TECHNICAL DATA SHEET

InJet® 3179 CRD

Big board

★★★ STENCIL, MISPRINT, SQUEEGEE cleaning
★★★ PUMPRINT cleaning
★★ PCB cleaning
GENERAL INFORMATION

The InJet® 3179 CRD including 100% closed loop with processes of cleaning, rinsing and drying technologies.

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

The InJet® 3179 CRD is designed to remove solder pastes and SMT adhesives from non-standard oversized stencils up to 1170 x 2160 x 2015 mm or 46.1 x 85 x 79.3 in, respectively.

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.
4 INDIVIDUAL PROCESSES

CLEANING

RINSING

DRYING

CLEANING PARAMETRES

<table>
<thead>
<tr>
<th>Application name</th>
<th>Recommended application</th>
<th>Recommended temperature</th>
<th>Total cleaning process time</th>
<th>Capacity per 8 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stencil, misprint, squeegee</td>
<td>★★★</td>
<td>20 – 40°C</td>
<td>68 – 104 °F</td>
<td>54 / 27 ***</td>
</tr>
<tr>
<td>Pumprint</td>
<td>★★★</td>
<td>40 – 55°C</td>
<td>104 – 131 °F</td>
<td>54 / 27 ***</td>
</tr>
<tr>
<td>PCB</td>
<td>★★</td>
<td>35 – 55°C</td>
<td>95 – 131 °F</td>
<td>768 *</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>metric units</th>
<th>imperial units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (w x l x h)</td>
<td>1170 x 2160 x 2015 mm</td>
<td>46.1 x 85 x 79.3 in</td>
</tr>
<tr>
<td>Weight</td>
<td>900 kg</td>
<td>1984 lbs</td>
</tr>
<tr>
<td>Ø energy consumption per cycle</td>
<td>2.5 kWh</td>
<td>2.5 kWh</td>
</tr>
<tr>
<td>Cleaning and rinsing fluid consumption per cycle</td>
<td>0.05 – 0.3 l</td>
<td>0.01– 0.08 gal</td>
</tr>
<tr>
<td>Compressed air consumption per cycle</td>
<td>1500 l / cycle</td>
<td>396.26 gal / cycle</td>
</tr>
<tr>
<td>Max. dimensions of the cleaned parts</td>
<td>100 x 1700 x 900 mm</td>
<td>3.94 x 66.93 x 35.43 in</td>
</tr>
<tr>
<td>Exchangeable mechanical filter of cleaning and rinsing fluid</td>
<td>5 – 200 μm</td>
<td>5 – 200 μm</td>
</tr>
<tr>
<td>Operating pressures</td>
<td>cleaning: 1.5 Bar – 3.5 Bar, rinsing: 0.3 Bar – 2.0 Bar</td>
<td>cleaning: 21.76 PSI – 50.76 PSI, rinsing: 4.35 PSI – 29 PSI</td>
</tr>
<tr>
<td>Cleaning fluid flow rate</td>
<td>400 l / min</td>
<td>105.67 gal / min</td>
</tr>
<tr>
<td>Temperature range setting of the cleaning and rinsing fluid</td>
<td>From ambient temperature to 60°C</td>
<td>From ambient temperature to 140°F</td>
</tr>
<tr>
<td>Conductivity range settings of the rinsing fluid in the tanks.</td>
<td>0 – 2000 μS/cm * optional</td>
<td>0 – 2000 μS/cm * optional</td>
</tr>
<tr>
<td>Temperature range setting of the drying</td>
<td>From ambient temperature to 80°C</td>
<td>From ambient temperature to 176°F</td>
</tr>
<tr>
<td>Noise level</td>
<td>&lt; 70 dB</td>
<td>&lt; 70 dB</td>
</tr>
<tr>
<td>Device control</td>
<td>PLC + 8.4&quot; touchscreen</td>
<td>PLC + 8.4&quot; touchscreen</td>
</tr>
<tr>
<td>Volume of the storage tanks</td>
<td>125 l</td>
<td>33 gal</td>
</tr>
</tbody>
</table>

## DIMENSIONS

- **Dimensions**
  - Width: 1170 mm (46.1 in)
  - Length: 2160 mm (85 in)
  - Height: 2015 mm (79.3 in)

## MINIMUM SERVICE SPACE AROUND THE MACHINE

- **Dimensions**
  - Width: 2160 mm (85 in)
  - Length: 3160 mm (124.4 in)
  - Height: 2300 mm (90.6 in)

- **Service Space**
  - Front: 600 mm (23.6 in)
  - Sides: 600 mm (23.6 in)
  - Top: 600 mm (23.6 in)
  - Open door: 450 mm (17.7 in)
## INSTALLATION REQUIREMENTS

<table>
<thead>
<tr>
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<th>metric units</th>
<th>imperial units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>400V, 32A, 50Hz (3+N+PE)</td>
<td>UL 400V, 32A, 60Hz* (3+N+PE)</td>
</tr>
<tr>
<td>Pmax</td>
<td>12 kW</td>
<td>12 kW</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>Pipe Ø 6 mm, Ø 10 mm</td>
<td>Pipe ID 0.24 in, ID 0.39 in</td>
</tr>
<tr>
<td>Recommended working pressure</td>
<td>4,5 - 6 Bar</td>
<td>65.25 – 87 PSI</td>
</tr>
<tr>
<td>Exhaust pipe diameter</td>
<td>Ø 100 mm</td>
<td>ID 3.94 in</td>
</tr>
<tr>
<td>Exhaust pipe capacity</td>
<td>380 m³/h</td>
<td>13400 ft³/h</td>
</tr>
<tr>
<td>Minimum liquid for first run</td>
<td>2 x 95 l</td>
<td>2 x 25.1 gal</td>
</tr>
<tr>
<td>Service space required around the device</td>
<td>600 mm</td>
<td>23.6 in</td>
</tr>
</tbody>
</table>

* When using frequency convertor

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### Diagrams

- **Front View**: 1170 mm (46.1 in), 2015 mm (79.3 in)
- **Right View**: 1030 mm (40.6 in)
- **Top View**: Ø 100 mm (ID 3.94 in), 227.81 mm (ID 0.9 in)
### STANDARD HARDWARE EQUIPMENT

- 1 process chamber – fully automated solution
- 100% closed loop fluid system
- 2 arm rotation – fluid powered – cleaning
- Cleaning and rinsing fluid heating
- Mechanical filtration
- 2 hot air blowers – drying
- Chimney flap – electronically controlled
- Pneumatic door lock
- Emergency stop button
- Manipulation wheels – lockable
- PLC controller + 8.4” touchscreen display
- Spare parts (base kit)

### STANDARD SOFTWARE EQUIPMENT

- 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

- Common fluids draining – manual control
- Automatic fluids refilling (without pump)
- Automatic fluids discharging (without pump)
- Tanker 200 and 400 l – cleaning / rinsing fluid
- Filtration 1PR sandwich – integrated
- Filtration sandwich – external
- Conductivity measurement of rinse fluid 0–2000 µS – blocking optional

and other equipment ...

OPTIONAL SOFTWARE EQUIPMENT

- SW for CVA calculation (android, machine)
- Adjustable timer of heating – cleaning fluid
- Upgrade machine for PROTON
- Language mutation (CZE, ENG, GER, POL, CHI, RUS, ITA, SPA, MAY, HUN)
- ONLINE access to cleaning device

and other equipment ...

OPTIONAL ACCESSORY – FRAMES AND OTHERS

- Mechanical carrier frame – PCB
- Mechanical carrier frame – frameless stencils
- Mechanical carrier frame – squeegees

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
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

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.