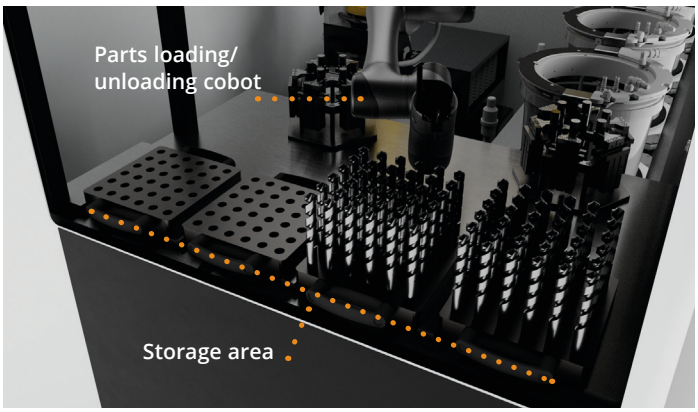
DLYTE AUTOMATED CELL CARBIDE CT

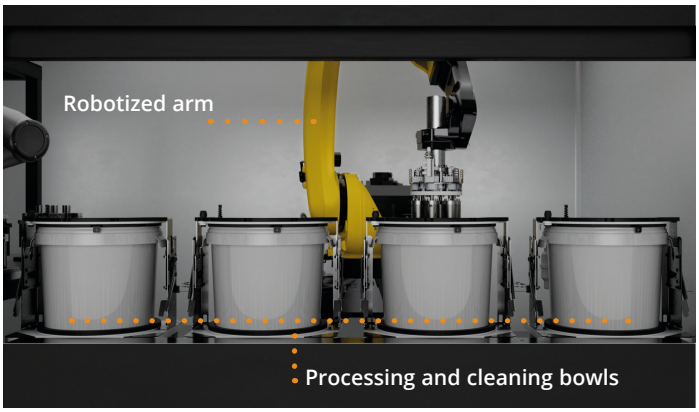
All benefits at a glance

- **Automated processes:** edge preparation, smoothing, polishing, coating, droplet removal and decoating.
- **Robotic operation:** performed by a robotized arm and parts loading cobot for full integration into high-volume production lines.
- **Process coverage:** includes loading, unloading, treatment, and post-dip cleaning.
- **Dry electropolishing:** fast, reliable, and homogeneous with processing times of 30 - 180 seconds.
- **Capacity:** handles up to 72 parts autonomously.
- **High productivity:** processes up to 6 pieces per cycle.
- **Fast processing:** edge preparation and polishing within 2 minutes
- **Versatile:** accommodates various tool lengths and diameters.
- **Flexible programming:** easily configurable for different batch sizes.

EXCLUSIVE* PARTNER

* The Rösler Group is the exclusive global sales partner for DLyte Carbide systems.





Publ.-Nr.: EN.342.01 - Revision: 03/2025 - Specifications are subject to change without notice.

Rösler Oberflächentechnik GmbH
Vorstadt 1
96190 Untermerzbach
Germany

Tel. +49 9533 / 924-0
Fax +49 9533 / 924-300
info@rosler.com
www.rosler.com

Machine specifications

3 versions available:

- **DLyte 100 Automated Cell Carbide CT:**
  Storage capacity for 6 pallets of 150 parts/each (6 mm diameter)
  *Up to 750 units of loading capacity in case of one single diameter (6mm) treatment (using only one pallet for unloading)
- **DLyte 100PRO Automated Cell Carbide CT:**
  Storage capacity for 12 pallets of 150 parts/each (6 mm diameter)
  *Up to 1650 units of loading capacity in case of one single diameter (6mm) treatment (using only one pallet for unloading)
- **DLyte 100PRO+ Automated Cell Carbide CT:**
  Storage capacity for 12 pallets of 150 parts/each (6 mm diameter)
  *Up to 1650 units of loading capacity in case of one single diameter (6 mm) treatment (using only one pallet for unloading)
  Three-dimensional surface quality control device. Device for dimensional inspection (to check the diameter and length of the drill bit) Laser marker for engraving traceability codes or corporate logos.

The equipment includes temperature proves and refrigeration system for Dry Suspension processes. Includes Workbowl trolley, standard holder (Ø 0.5 - 20 mm, shank 3 mm - 20 mm), and 6 rollomatic pallets for 6mm Shank. It does not include cathode workbowls (cathode set and cleaning set).

Technical data	
Capacity (per cycle)	180 Ø x 180 mm (capacity of 6 parts per cycle with standard holder)
Machine dimensions	4,750 x 2,250 x 2,500 mm
Machine weight	4,000 kg
Power (single phase with industrial plug)	38 kVA
Voltage	400 V~ ± 10% (3P+N+PE)
Air pressure	5 - 6 bar
Storage capacity	Storage capacity for 6 pallets of 150 parts/each (6 mm diameter) *Up to 750 units of loading capacity in case of one single diameter (6 mm) treatment (using only one pallet for unloading) Storage capacity for 12 pallets of 150 parts/each (6 mm diameter) *Up to 1650 units of loading capacity in case of one single diameter (6 mm) treatment(using only one pallet for unloading)
External pneumatic stop cock	Yes
Noise level	<70 dB(A)
HMI size	Multitouch Panel PC CP3721-1600-0020
Ambient temperature operating	5 °C to 35 °C
Temperature storage	-10 °C to +70 °C
Recommended humidity	30 - 70 % RH (without condensation)
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)

Consumption of 200 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).

Rösler Oberflächentechnik GmbH
Vorstadt 1
96190 Untermerzbach
Germany

Tel. +49 9533 / 924-0
Fax +49 9533 / 924-300
info@rosler.com
www.rosler.com

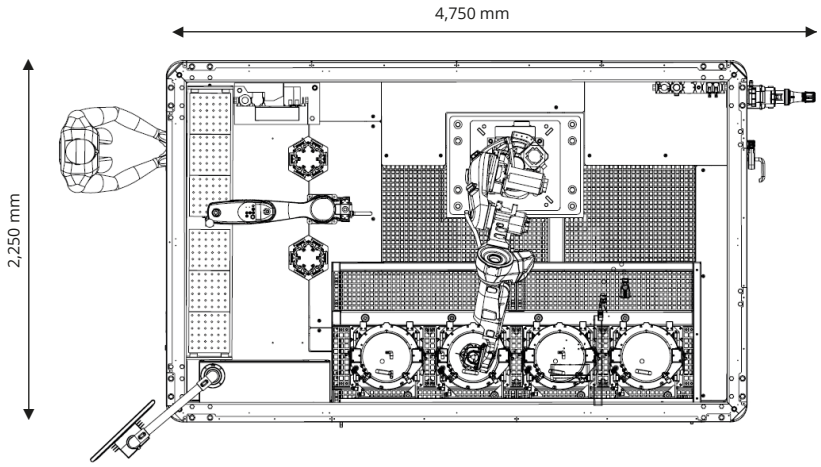
Movements	
Main axial turning	Yes
Vertical (up/down)	Yes
Media refrigeration	Independent refrigeration of each workbowl

Workbowl

Type
Cathode Set Dry Electrolyte
Cathode Set Dry Suspension Electrolyte compatible with refrigeration system
Cleaning Set Dry Suspension Refrigerated

Capacity	
Number of workbowls	4
Workbowl volume (each)	16 L
Working volume (each)	180 Ø x 180 mm

Technical draw



Automated Cell Carbide CT Models

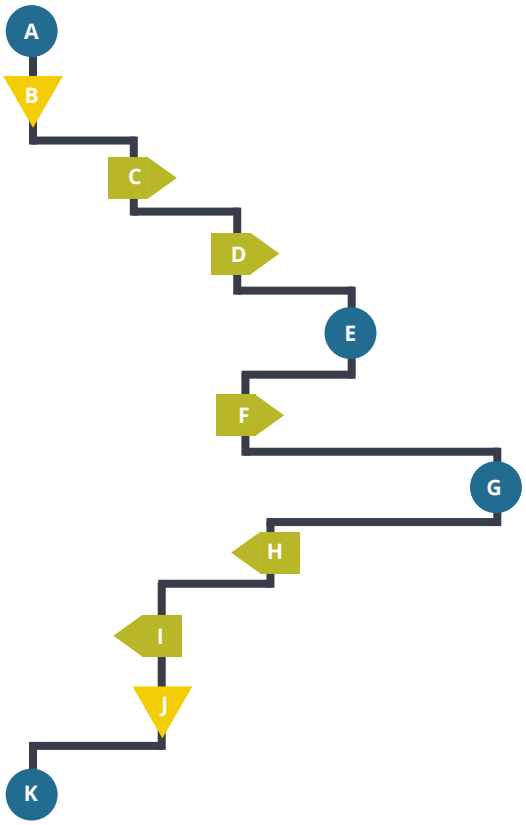
Trays Rollomatic			Capacity Storage		
Types	**Size**	**Parts**	**100**	**100 PRO**	**100 PRO+**
Type A long: 0,50 a 3,178	**125*180 (18)**	**20*25 = 500**	**6**	**12**	**12**
Type A court: 0,50 a 3,178	**125*180 (18)**	**20*25 = 500**	**6**	**12**	**12**
Type B long: 3,20 a 6,50	**144*199 (14)**	**15*20 = 300**	**6**	**12**	**12**
Type C1 long: 6,60 a 10,00	**144*224 (14)**	**10*15 =150**	**6**	**12**	**12**
Type C2 long: 10,10 a 12,50	**144*224 (14)**	**5*15 = 75**	**6**	**12**	**12**
Type C3 long: 12,60 a 17,90	**144*224 (22)**	**5*10 = 50**	**6**	**12**	**12**
Type C4 long: 18,00 a 25,00	**144*224 (22)**	**5*6 = 30**	**6**	**12**	**12**

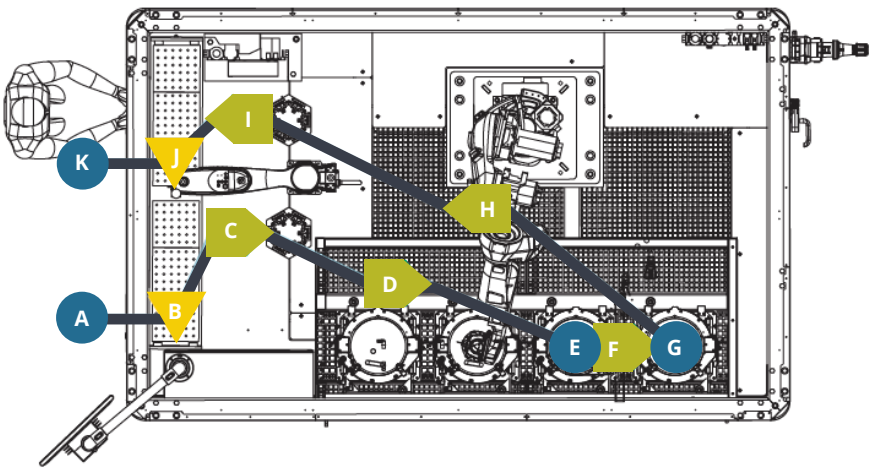
In continuous production, using different workpiece pallet models may require adjustments to the handling fixtures.

Rösler Oberflächentechnik GmbH
Vorstadt 1
96190 Untermerzbach
Germany

Tel. +49 9533 / 924-0
Fax +49 9533 / 924-300
info@rosler.com
www.rosler.com

Estimated process time

User	SCARA	Robot	Polishing Workbowl	Cleaning Process	Index	Process time according to finish (s)			Description
						4 µ	5 µ	6 µ	
					A	–	–	–	The user positions the pieces within the tray.
					B	–	–	–	The user then inserts the tray into the machine.
					C	50	50	50	The SCARA retrieves pieces from the tray and positions them in the holder. This sequence repeats until the tray is empty. (*) This time only needs to be added to the first process.
					D	30	60	90	Subsequently, the robot transfers the holder with the pieces and places them into the polishing workbowl.
					E				The polishing process initiates.
					F				The robot transports the holder, along with the polished pieces, to the cleaning workbowl.
					G	30	30	30	The cleaning process starts.
					H				The robot transport the holder, now with cleaned pieces, back to the initial point.
					I	50	50	50	The SCARA removes the polished pieces from the holder and positions them back into the tray. (*) This time only needs to be added to the last process.
					J	–	–	–	The pieces remain within the tray.
					K	–	–	–	Once the polishing and cleaning processes are complete, the user can retrieve the finished pieces from the tray.



Operation

Storage

Transport

More information about **precise surface finishing of metal components** with the DryLyte technology:

* This product is protected by one or more of the following patents and patent applications: Patents https://www.gpainnova.com/patents

Rösler Oberflächentechnik GmbH
Vorstadt 1
96190 Untermerzbach
Germany

Tel. +49 9533 / 924-0
Fax +49 9533 / 924-300
info@rosler.com
www.rosler.com