DCT

 # Better Solutions

Sonix®
ULTRASONIC
TECHNOLOGY

4
CHAMBERS

4
INDIVIDUAL
PROCESSES

STAINLESS STEEL DESIGN
AISI **304/316**

Sonix® 355 CRRD
CUSTOMLINE

APPLICATION	REMOVING
COMFORMAL COATING →	**Coating removing**
PCB →	**Flux**

ℹ 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 INTENDENT FOR RECOMMENDED

APPLICATION		REMOVING
COMFORMAL COATING	→	**Coating removing**
PCB	→	**Flux**

CLEANING TECHNOLOGY

The Sonix® series cleaning systems represent a unique **Ultrasonic technology** developed and manufactured by DCT.

CHAMBERS & PROCESSES

4 PROCESS CHAMBERS
4 PROCESSES - CLEANING, PRE-RINSING, RINSING, DRYING

PROCESS CONTROL

- **Minimum level warning** - cleaning and rinsing fluid
- **Liquid and filter replacement notification** - cycle counting
- **Conductivity measurement - pre-rinse 0-2000 μS** - blocking option
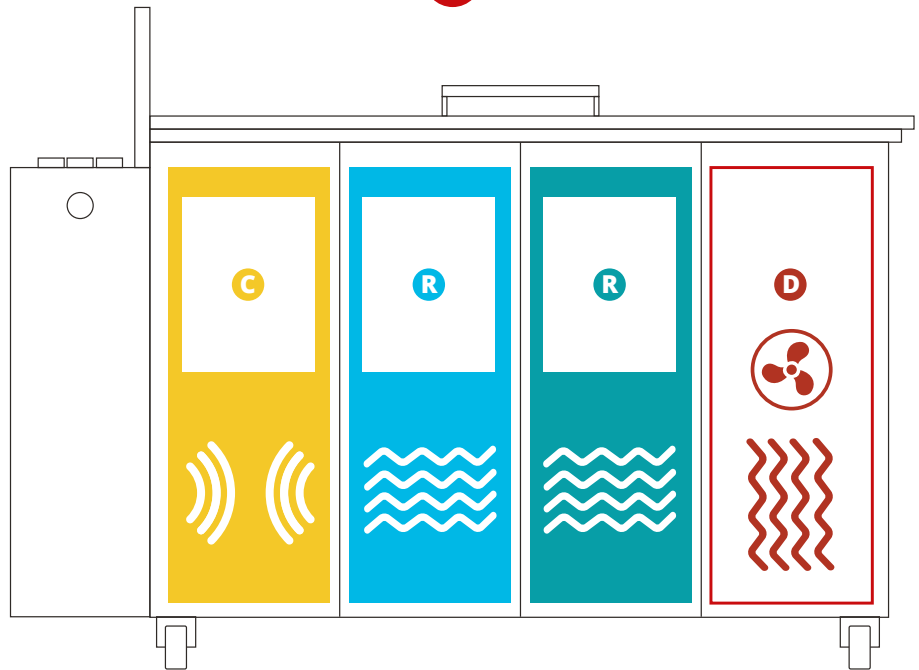- **Conductivity measurement - rinse 0-2000 μS** - blocking optional

Watch our video

4 PROCESS CHAMBERS

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
Conformal coating removing	★★	40 – 55°C	104 – 131 °F	60 min.	960 * / 80 *
PCB	★	35 – 55°C	95 – 131 °F	35 min.	1440 **

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)

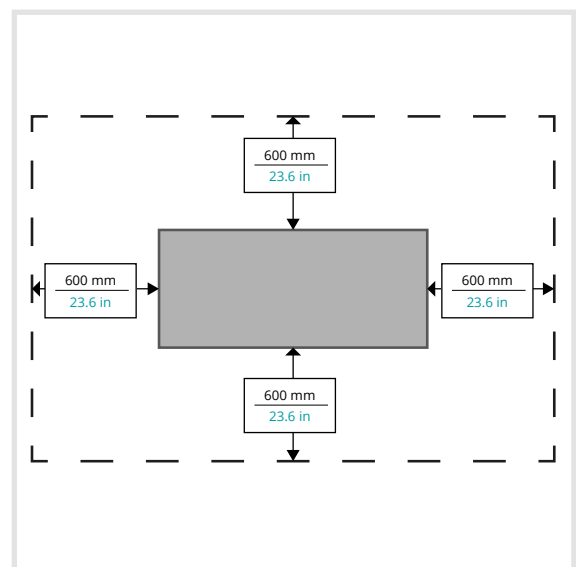*** Stencils, pumpprints larger than 736 x 736 mm / 29 x 29 in

⚙ TECHNICAL PARAMETERS

	metric units	imperial units
Dimensions (w x l x h)	1740 x 1220 x 1210 mm	68.5 x 48 x 47.6 in
Weight	400 kg	882 lbs
Ø energy consumption per cycle	1.92 kWh	1.92 kWh
Consumption of cleaning agent per cycle - empty cleaning chamber	0,1 – 0,3 l (15 min, 45°C)	0.02 – 0,08 gal (15 min, 113°F)
Consumption of rinsing fluid per cycle - empty rinsing chamber	0,1 – 0,3 l (15 min, 45°C)	0.02 – 0,08 gal (15 min, 113°F)
Compressed air consumption per cycle	1 l / 5 Bar	0.26 gal / 72.5 PSI
Dimensions of carrier basket	270 x 530 x 620 mm	10.6 x 20.8 x 24.4 in
Max. dimensions of the cleaned parts	280 x 540 x 630 mm	11,2 x 21,2 x 24,8 in
Temperature range setting of the cleaning and rinsing fluid	From ambient temperature to 60°C	From ambient temperature to 140°F
Ultrasound frequency	35 kHz	35 kHz
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
Volume of the storage tanks	120 l	31,7 gal

DIMENSIONS

1220 mm
48 in

1740 mm
68.5 in

1210 mm
47.6 in
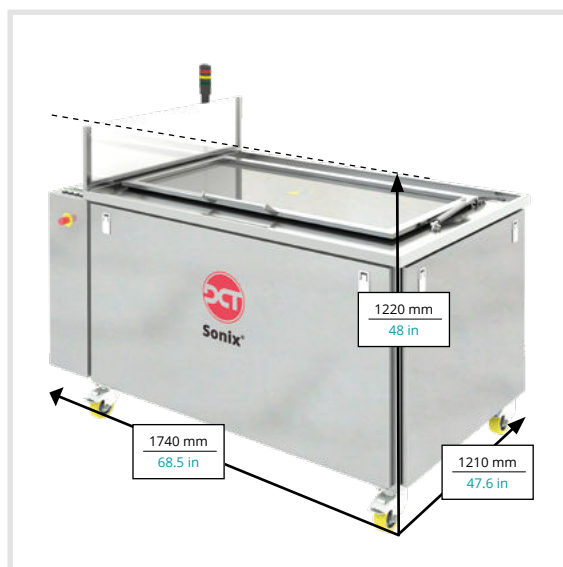
MINIMUM SERVICE SPACE AROUND THE MACHINE

600 mm
23.6 in

600 mm
23.6 in

600 mm
23.6 in

600 mm
23.6 in

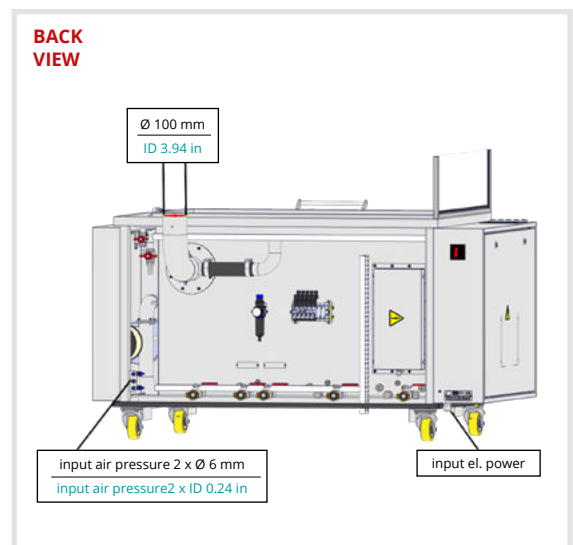## INSTALLATION REQUIREMENTS

	metric units	imperial units
Power supply	400V, 32A, 50Hz (3+N+PE)	UL 400V, 32A, 60Hz* (3+N+PE)
Pmax	15 kW	15 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	65,25 – 87 PSI
Compressed air quality	3. Class **	3. Class **
Exhaust pipe diameter	Ø 100 mm	ID 3.94 in
Exhaust pipe capacity	580 m³/h	20450 ft³/h
Minimum liquid for first run	3 x 100 l	3 x 26.4 gal
Service space required around the device	600 mm	23.6 in

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

RIGHT VIEW

1210 mm / 47.6 in
115 mm / 4.53 in
discharge of the fluids G 1"
195 mm / 7.68 in

RIGHT VIEW

Ø 100 mm / ID 3.94 in
1020 mm / 40.2 in

TOP VIEW

400 mm / 15.7 in
Ø 100 mm / ID 3.94 in
110 mm / 4.33 in

BACK VIEW

Ø 100 mm / ID 3.94 in
input air pressure 2 x Ø 6 mm
input air pressure2 x ID 0.24 in
input el. power
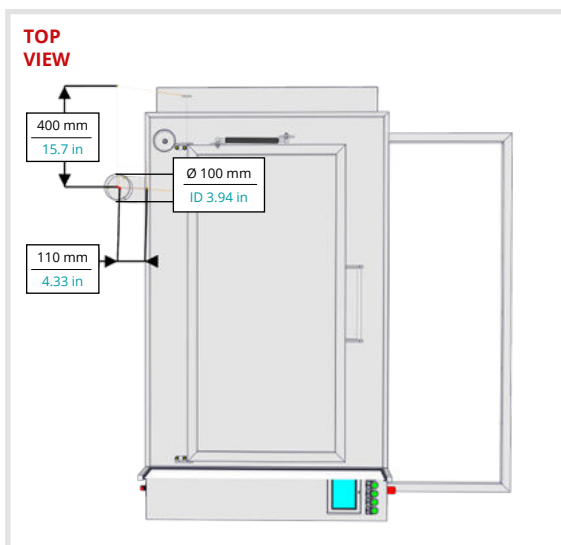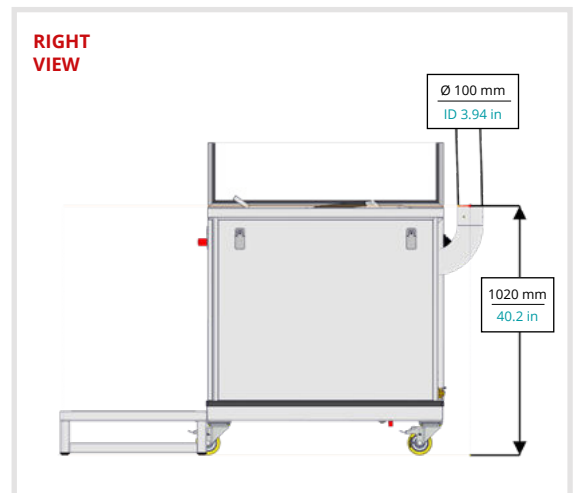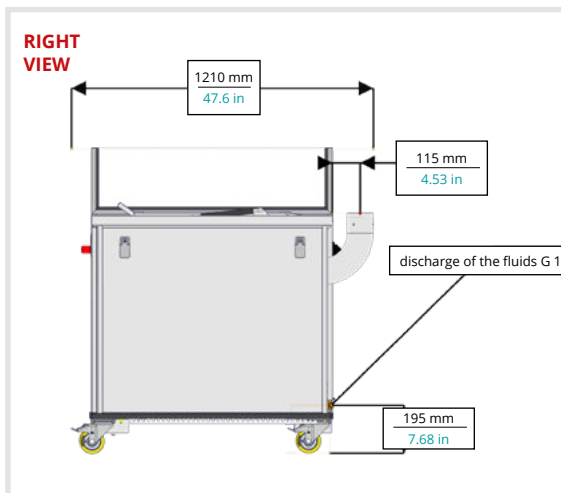
STANDARD EQUIPMENT

MECHANICAL EQUIPMENT

Castor wheels with brakes - BLICKLE

Spare parts (base kit)

ELECTRO EQUIPMENT

PLC controller + 5,7" touchsreen display - IDEC

Heating system - cleaning, pre-rinsing and rinsing fluid

Drying system - hot air

Emergency stop button

ESD earthing point - for operator

SOFTWARE EQUIPMENT

Language version - Czech + English

Three 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

MANDATORY EQUIPMENT

Status light main + acoustic signalization - IDEC

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

Conductivity measurement - rinse 0-2000 µS - blocking optional

OPTIONAL EQUIPMENT

HARDWARE EQUIPMENT

Automatic cleaning agent refilling (without pump-ready mix)

External portable pump

Chimney assembly with draft diverter - Sonix 355

Stainless steel drip tray - ESD floor protection

Filtration sandwich - external

Drain valve with lock

Walkable platform - Sonix 355

ELECTRO EQUIPMENT

Electronic control - drying spirals functionality

Control of external exhaust ventilator - instalation at customer

Transformer with/without UL

SOFTWARE EQUIPMENT

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

TRACEABILITY

Traceability ON line

Traceability OFF line

BASKETS, HOLDERS AND STANDS EQUIPMENT

Mechanical basket

Mechanical holder for basket

EXTERNAL TANKS AND ACCESSORIES

1000l IBC 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