



DLyte 100PRO Carbide

DLyte 100PRO Carbide is the biggest compact machine for industrial applications. It combines a planetary movement and a vertical backand-forth motion inside the drum containing the electrolyte media. It is suitable to treat materials included in Steel group, Cobalt-chrome, Titanium group, Copper based alloys group, Hard metals group, Nickel based alloys group and Aluminium group materials.

Workbowl and holder are not included. Light tower, anti-vibratory support, conductivity and temperature calibration system are included.

FINISHING PROCESSES

- + Precision finishing
- + Smoothing
- + Mirror finishing
- + Deburring
- + Rounding
- + Corrosion resistance
- + AM post-processing
- + Inner Channels

TECHNICAL DATASHEET. DLYTE 100PRO CARBIDE

The Dlyte 100PRO Carbide's advanced PLC based electronics allows to apply asymmetric pulses required to process carbides and a wide range of materials from low to high frequency, and parameter concatenation. In addition, it allows to control the holder rotation's speed and direction, to precisely apply movements on each piece of the batch, ensuring homogeneous results.

Dlyte 100PRO Carbide's electrolyte lifespan is based on material extraction, as it is able to calculate the remaining media lifespan of the electrolyte based on material removal. Thanks to the independent conductivity and its 2 temperature probes, it offers readings to the automatic electrolyte conditioning system to optimize performance and its useful life, and also adds an extra safety layer.

Its advanced software logs key parameters, and warnings of the process, thus assuring traceability of the processed batch. All data can be easily extracted and analyzed through the ethernet and usb ports.

The hardware is designed with robust and reliable mechanics to work continuously in mass production. It includes a refrigeration system with a heat exchanger, to control and stabilize the Dry Suspension electrolyte temperature, and accomplish repetitive and controlled results.

Its hardware also allows to have an easier access for maintenance and operation, and its safety system includes a warning light tower which indicates the machine status, and antisabotage security system.

01. MACHINE SPECIFICATIONS

TECHNICAL DATA

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Capacity (per cycle)	180 Ø x 80 mm (maximum volume centered to the axis)
Machine dimensions	950 x 1,320 x 880 mm
Support dimensions	950 x 790 x 800 mm
Machine weight	274 kg
Anti-vibratory support weight	144 kg
Power (single phase with industrial plug)	5.5 kW (24 A) (single phase with industrial plug) ☺
Voltage	230 V~ ± 10% (1P+N+PE) (Available transformer kit 110-230 V~)
Air pressure	4-5 bar (air connector: 8mm or 1/4' BSP')

Consumption of 40 l/min. The air quality must be 5:4:4* according to ISO 8573. (*) Air quality required for a maintenance every 6 months (change of filters).

Storage capacity (Anti-vibratory support)	231 l
Distilled water tank capacity	6.5 l (drain valve included)
External antisabotage valve	Yes
Noise level	<70 dB(A)
HMI size	Touchscreen LCD TFT 7"
Auxiliar 24 V connector inside cabin for holder accessories	Yes
Ambient temperature operating	5°C to 35°C
Temperature storage	-10°C to +70°C
Recommended humidity	30 - 70 % RH (without condensation)

TECHNICAL DATASHEET. DLYTE 100PRO CARBIDE

TECHNICAL DATA 2/2

Electrolyte storage	5°C to 40°C (check expiration date)
Tower light	Yes
Frequency	50-60 Hz
Index of protection	IP20 (polishing module) IP22 (electric cabinet)

MOVEMENTS

Main axial turning	Yes
Vertical (up/down)	Yes
Holder vibration	Yes
Media refrigeration	Yes

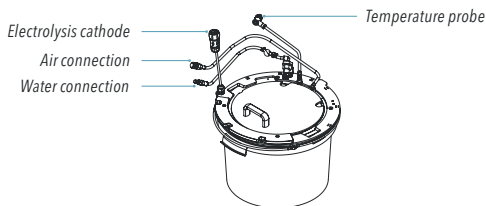
02. WORKBOWL

TYPE

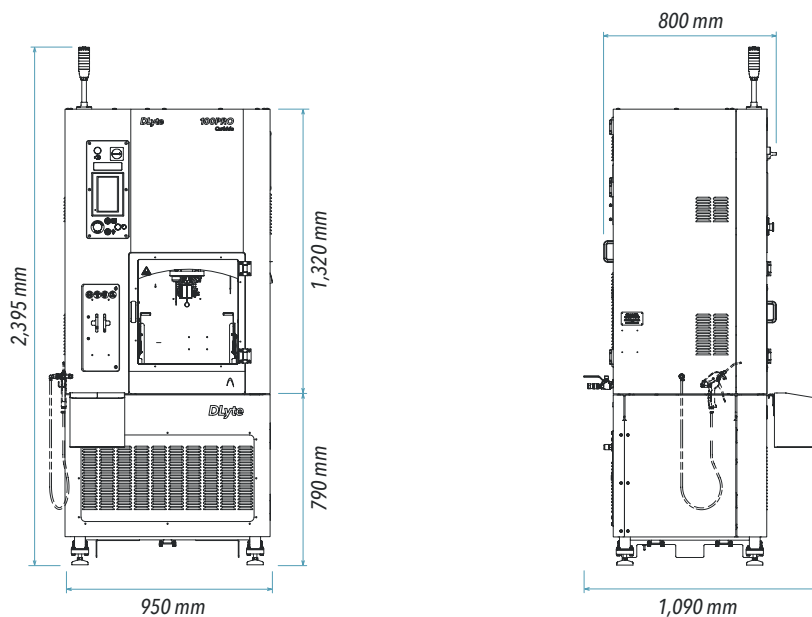
Cathode Set Dry Electrolyte
Cathode Set Dry Suspension Electrolyte
Cathode Set Dry Suspension Electrolyte compatible with refrigeration system

CAPACITY

Workbowl volume	16 L
Working volume	180 Ø x 80 mm (maximum volume centered to the axis)



03. TECHNICAL DRAW



* The Products included in this document may be protected by one or more patents and patent applications detailed at: <https://www.dlyte.com/patents/>