



TECHNICAL DATA SHEET

AirJet® 4127 CRD

BETTER SOLUTIONS



CHAMBER

★★★ REFLOW and SOLDERING PARTS cleaning



GENERAL INFORMATION

The AirJet® cleaning systems represent unique air-bubbling technology developed and manufactured by DCT.

Air-bubbling technology machines are developed for gentle yet highly efficient maintenance cleaning of reflow and wave soldering machines such as soldering frames, filters, heat exchangers, etc.

The AirJet® “Piano” can also be offered for the removal of conformal coatings. AirJet® cleaning systems are available in several sizes and with different levels of automation of the cleaning process.

AirJet® 4127 CRD including 100% separated processes of cleaning, rinsing and drying technologies.

All processes are automated and take place in **3 separate process chambers**, which are also storage tanks.

Cleaning takes place in the first inlet chamber, where the operator places the basket with parts. Then the operator manually moves the basket with the cleaned parts into the secondary rinse chamber. The operator then moves the basket to the last drying chamber.

All 3 chambers can be used in parallel, which increases the machine's cleaning capacity and reduces cross-contamination when compared with single-chamber devices.

The **AirJet® 4127 CRD** is designed for the maintenance cleaning of **reflow ovens and wave soldering machines**.

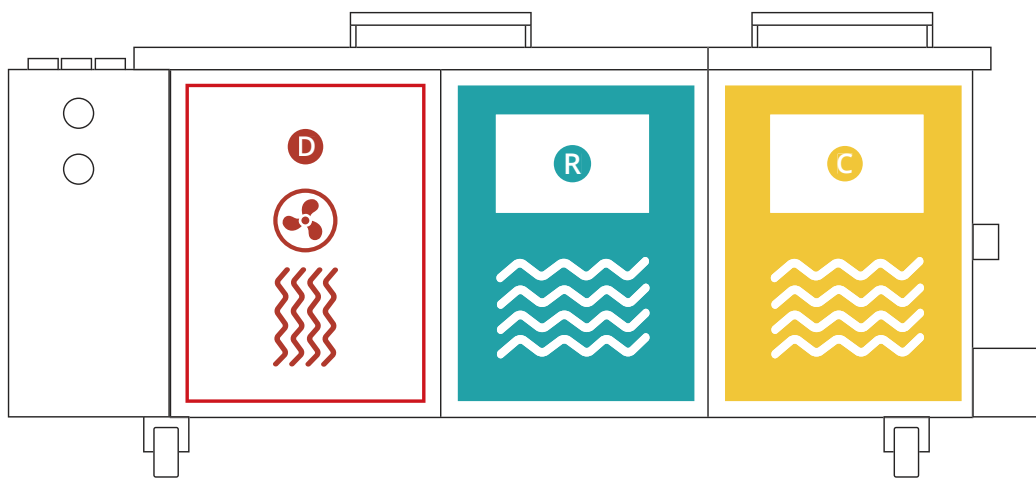


Depending on your cleaning requirements, the DCT project manager, in collaboration with a local distributor, will advise you on a suitable water-based cleaning fluid and the correct setup of the entire process.



3 INDIVIDUAL PROCESSES

- C** CLEANING
- 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	35 min.	288 **

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

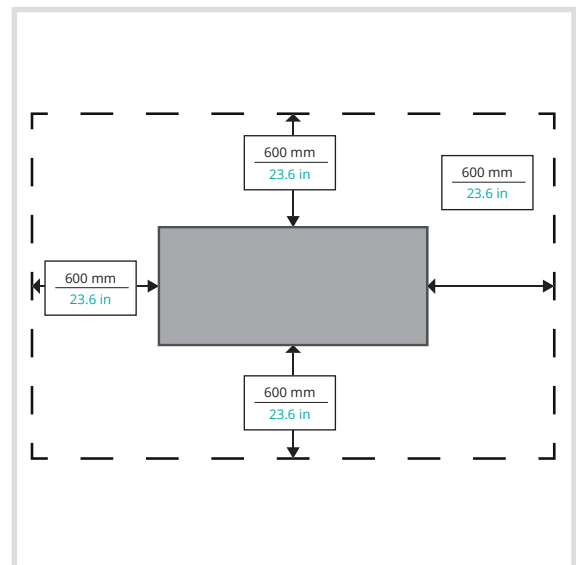


TECHNICAL PARAMETERS

	<i>metric units</i>	<i>imperial units</i>
Dimensions (w x l x h)	1900 x 1550 x 1465 mm	74.8 x 61 x 57.7 in
Weight	480 kg	1058 lbs
Ø energy consumption per cycle	1,65 kWh	1.65 kWh
Cleaning and rinsing fluid consumption per cycle	0,05 – 0,3 l	0.01 gal - 0.08 gal
Compressed air consumption per cycle	83 l / 5 Bar	0.79 gal / 72.5 PSI
Max. dimensions of the cleaned parts	430 x 1280 x 700 mm	16,93 x 50,39 x 27,56 in
Dimensions of the carrier basket	410 x 1210 x 670 mm	16,14 x 47,64 x 26,38 in
Volume of the storage tanks (clean, rinse)	400 l	400 l
Temperature range setting of the cleaning and rinsing fluid	From ambient temperature to 60°C	From ambient temperature to 140°F
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 + 5,7" touchscreen	PLC + 5.7" touchscreen



DIMENSIONS



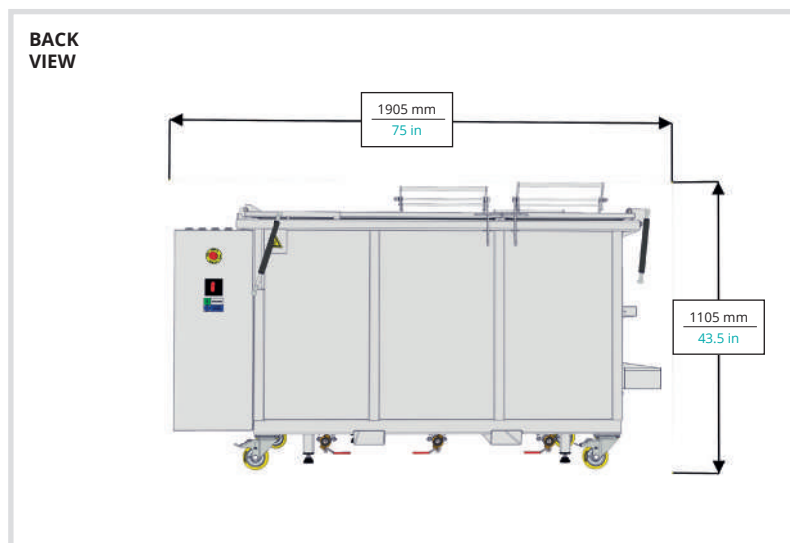
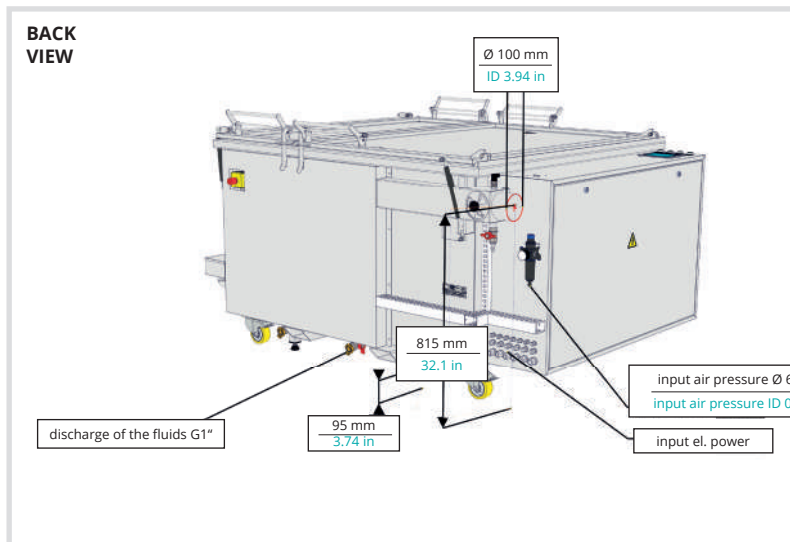
**MINIMUM SERVICE SPACE
AROUND THE MACHINE**



INSTALLATION REQUIREMENTS

	<i>metric units</i>	<i>imperial units</i>
Power supply	400V, 32A, 50Hz (3+N+PE)	UL 400V, 32A, 60Hz* (3+N+PE)
Pmax	14 kW	14 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 capacity	380 m³/h	13 400 ft³/hod
Minimum liquid for first run	2 x 75 l	2 x 106 gal
Service space required around the device	600 mm	23.6 in

* When using frequency convertor





STANDARD HARDWARE EQUIPMENT

3 process chambers – manual solution

100% closed loop fluid system

Cleaning and rinsing fluid heating

1 hot air blower – drying

Hot air drying

Emergency stop button

Adjustable legs – 4 pcs

PLC controller + 5,7" touchscreen display

Spare parts (base kit)



STANDARD SOFTWARE EQUIPMENT

Standard software language mutation – CZ, ENG

Liquid and filter replacement notification – cycle counting

Possibility of 5 programs – setting option



OPTIONAL HARDWARE EQUIPMENT

Manipulation wheels – lockable

Automatic fluids refilling (without pump)

Drip tray – ESD floor protection

Pump for draining fluids automatically

Control of external exhaust ventilator

and other equipment ...



OPTIONAL SOFTWARE EQUIPMENT

Adjustable timer of heating cleaning fluid

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

ONLINE access to cleaning device



OPTIONAL ACCESSORY – FRAMES AND OTHERS

Mechanical basket



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.

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



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InJet® is a registration trademark of DCT Czech s.r.o.

DCT Czech s.r.o., Tovární 85, 679 21 Černá Hora, Czech republic
e-mail: info@dct.cleaning, www.dct.cleaning