLOOR SOLUTION)**



**4 PROCESSES**

- C** CLEANING
- R** PRE-RINSING
- R** RINSING
- D** DRYING



**CLEANING PARAMETRES**

Cleaning Application	Suitability	Recommended processes temperature		Total usual 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.	2016 *
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

	metric units	imperial units
Dimensions (w x l x h)	1620 x 1400 x 2350 mm	63.8 x 55.1 x 92,5 in
Weight	795 kg	1753 lbs
Ø energy consumption per cycle	3,3 kWh	3.3 kWh
Consumption of cleaning agent per cycle - empty process chamber	0,2 – 0,5 l (15 min, 45°C)	0.05 – 0.13 gal (15min, 113°F)
Consumption of rinsing fluid per cycle - empty process chamber	0,2 – 0,5 l (15 min, 45°C)	0.05 – 0.13 gal (15min, 113°F)
Compressed air consumption per cycle	2 l / cycle	0.52 gal / cycle
Air consumption - chemical residue isolation in piping & spray - in - air nozzles	145 l / 25 sec	38,30 gal / 25 sec
Air consumption - chemical residue isolation in process chamber *	260 l / 45 sec	68.68 gal / 45 sec
Max. dimensions of the cleaned parts **	850 x 800 x 600 mm	32.7 x 31 x 22.7 in
Exchangeable mechanical filter of cleaning and rinsing fluid	5 – 200 µm	5 – 200 µm
Spraying pressure - Cleaning - 1F	min. 0,5 Bar, max. 2,3 Bar	7.25 - 33.36 PSI
Spraying pressure - Cleaning - 2F	min. 0,5 Bar, max.,1,1 Bar	7.25 - 15.95 PSI
Spraying pressure - Pre-rinsing - 1F	0,5 Bar	7.25 PSI
Spraying pressure - Pre-rinsing - 2F	0,4 Bar	5.8 PSI
Spraying pressure - Rinsing - 1F	min. 0,1 Bar, max.1,1 Bar	1.45 - 15.95 PSI
Spraying pressure - Rinsing - 2F	min. 0,1 Bar, max.1,1 Bar	1.45 - 15.95 PSI
Cleaning fluid flow rate	200 l / min	52.83 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	0 – 2000 µS/cm
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 storage tanks	85 l	22,4 gal

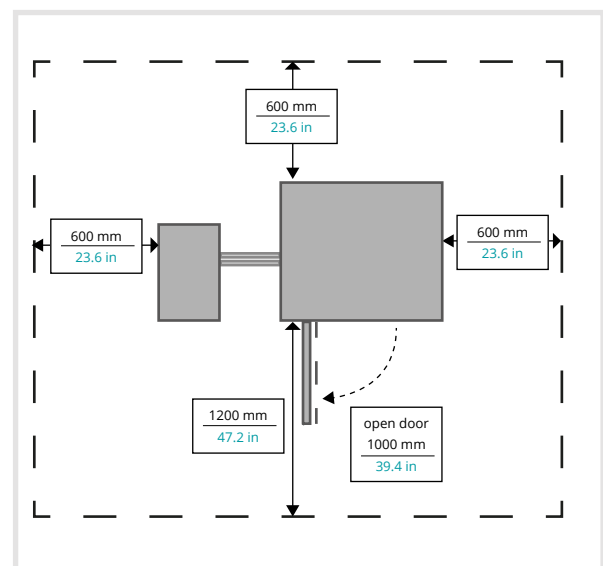
\* Optional

\*\* The maximum height of the board, if the basket has 2 floors, is 210 mm at a loading angle of 10°.

### DIMENSIONS



### MINIMUM SERVICE SPACE AROUND THE MACHINE

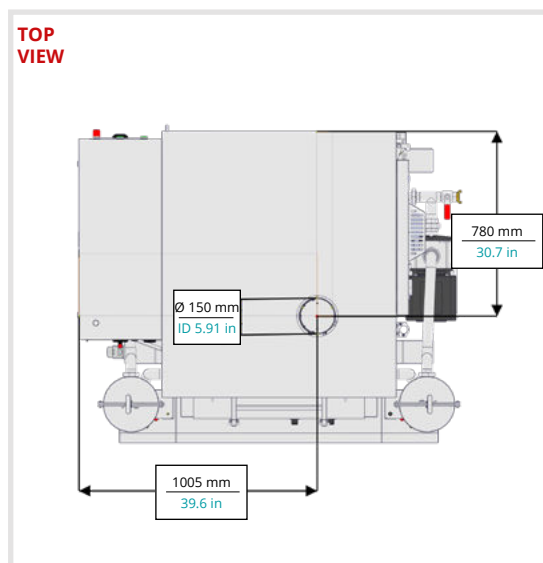
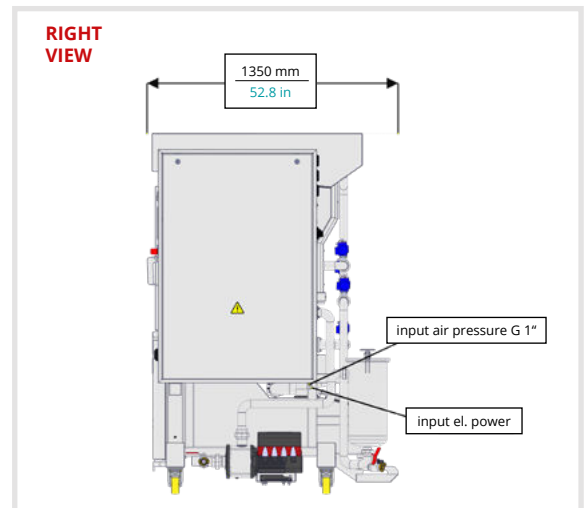
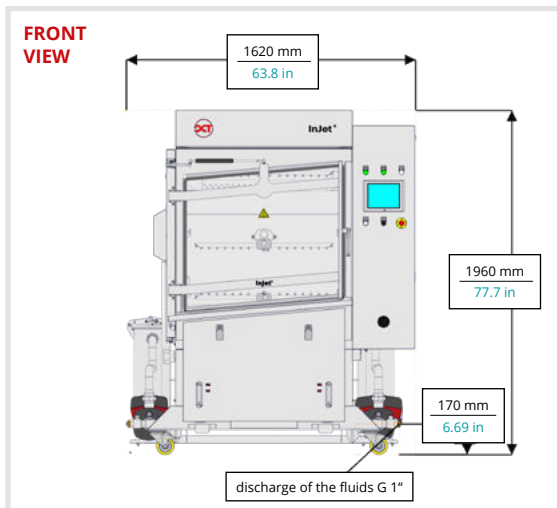




## INSTALLATION REQUIREMENTS

	<b>metric units</b>	<b>imperial units</b>
Power supply	400V, 32A, 50Hz (3+N+PE)	UL 400V, 32A, 60Hz* (3+N+PE)
Pmax	16 kW	16 kW
Compressed air connection	Pipe Ø 6 mm, Ø 10 mm - 5 m	Pipe ID 0.24 in, ID 0.39 in - 196,9 in
Recommended working pressure	4,5 – 6 Bar	65.25 – 87 PSI
Compressed air quality	3. Class **	3. Class **
Exhaust pipe diameter	Ø 150 mm	ID 5.91 in
Exhaust pipe capacity	580 m³/h	20450 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  
 \*\* According to the norm ISO 8573-1



## STANDARD EQUIPMENT



### MECHANICAL EQUIPMENT

Filtration of mechanical particles
Consumption savings - Residue air-isolation
Chimney flap - automatic
Draft diverter with drip plate - 150 mm
Pressurized air coupling for external pump connection
Castor wheels with brakes
Door lock - automatic
Manual air-bleeding for pumps
Mechanical filter lock
Glass level gauge in stainless steel housing
Spare parts (base kit)
External tank - (pre-)rinsing - 75l



### ELECTRO EQUIPMENT

PLC controller+ 8,4" touchscreen display
Rotation - 4 arms - electrically powered
Heating system - cleaning fluid + (pre-)rinsing fluid
Drying system - hot air
Emergency stop button
ESD earthing point - for operator



### SOFTWARE EQUIPMENT

Language version - Czech + English
Five programs with individually settable parameter
Three-level logging rights - operator, maintenance, engineer
Minimum level warning - cleaning and rinsing fluid
Liquid and filter replacement notification – cycle counting
Control system of fluids limit pressures
Real-time cleaning fluid pressure monitoring

## MANDATORY EQUIPMENT



Status light main + acoustic signalization IDEC

Conductivity measurement - pre-rinse 0-2000 µS - blocking optional

Conductivity measurement - rinse 0-2000 µS - blocking optional

Frequency convertor

Heating for tanker 75 L for 888 CRRD

## OPTIONAL EQUIPMENT



### MECHANICAL EQUIPMENT

Common fluids draining- manual control

Automatic cleaning agent refilling (without pump-ready mix)

Automatic cleaning agent discharging (without pump)

Automatic rinsing water refilling (without pump)

Automatic rinsing water discharging (without pump)

Integrated pump for automatic discharge

Integrated pump for manual discharge

Modification of CRRD/CCRD from 2F to 1F

Stainless steel drip tray - ESD floor protection

External portable pump

Filtration sandwich - external

Drain valve with lock

Squeegee for reservoir tank maintenance

Heating coil cover 888

Retractable clamp - 88,9 mm



### ELECTRO EQUIPMENT

Transformer with/without UL

Control of external exhaust ventilator - instalation at customer

Electronic control - drying spirals functionality

## OPTIONAL EQUIPMENT



### SOFTWARE EQUIPMENT

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Fluid heating timer

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Modification of cleaning system for 3rd class flammable liquid

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

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### TRACEABILITY

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Traceability OFF line

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Traceability ON line

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### BASKETS, HOLDERS AND STANDS EQUIPMENT

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Mechanical raster- trolley solution - soldering frame (8slots)

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Mechanical raster - drawer solution - soldering frames (8 slots)

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Mechanical carrier holder - trolley solution - PCB (18 slots)

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Mechanical basket - trolley solution - PCB

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Side guidance of PCB - trolley solution

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Mechanical stand - trolley solution - solder. f.(8 slots) adjus.

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Mechanical stand - drawer solution - soldering frames (8 slots)

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Mechanical reduction - trolley+drawer sol. -stencil, squeegee, PCB

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Mechanical comb holder - trolley solution - PCB (10 slots)

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Mechanical mobile chassis - trolley solution - soldering frames

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Mechanical carrier - trolley solution - soldering frame (5 slo.)

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### TROLLEYS EQUIPMENT

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Mechanical manipulation trolley - two floor with lock

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## OPTIONAL EQUIPMENT



### EXTERNAL TANKS AND ACCESSORIES

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Tank - 200l - rinse fluid

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Conductivity measurement

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Tank - 200l - cleaning fluid (readymix)

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Tank - 200l - cleaning fluid (concentrate)

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Air-based fluid mixing

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Heating the fluids in the tanker (200 L)

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Tank - 200l - cleaning fluid (concentrate) + dosing pump

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1000l IBC tank

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Monitoring the level in discharge external tank - IBC 1000 l

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Monitoring the level in external tank for DI water - IBC 1000 l

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Water pump with pressure tank

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*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.*



## 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 cleaning systems 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 3 or 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** cleaning systems and their accessories.

**Our cleaning systems, 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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