



# BETTER SOLUTIONS



**InJet®**

SPRAY IN AIR  
TECHNOLOGY



CHAMBER



INDIVIDUAL  
PROCESSES



STAINLESS  
STEEL  
DESIGN

AISI 304/316

TECHNICAL DATA SHEET

# InJet® 388 CRD CUSTOMLINE



## APPLICATION

- STENCIL, MISPRINT, SQUEEGEE
- PUMPRINT
- COMFORMAL COATING

## REMOVING

- SOLDER PASTES
- SMT ADHESIVES
- COATING



## 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

- STENCIL, MISPRINT, SQUEEGEE
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### CLEANING TECHNOLOGY


The InJet® 388 series cleaning systems represent unique **vertical Spray-In-Air technology developed** and manufactured by DCT. The vertically installed Spray-In-Air device minimizes the shadowing effect commonly seen in horizontal cleaners, and maximizes the efficiency of the cleaning process as the cleaning fluid is sprayed directly onto the cleaned component.


### CHAMBERS & PROCESSES


- 1 PROCESS CHAMBER
- 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

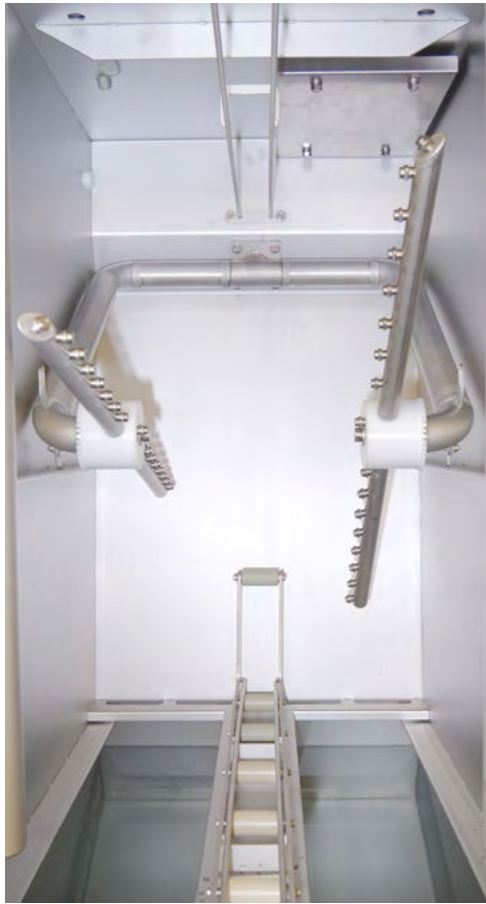





Watch our video

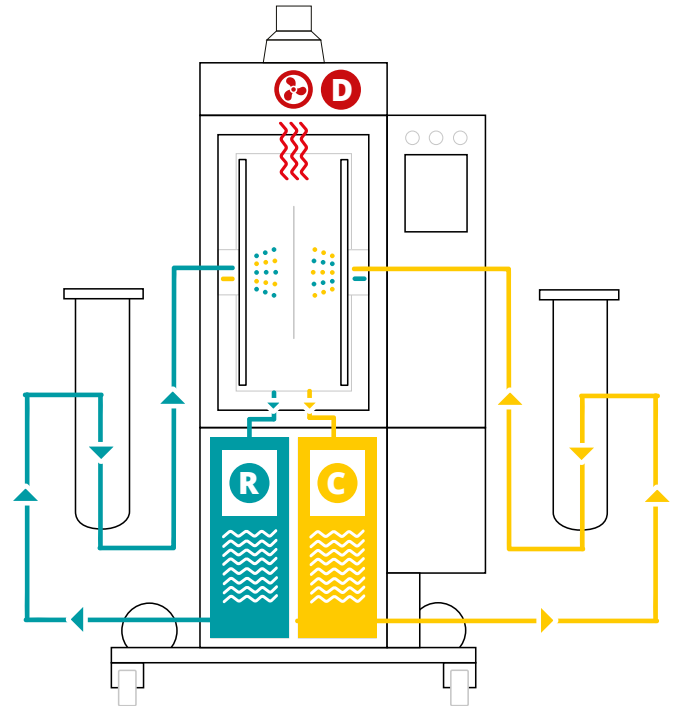


### 1 PROCESS CHAMBER



### 3 PROCESSES

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



### CLEANING PARAMETRES

Cleaning Application	Suitability	Recommended processes temperature		Total usual process time	Capacity per 8 hours
Stencil, misprint, squeegee	★	20 – 40°C	68 – 104 °F	18 min.	27 ***
PumPrint	★	40 – 55°C	104 – 131 °F	18 min.	27 ***
Conformal coating	★	40 – 55°C	104 – 131 °F	60 min.	192 * / 16 **

LEGEND: ★ HIGHLY RECOMMENDED    ★ RECOMMENDED    ★ APPLICABLE

\* PCBA eurocards / per 8 hours (calculated for dimension of 100 x 160 mm / 3.94 x 6.3 in)

\*\* Parts in soldering coating 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



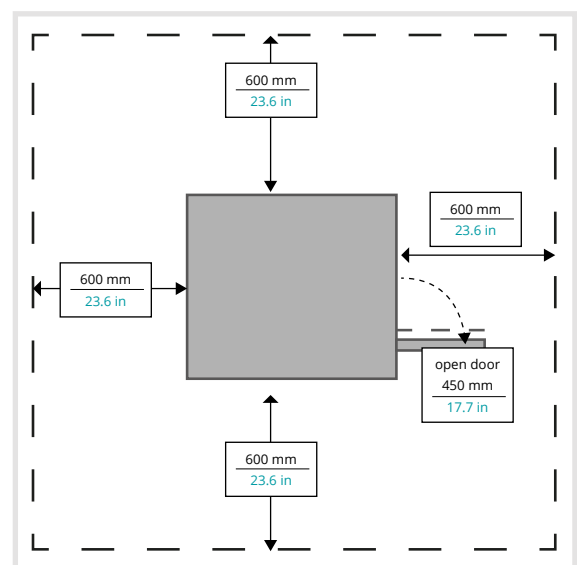
## TECHNICAL PARAMETERS

	metric units	imperial units
Dimensions (w x l x h)	1200 x 1390 x 2400 mm	47,2 x 54,7 x 94,5 in
Weight	450 kg	992 lbs
Ø energy consumption per cycle	2,5 kWh	2.5 kWh
Cleaning and rinsing fluid consumption per cycle	0,05 – 0,3 l	0.01 – 0.08 gal
Compressed air consumption per cycle	900 l / cycle	237.75 gal / cycle
Max. dimensions of the cleaned parts	190 x 800 x 760 mm	7.48 x 31,5 x 29,92 in
Exchangeable mechanical filter of cleaning and rinsing fluid	5 – 200 µm	5 – 200 µm
Operating pressures	cleaning: 1,5 – 2,8 Bar, rinsing: 0,3 – 1,5 Bar	cleaning: 21.75 – 40.6 PSI rinsing: 4.35 – 21.5 PSI
Cleaning fluid flow rate	200 l / min	52.8 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
Cleaning system control	PLC + 8,4" touchscreen	PLC + 8.4" touchscreen
Volume of the storage tanks	60 l	15,8 gal

### DIMENSIONS



### MINIMUM SERVICE SPACE AROUND THE MACHINE



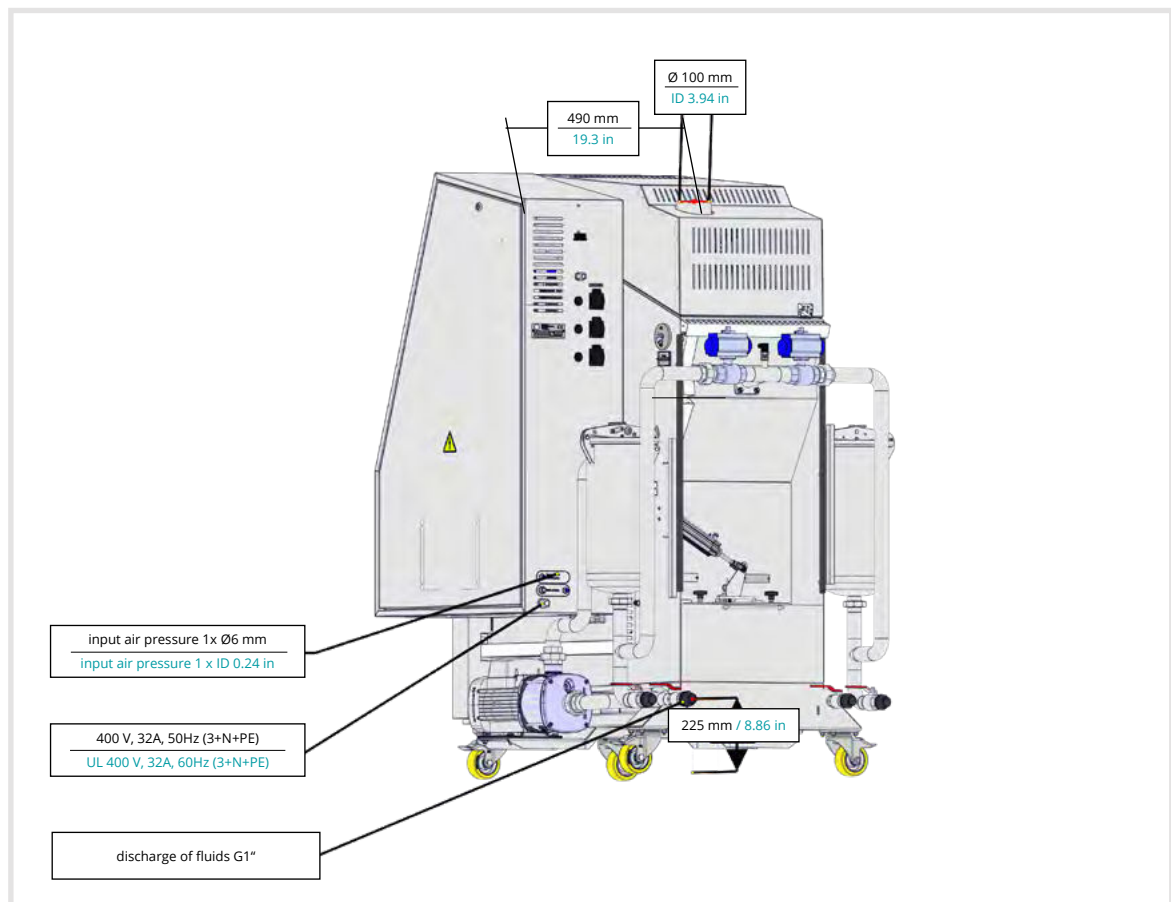


## INSTALLATION REQUIREMENTS

	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 - 5 m	Pipe ID 0.24 in - 196,9 in
Recommended working pressure	4,5 – 6 Bar	65.5 – 87 PSI
Compressed air quality	3. Class **	3. Class **
Exhaust pipe diameter	Ø 100 mm	ID 3.94 in
Exhaust pipe capacity	380 m³/h	13400 ft³/h
Minimum liquid for first run	2 x 50 l	2 x 13.2 gal
Service space required around the device	600 mm	23.6 in

\* When using frequency convertor  
 \*\* According to the norm ISO 8573-1

### BACK VIEW



## STANDARD EQUIPMENT



### MECHANICAL EQUIPMENT

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Filtration of mechanical particles

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Rotation - 2 arms - powered by fluid flow

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Chimney flap - automatic

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Draft diverter with drip plate - 100 mm

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Pressurized air coupling for external pump connection

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Castor wheels with brakes - BLICKLE

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Door lock - automatic

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Manual air-bleeding for pumps

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Mechanical filter lock

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Glass level gauge in stainless steel housing

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Spare parts (base kit)

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### ELECTRO EQUIPMENT

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PLC controller + 8,4" touchscreen display - IDEC

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Heating system - cleaning fluid, rinsing fluid

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Drying system - hot air

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Emergency stop button - EATON

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ESD earthing point - for operator

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### SOFTWARE EQUIPMENT

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Language version - Czech + English

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Five programs with individually settable parameter

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Three-level logging rights - operator, maintenance, engineer

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Minimum level warning - cleaning and rinsing fluid

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Liquid and filter replacement notification - cycle counting

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Control system of fluids limit pressures

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Real-time cleaning fluid pressure monitoring

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## MANDATORY EQUIPMENT




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Status light main + acoustic signalization - IDEC

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Conductivity measurement - rinse 0-2000 µS - blocking optional

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## OPTIONAL EQUIPMENT



### HARDWARE EQUIPMENT

Air Knife - swinging
Common fluids draining- manual control
Automatic cleaning agent refilling (without pump-ready mix)
Automatic cleaning agent refilling - concentrate
Automatic cleaning agent discharging (without pump)
Automatic rinsing water refilling (without pump)
Automatic rinsing water discharging (without pump)
Integrated pump for automatic discharge
External portable pump
Integrated pump for manual discharge
Drip tray - fitted
Stainless steel drip tray - ESD floor protection
Consumption savings - Residue air-isolation
Filtration sandwich - external
Drain valve with lock
Squeegee for reservoir tank maintenance



### ELECTRO EQUIPMENT

Upgrade to 2-arm driven rotation
Upgrade to 3-arm driven rotation
Control of external exhaust ventilator - instalation at customer
Electronic control - drying spirals functionality
Electronically continuous level measurement - cleaning
Electronically continuous level measurement - rinse
Frequency convertor
Transformer with/without UL



### SOFTWARE EQUIPMENT

Fluid heating timer - cleaning
Modification of cleaning system for 3rd class flammable liquid
Language mutation (CZE, ENG, GER, POL, CHI, RUS, ITA, SPA, MAY, HUN)

## OPTIONAL EQUIPMENT



### TRACEABILITY

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Traceability OFF line

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Traceability ON line



### FRAMES EQUIPMENT

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Frames for PCBAs

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Frames for frameless stencils

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Frames for frame stencils

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Frames for VectorGuard stencils

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Frames for squeegees

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Frames - reduction for stencils

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Frames combined



### TROLLEYS, STANDS, HOLDERS EQUIPMENT

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Mechanical table holder for a mechanical carrier frames

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Mechanical manipulation trolley of PCBA holders - 10 positions

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Mechanical manipulation trolley of PCBA holders - 8 positions



### 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



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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