



<u>InJet®</u> **SPRAY IN AIR TECHNOLOGY**







InJet® 888 CRD-2F **CUSTOMLINE**



APPLICATION

REFLOW and SOLDERING PARTS → **Smelting residues**

PCB

STENCIL, MISPRINT, SQUEEGEE → Solder pastes

REMOVING

→ Flux



GENERAL INFORMATION

CUSTOMLINECLEANING 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 INTENDENT FOR RECOMMENDED

APPLICATION

REFLOW and SOLDERING PARTS

PCB

STENCIL, MISPRINT, SQUEEGEE

REMOVING

Smelting residues

Flux

Solder pastes

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 & PROCCESSES

1 PROCESS CHAMBER (2-FLOOR SOLUTION)
3 PROCESSES - 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





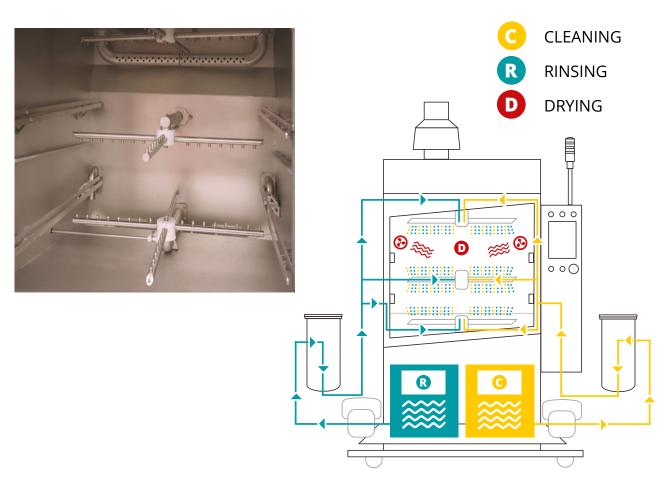




1 PROCESS CHAMBER (2-FLOOR SOLUTION)



3 PROCESSES





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 **
РСВ	**	35 – 55°C	95 – 131 °F	55 min.	2200 *
Stencil, misprint, squeegee	*	20 – 40°C	68 – 104 °F	20 min.	24

LEGEND: $\bigstar \bigstar \bigstar$ highly recommended $\bigstar \bigstar$ recommended \bigstar 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

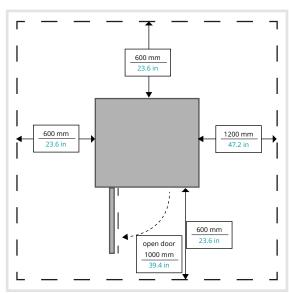
	metric units	imperial units	
Dimensions (w x l x h)	1620 X 1350 X 2350 mm	63.8 x 53.1 x 92,5 in	
Weight	680 kg	1500 lbs	
Ø energy consumption per cycle	3,3 kWh	3.3 kWh	
Consumption of cleaning agent per cycle – empty process chamber	0,2 - 0,5 l (15 min, 45°C)	0.05 – 0.13 gal (15min, 113°F)	
Consumption 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 resiude isolation in piping & spray - in - air nozzles	145 / 25 sec	38,30 gal / 25 sec	
Air consumption - chemical resiude isolation in process chamber	260 I / 45 sec	68.68 gal / 45 sec	
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	1,8 Bar	26.1 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 the storage tanks	85	22,4 gal	

^{**} 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

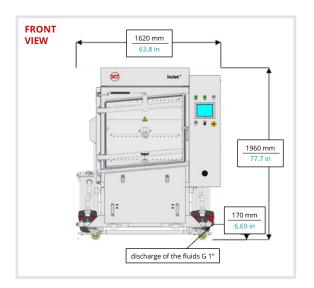


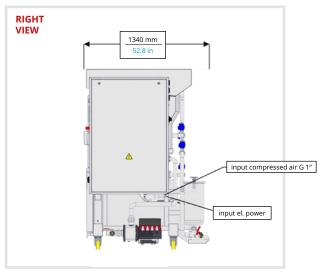


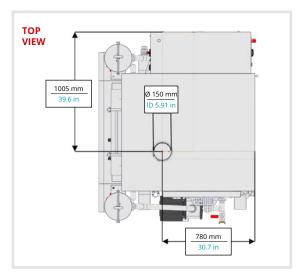
INSTALLATION REQUIREMENTS

	metric units	imperial units
Power supply	400V, 32A, 50Hz (3+N+PE)	UL 400V, 32A, 60Hz* (3+N+PE)
Pmax	12 kW	12 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 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 ** 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)



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 - rinse $\,$ 0-2000 μS - blocking optional

Frequency convertor

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

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



SOFTWARE EQUIPMENT

Fluid heating timer

Modification of cleaning system for 3rd class flammable liquid

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

OPTIONAL EQUIPMENT



TRACEABILITY

Traceability OFF line

Traceability ON line



BASKETS, HOLDERS AND STANDS EQUIPMENT

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

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

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

Mechanical basket - trolley solution - PCB

Side guidance of PCB - trolley solution

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

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

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

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

Mechanical mobile chassis - trolley solution - soldering frames

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



TROLLEYS EQUIPMENT

Mechanical manipulation trolley - two floor with lock



EXTERNAL TANKS AND ACCESSORIES

Tank - 200I - rinse fluid

Conductivity measurement

Tank - 200I - cleaning fluid (readymix)

Tank - 2001 - cleaning fluid (concentrate)

Air-based fluid mixing

Heating the fluids in the tanker (200 L)

Tank - 2001 - cleaning fluid (concentrate) + dosing pump

1000l IBC tank

Monitoring the level in discharge external tank - IBC 1000 I

Monitoring the level in external tank for DI water $\,$ - IBC 1000 I

Water pump with pressure tank



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.



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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