



DLyte[®]

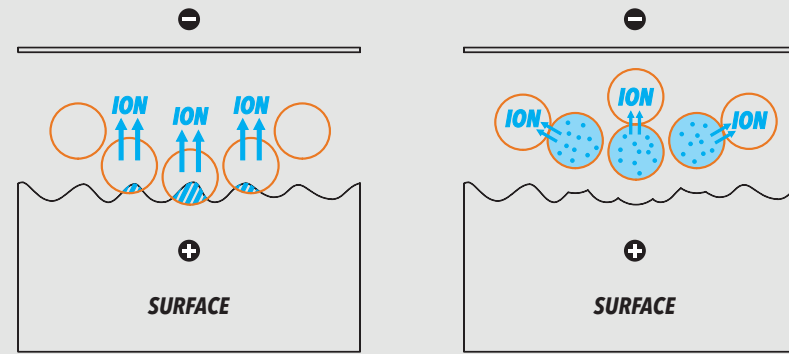
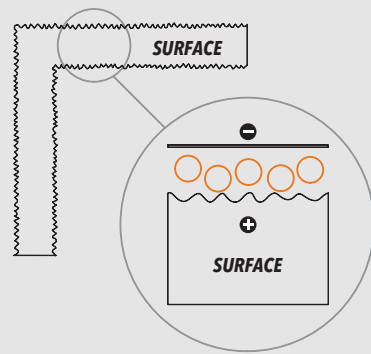
*The First **Dry** Electropolishing System*

www.dlyte.es

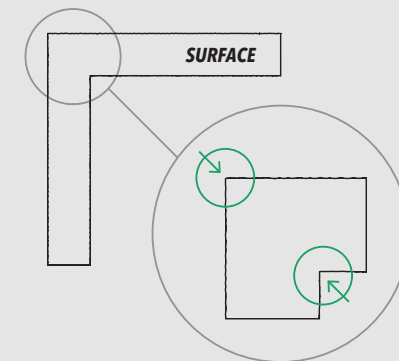
INDUSTRIAL



DryLyte® new patented technology for grinding and polishing metals by ion transport using free solid bodies. Revolutionary dry electropolishing that does not use any liquid as electrolyte.



The process removes material only from the peaks of roughness



The process does not round edges and can penetrate in all dead zones

Result after current

Mechanical-Manual Polishing
+ Classical Electropolishing



Result after *D*Lyte[®] Dental System



***D*Lyte**

Result after current

Mechanical-Manual Polishing
+ Classical Electropolishing



Result after *D*Lyte[®] Dental System

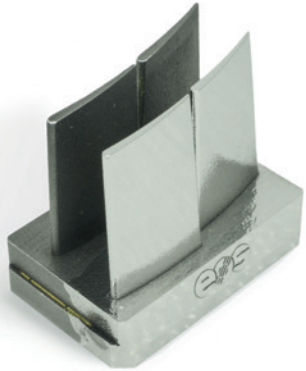


***D*Lyte**

Metals

*STEEL & STAINLESS STEEL / HIGH SPEED STEEL
HARD STEEL / COBALT CHROME / CARBON
NICKEL / TITANIUM / PRECIOUS METALS*

Applications



SINTERED / INCONEL 718



SINTERED / INOX316L



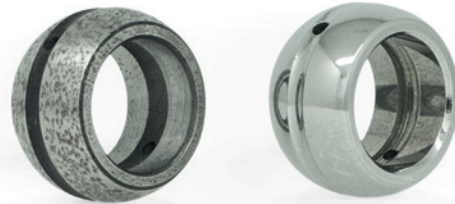
SINTERED / INOX316L



CNC / INOX316L



SINTERED / COBALT CHROME



CNC / HSS1.3505



CNC / HSS 1.3343

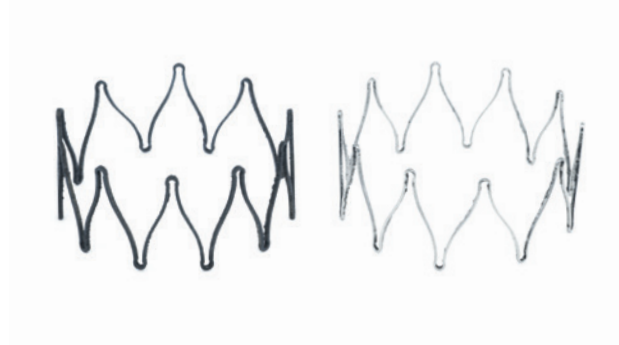


CASTING / COPPER

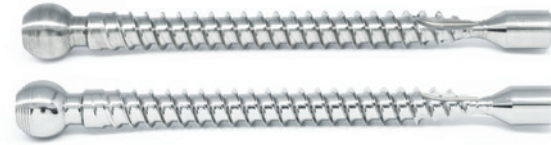
Applications



SINTERED / TITANIUM



LASER CUT / NITINOL



MILLING / TITANIUM



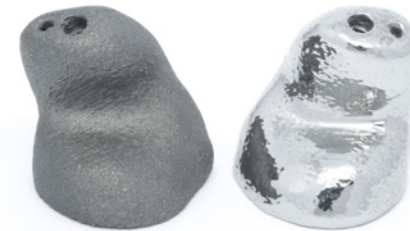
MILLING / TITANIUM



SINTERED / TITANIUM



SINTERED / TITANIUM



SINTERED / TITANIUM



SINTERED / TITANIUM

Main Benefits

Fully automatic polishing to a mirror finish in one step

Homogeneous polishing across the entire surface of the piece is the main advantage compared to mechanical polishing

Respect of tolerances and preservation of initial shape, even cutting edges

Traceable industrial process

Increases resistance to corrosion

No contamination on the surface and no traces of hydrogen on the surface

Controlled costs and predictable lead times

Reproducibility and homogeneity

No micro-scratches on the surface

The ability to process complex geometries without programming (especially important for AM)

Ra under 0,09 micrometers
(For additive manufacturing parts)

Allows for easy processing of channels and cavities

Automatic One Step Process



How DLyte system works?



The parts are fixed on the specific holder



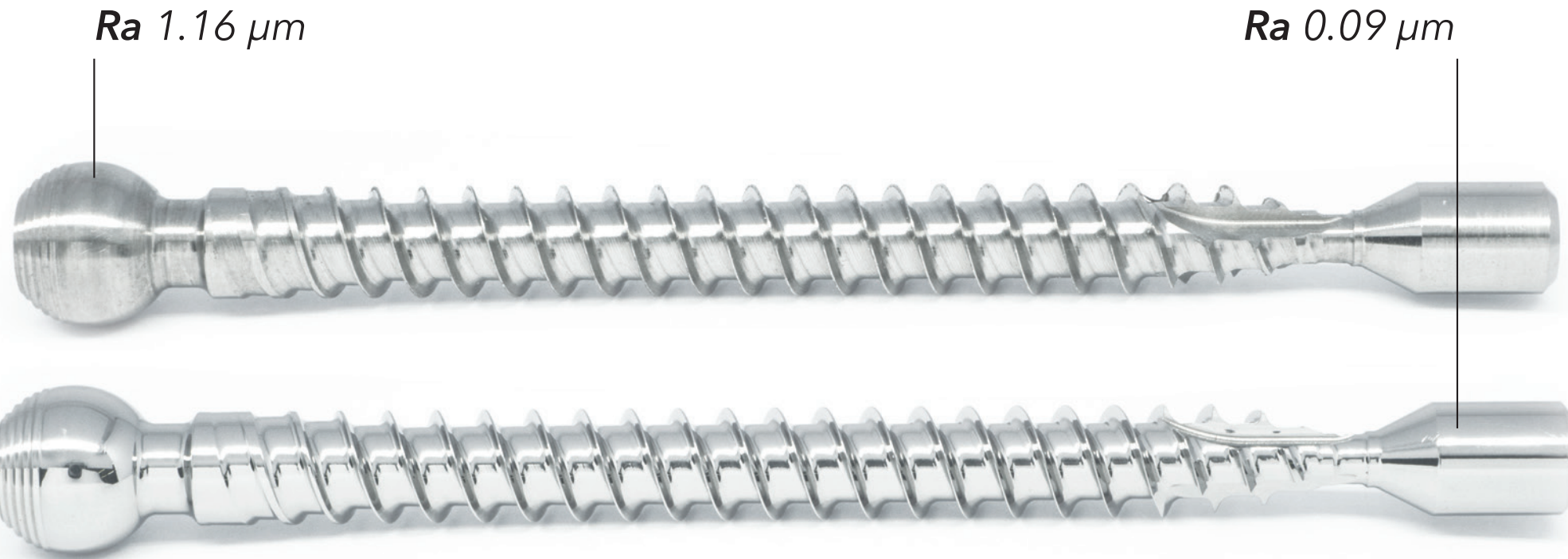
The holder is introduced on the machine



The parts are already polished

Titanium

CNC / TITANIUM

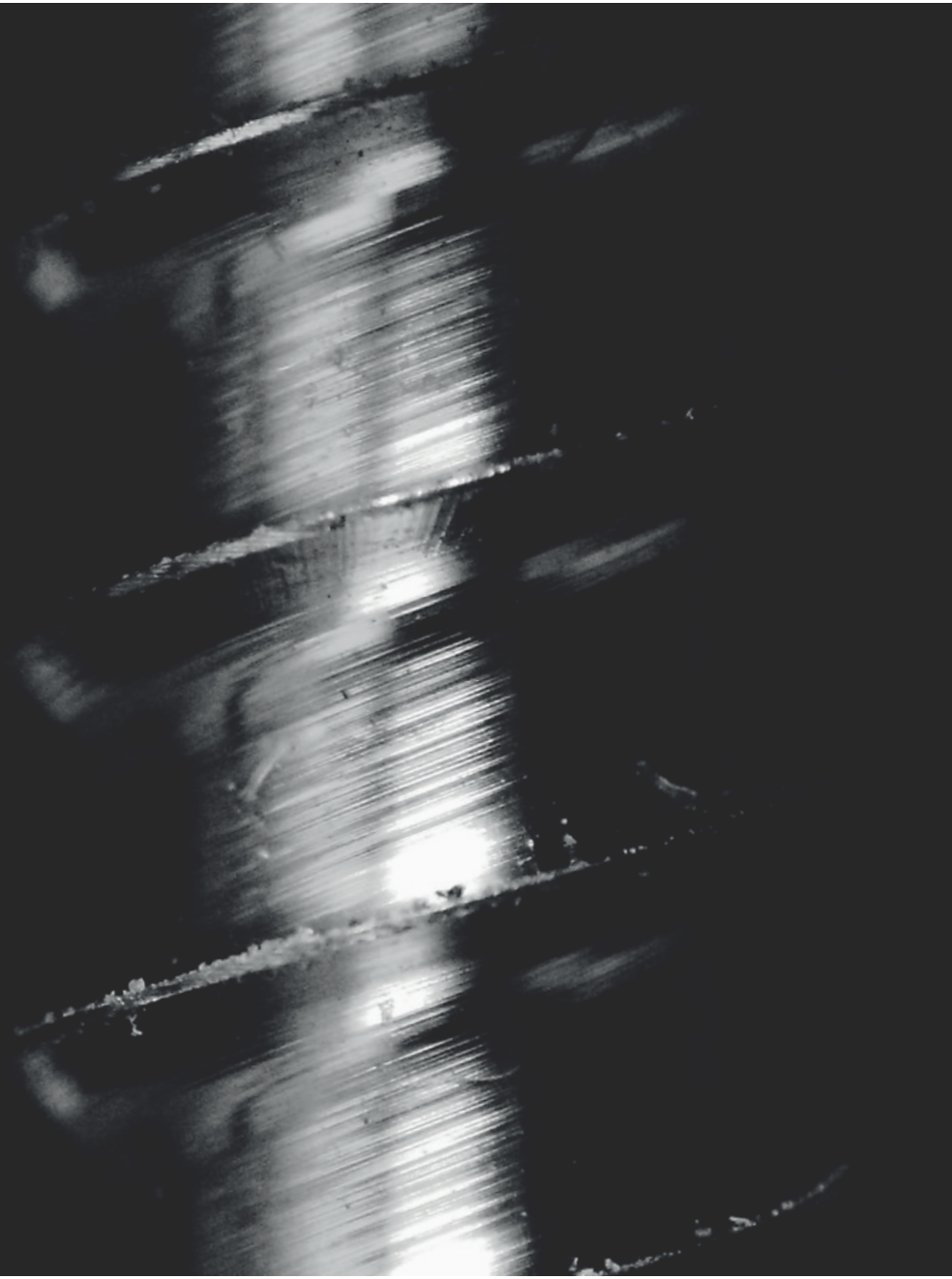


DLyte Titanium Series is the newest range of products able to grind and polish Titanium alloys for the Healthcare industry with the same benefits as the Cobalt Chrome Series.

The process does not generate oxidation and passivation of the piece.

500x

Result before polishing



500x

Result before **D**Lyte® polishing



DLyte

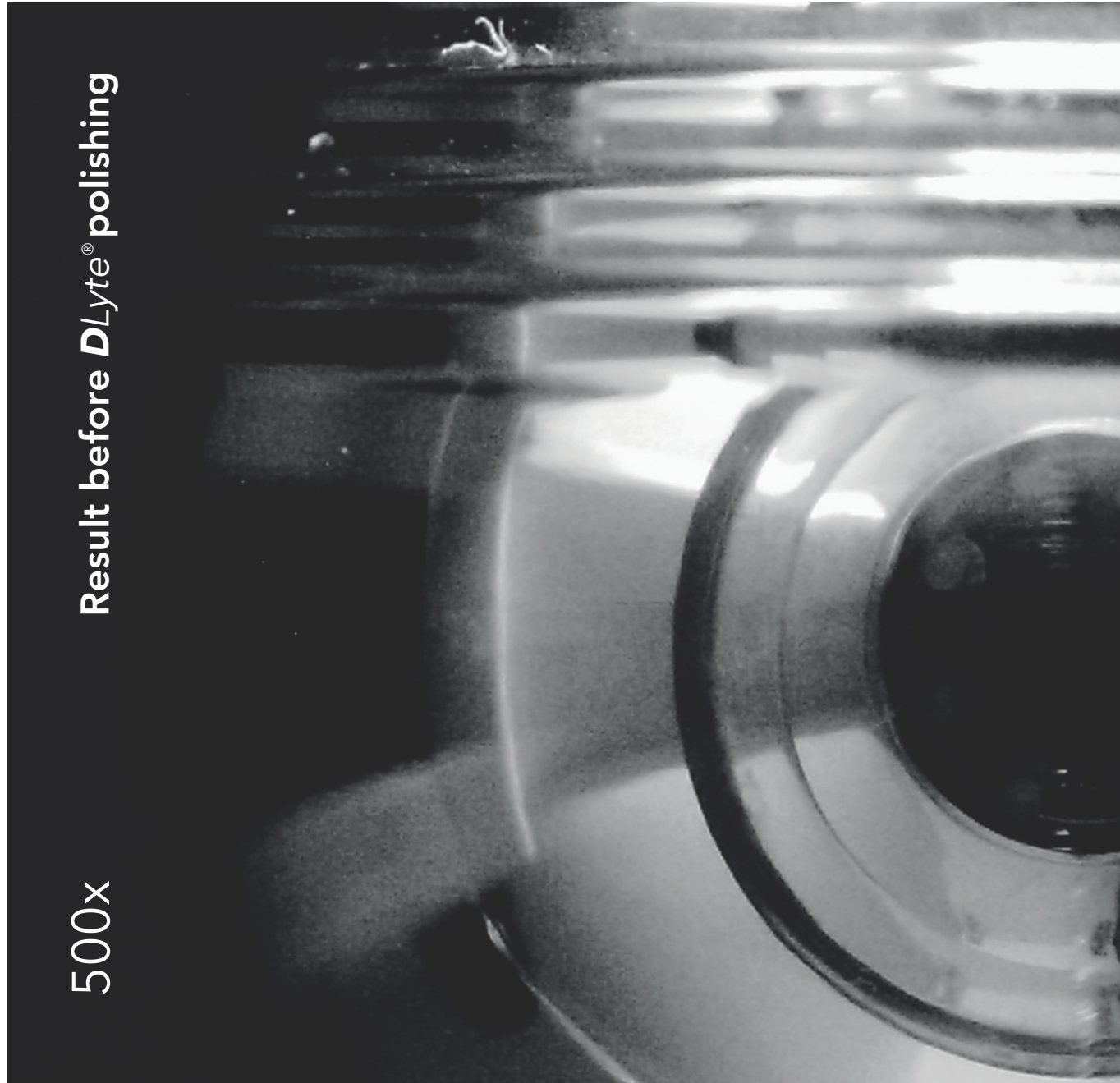
500x

Result before polishing



500x

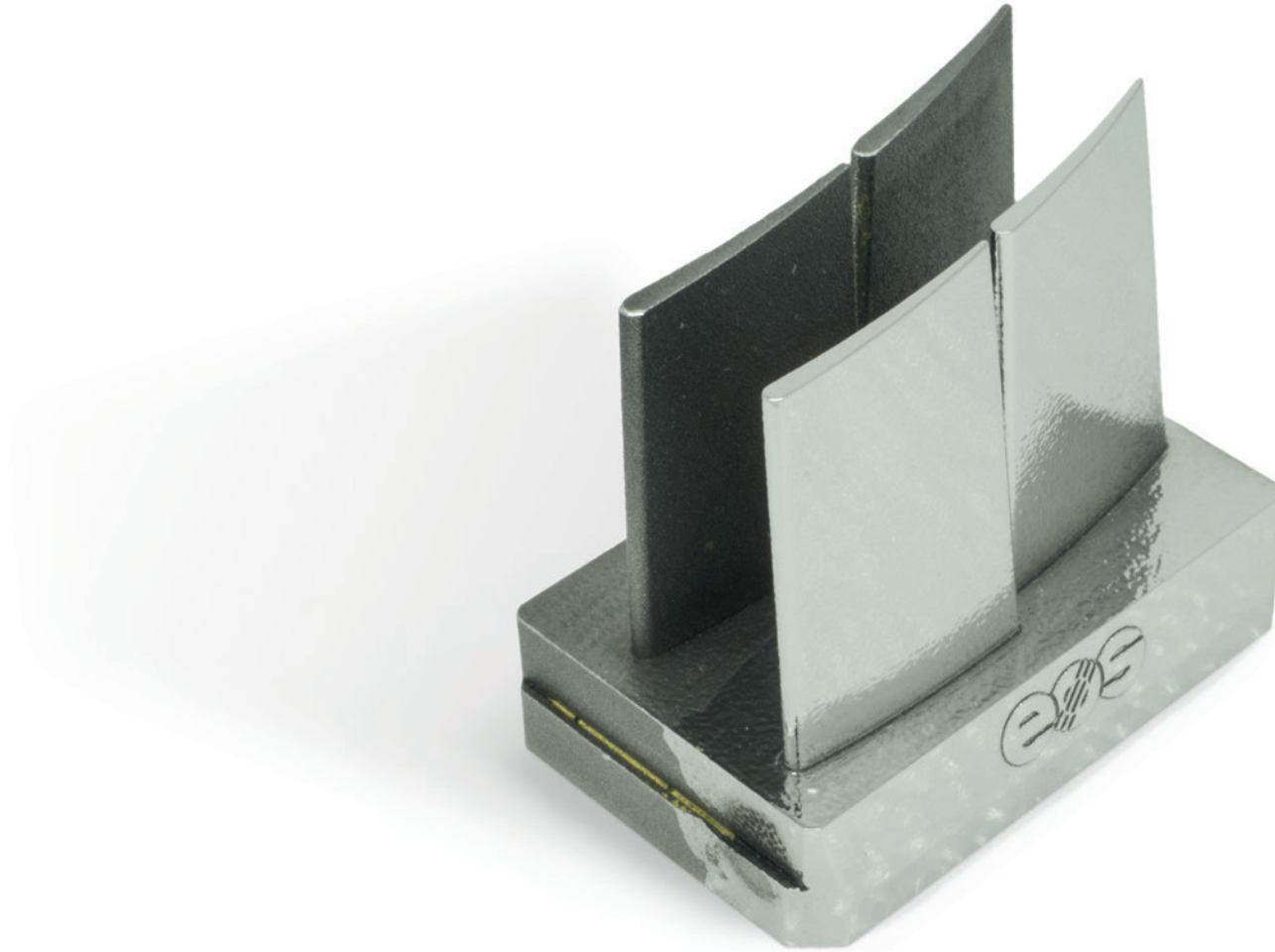
Result before **D**Lyte[®] polishing



DLyte

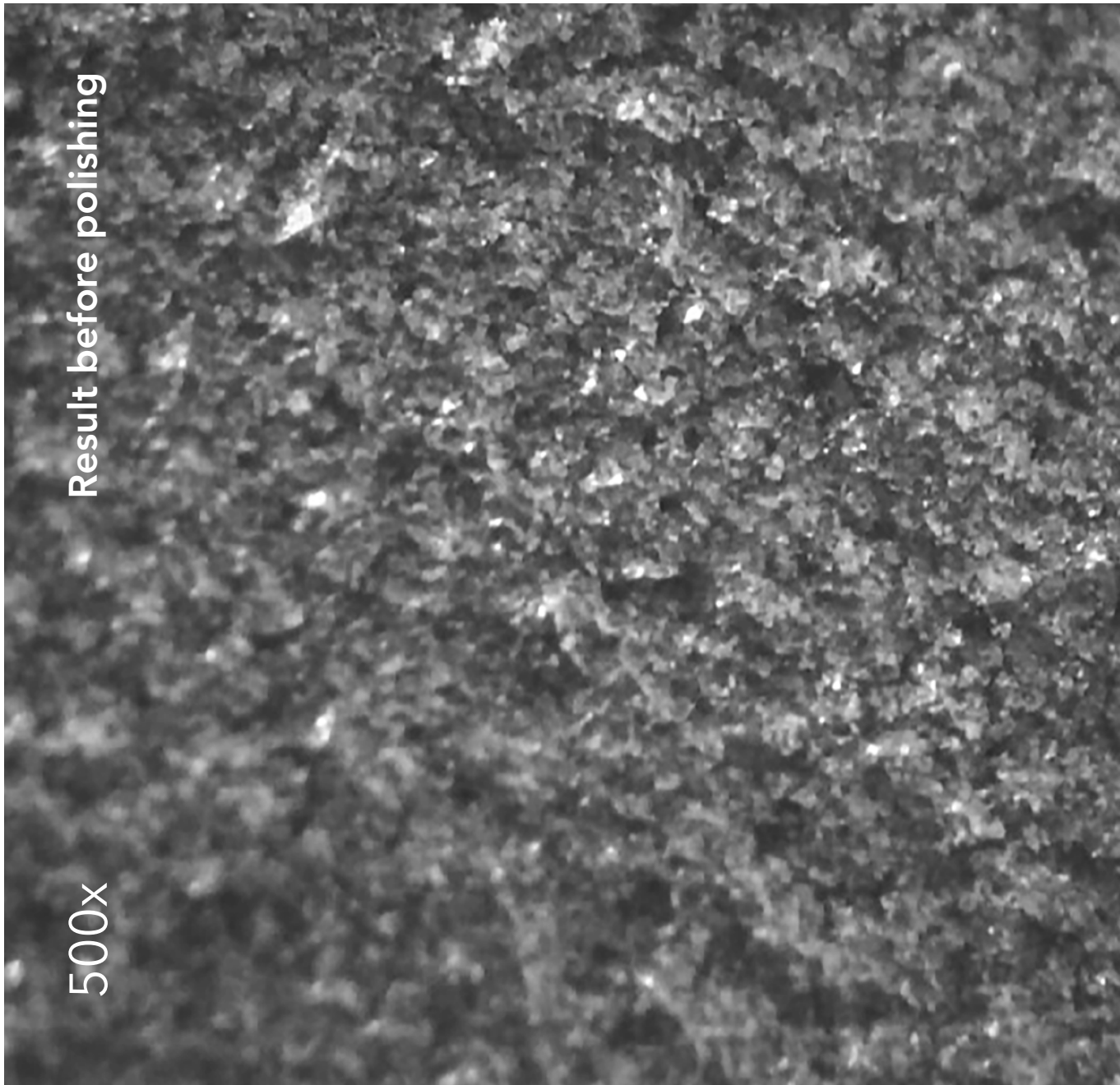
Additive Manufacturing

SINTERING / INCONEL718



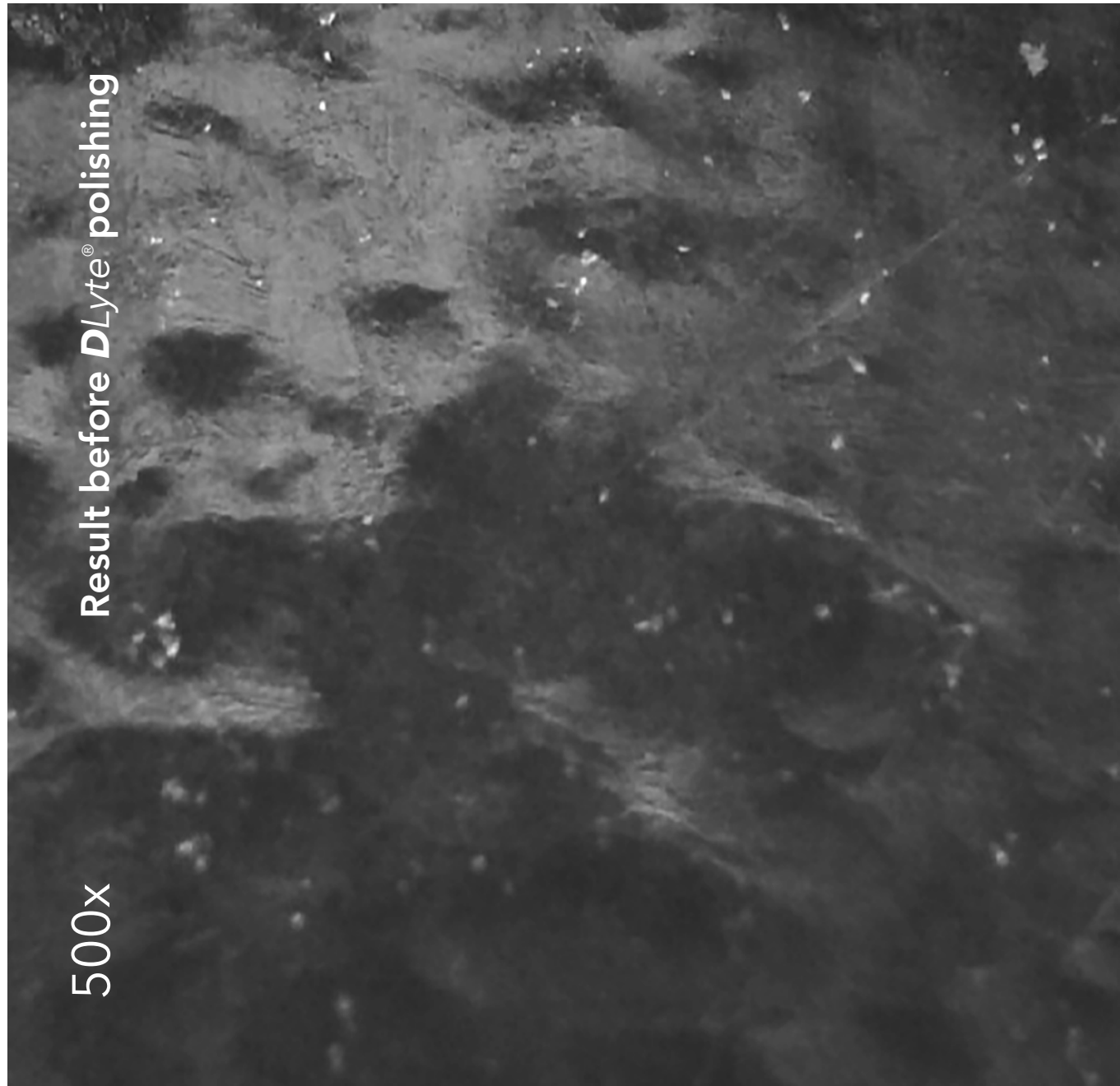
500x

Result before polishing



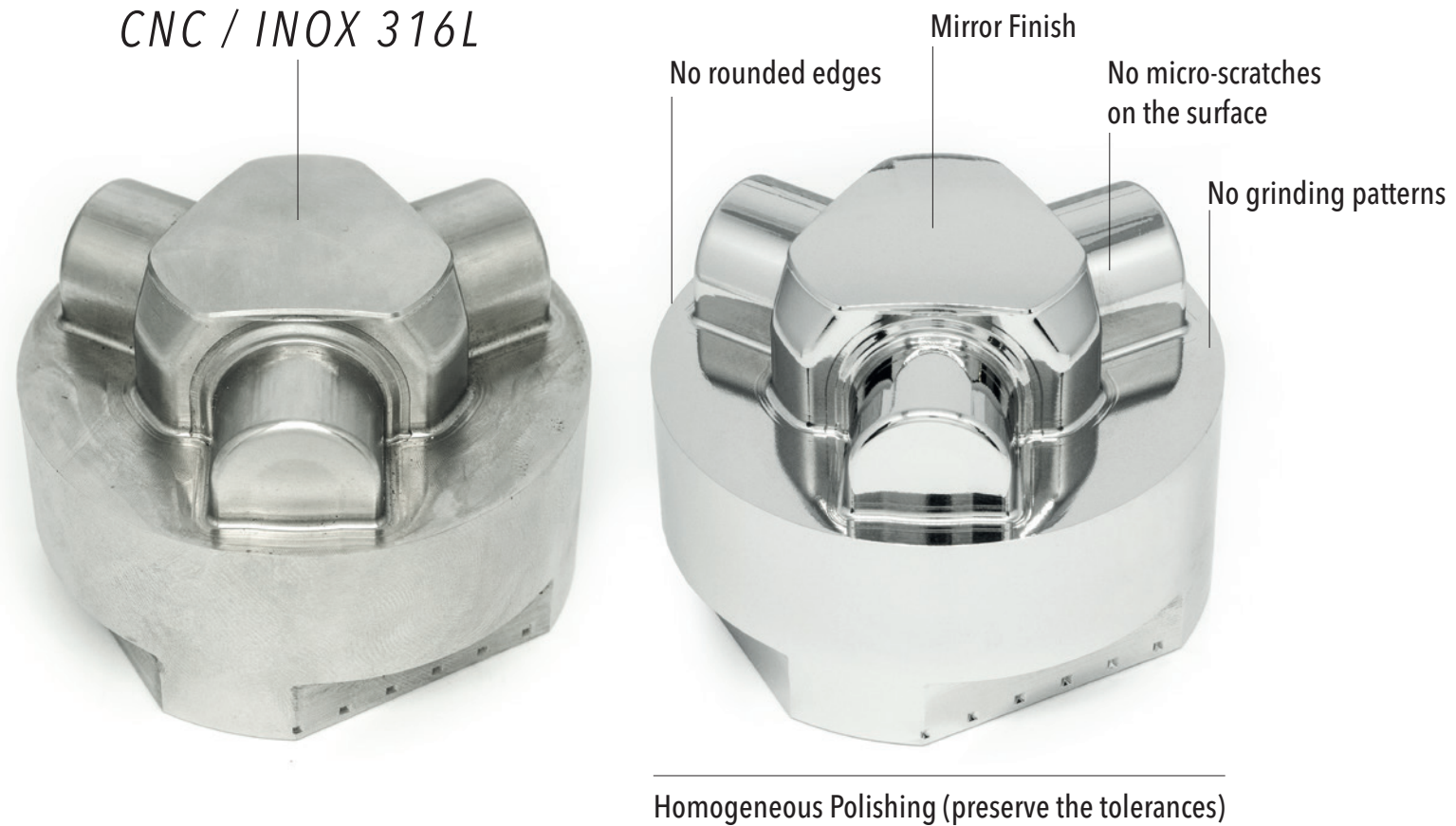
500x

Result before **D**Lyte® polishing



DLyte

Technical Report

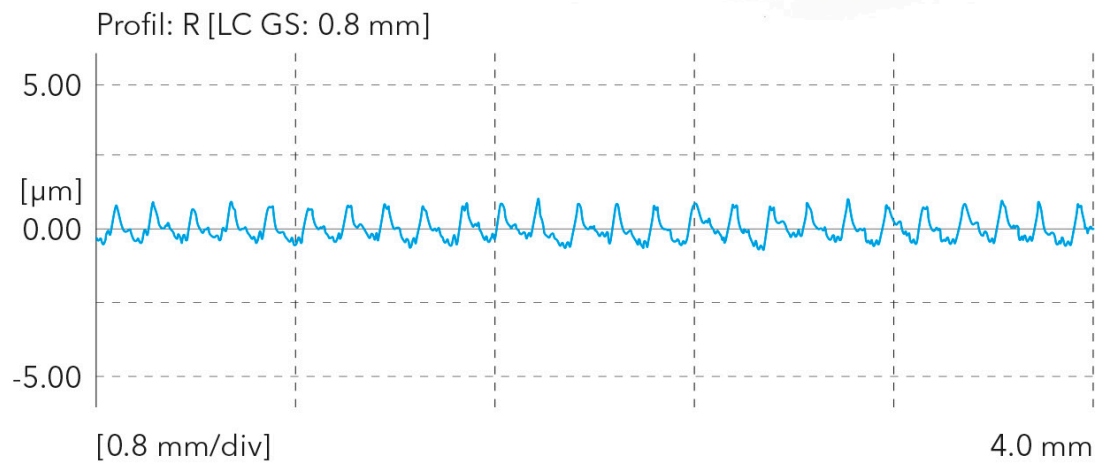


Before: Ra 0.692 μm | **Rz** 3.626 μm **After:** Ra 0.125 μm | **Rz** 0.843 μm

Technical Report

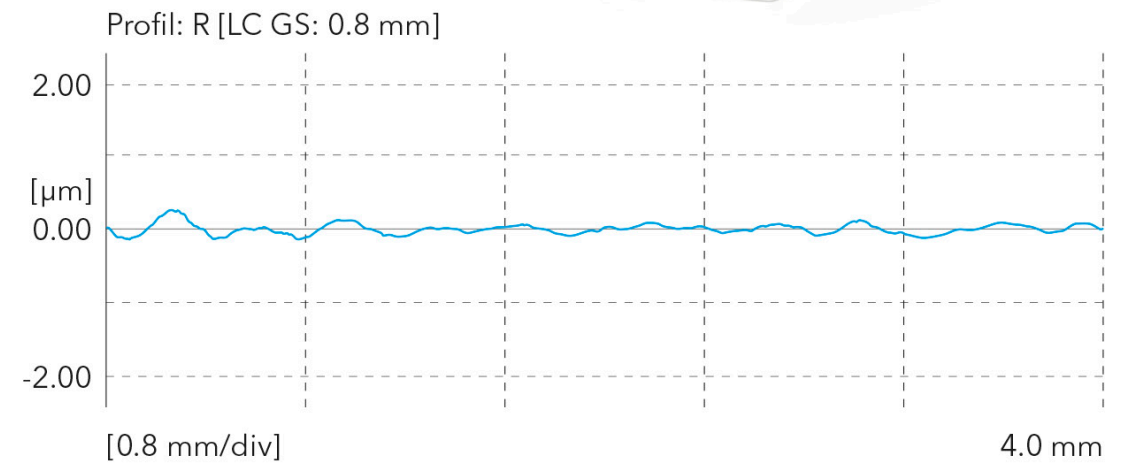
Before finish

Ra 0.692 μm
Rz 3.626 μm
Rt 4.07 μm



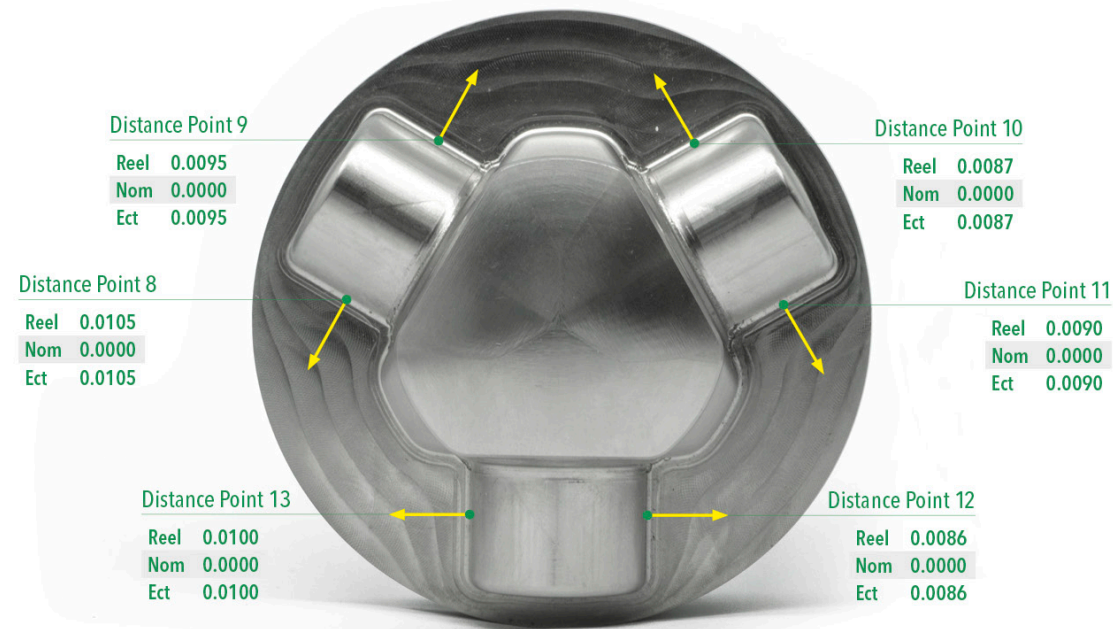
After finish

Ra 0.125 μm
Rz 0.843 μm
Rt 1.77 μm

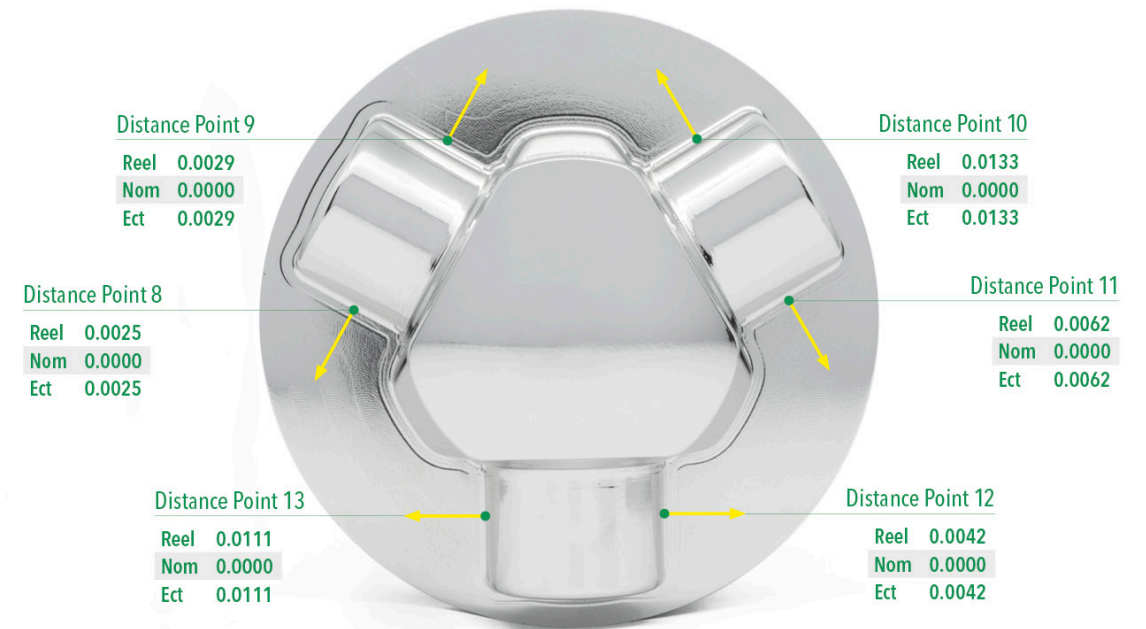


Technical Report

Before finish



After finish

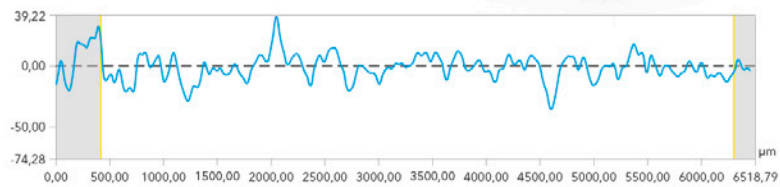
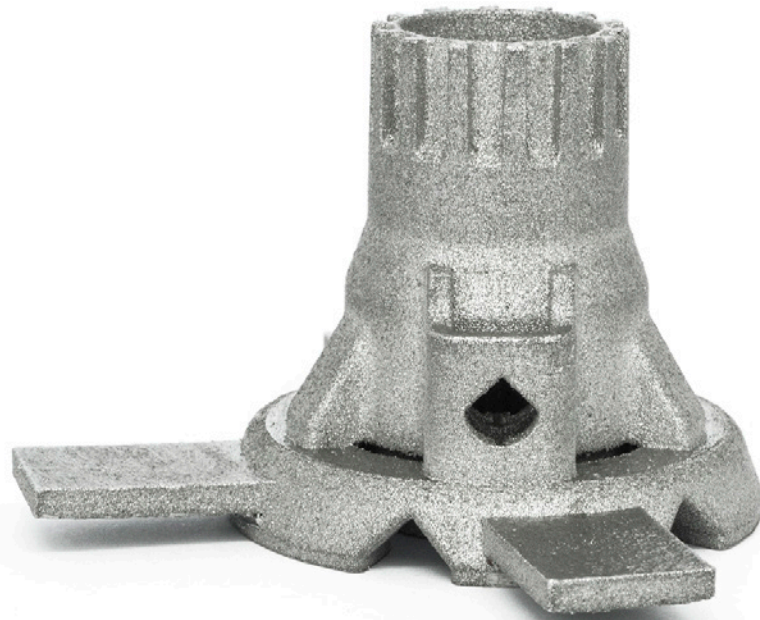


Respect of tolerances and preservation of initial shape, even cutting edges

Technical Report

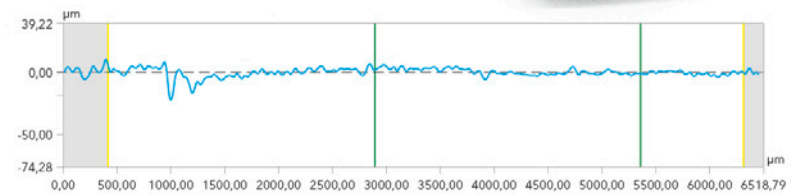
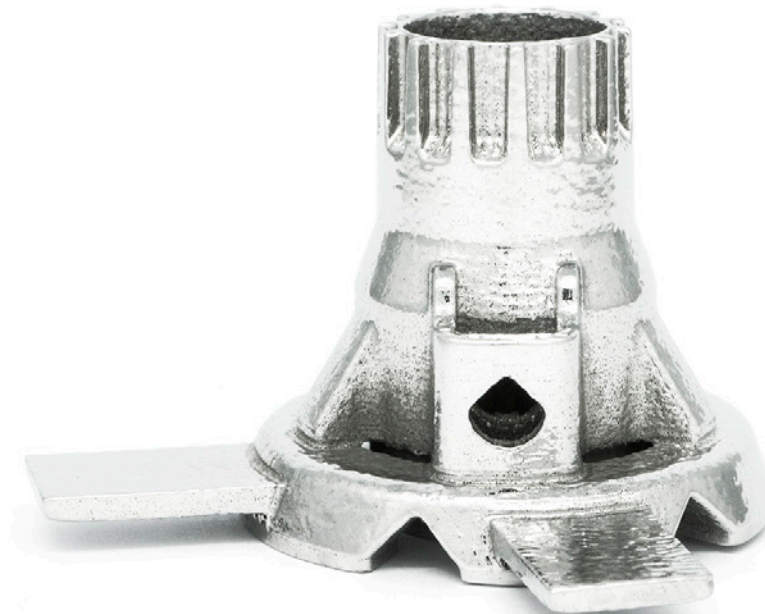
Clutch before finish

Nr	Name Messung	Dursch.	Max.	Min.	Std.Adw.	Einheit
1	Ra	7,95	10,22	6,26	0,91	µm
2	Rz	54,15	82,04	37,99	8,75	µm



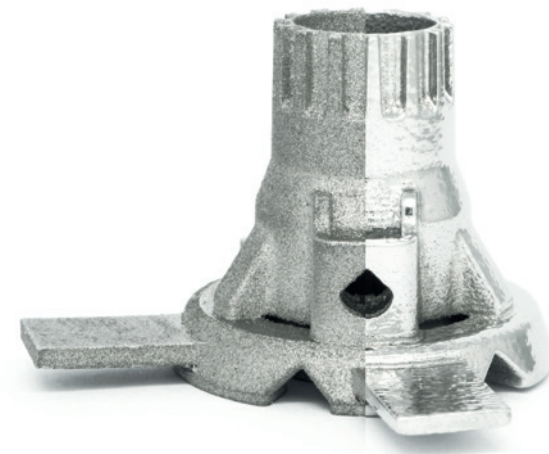
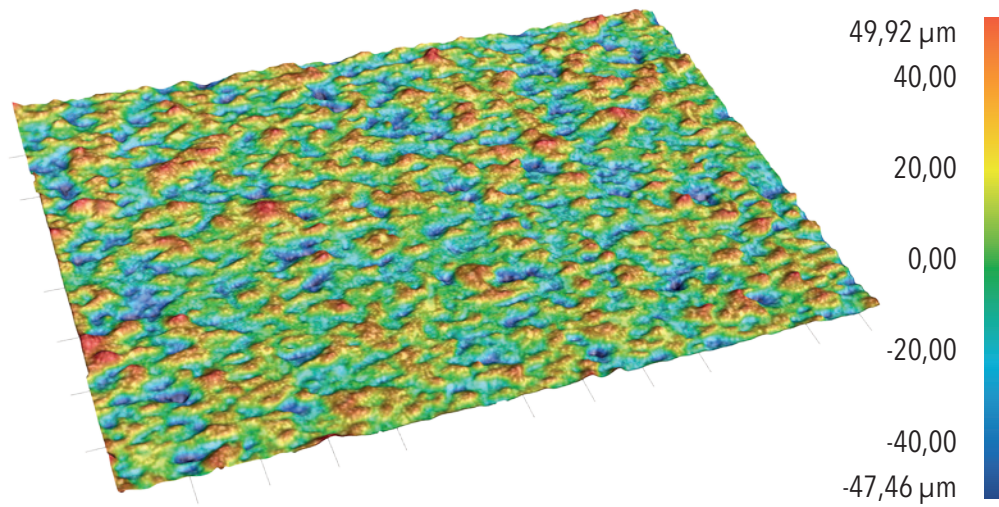
Clutch after finish

Nr	Name Messung	Dursch.	Max.	Min.	Std.Adw.	Einheit
1	Ra	1,88	2,44	1,41	0,26	µm
2	Rz	15,80	29,48	9,47	4,49	µm

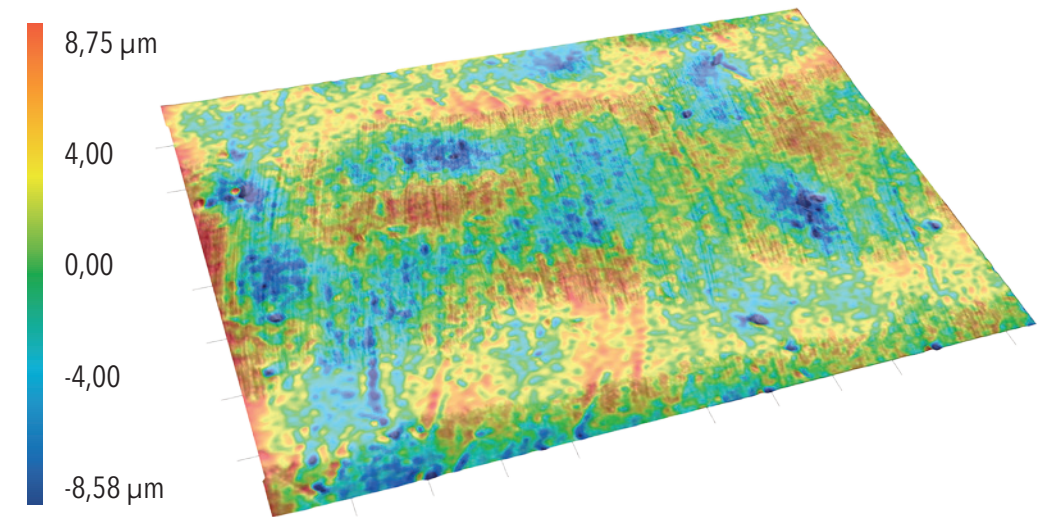


Technical Report

Clutch before finish



Clutch after finish



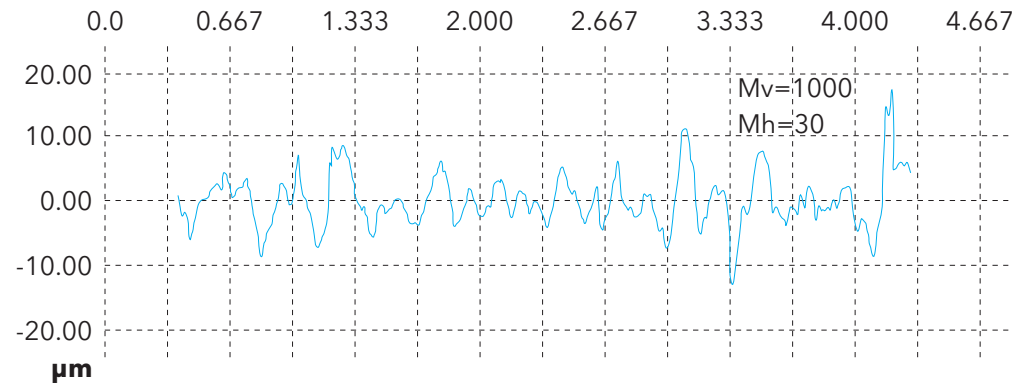
Technical Report

Blade before finish



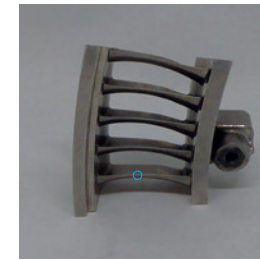
Ra 3.040 μm
Rz 18.616 μm
Rsk 0.416

R- Profile aligned Arc Rad. Filter ISO 11562 Lc=0.800mm



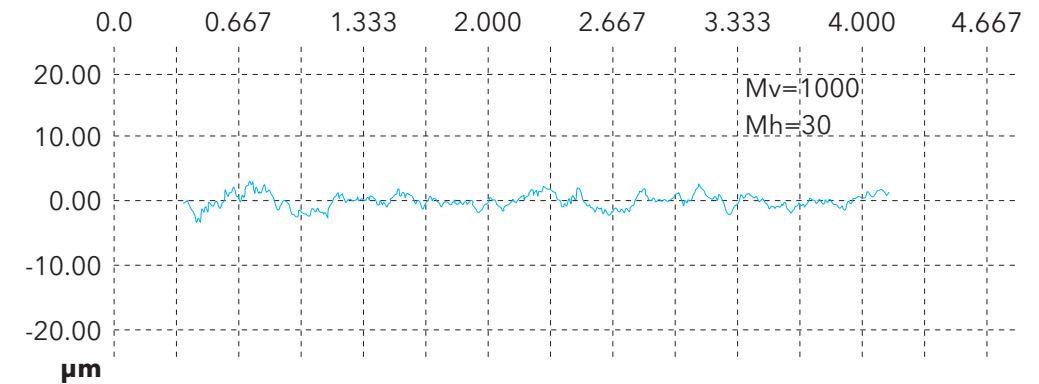
Probe Surfscan Lt=4.80mm Vt=0.50 mm/s Lr=0.800mm

Blade after finish



Ra 0.094 μm
Rz 0.505 μm
Rsk -0.042

R- Profile aligned Arc Rad. Filter ISO 11562 Lc=0.800mm



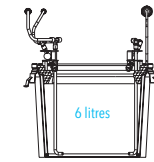
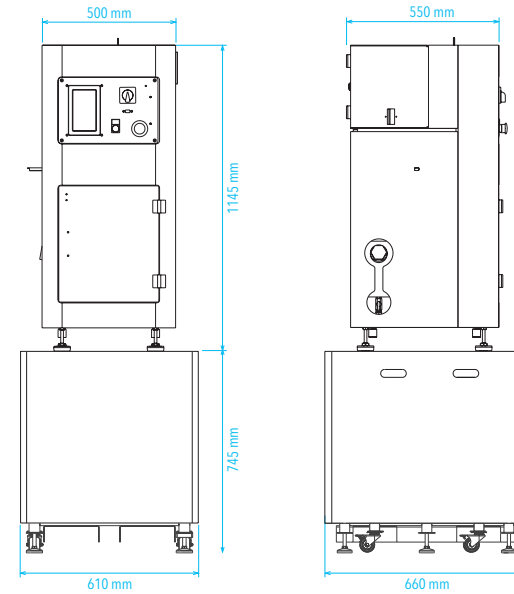
Probe Surfscan Lt=4.80mm Vt=0.50 mm/s Lr=0.800mm

DLyte Compact Series

DLyte

DLyte Compact Series

Serie **DLyte**1®



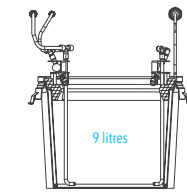
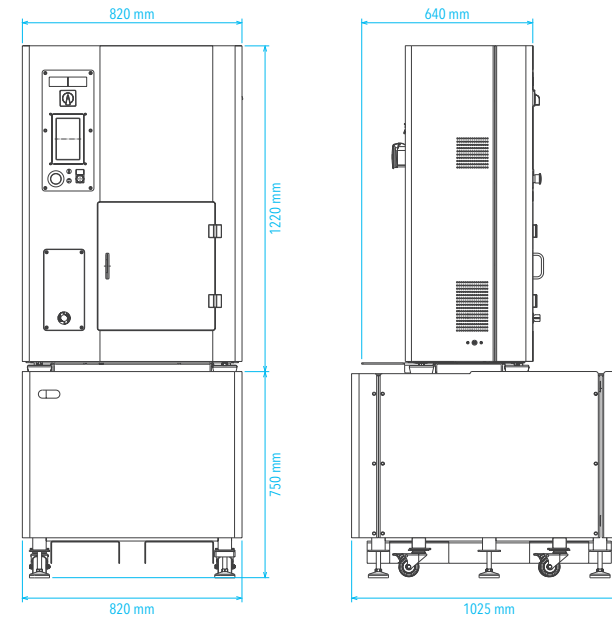
Serie DLyte1 Bucket Volume

MODEL	DLyte 1/1Ti/1+Ti
CAPACITY	-
MACHINE DIMENSIONS	500 x 555 x 1145 mm
SUPPORT DIMENSIONS	610 x 660 x 745 mm
MACHINE WEIGHT	96 kg
SUPPORT WEIGHT	47 kg
POWER	2 kW
VOLTAGE	220-240 V or 110-115 V
AIR PRESSURE	

Consumo de 40 l / min. La calidad del aire debe ser 1.5.1 * de acuerdo con ISO 8573.
 (*) Calidad del aire requerida para un mantenimiento cada 6 meses (cambio de filtros).

DLyte Compact Series

Serie *DLyte* 10®



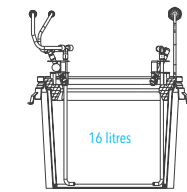
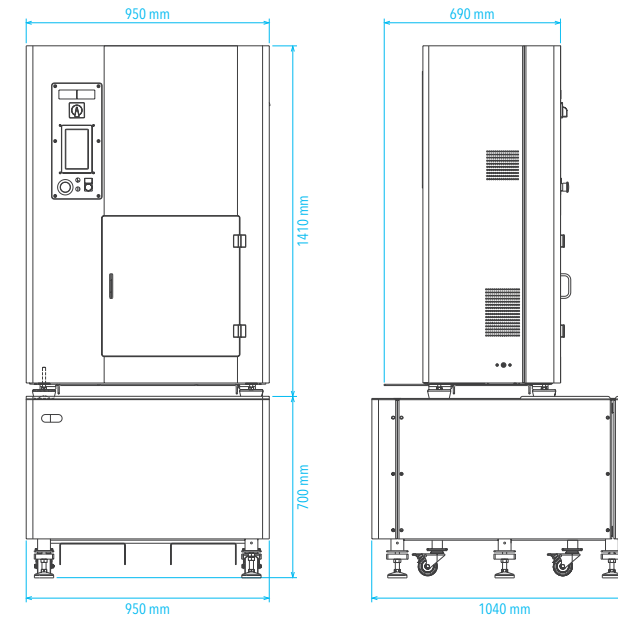
Serie DLyte10 Bucket Volume

MODEL	<i>DLyte</i> 10 / 10Ti / 10+Ti
CAPACITY	-
MACHINE DIMENSIONS	820 x 640 x 1220 mm
SUPPORT DIMENSIONS	820 x 1025 x 750 mm
MACHINE WEIGHT	173.5 kg
SUPPORT WEIGHT	87 kg
POWER	3 kW
VOLTAGE	220-240 V or 110-115 V
AIR PRESSURE	4-5 bar

Consumo de 40 l / min. La calidad del aire debe ser 1.5.1 * de acuerdo con ISO 8573.
 (*) Calidad del aire requerida para un mantenimiento cada 6 meses (cambio de filtros).

DLyte Compact Series

Serie *DLyte*100®

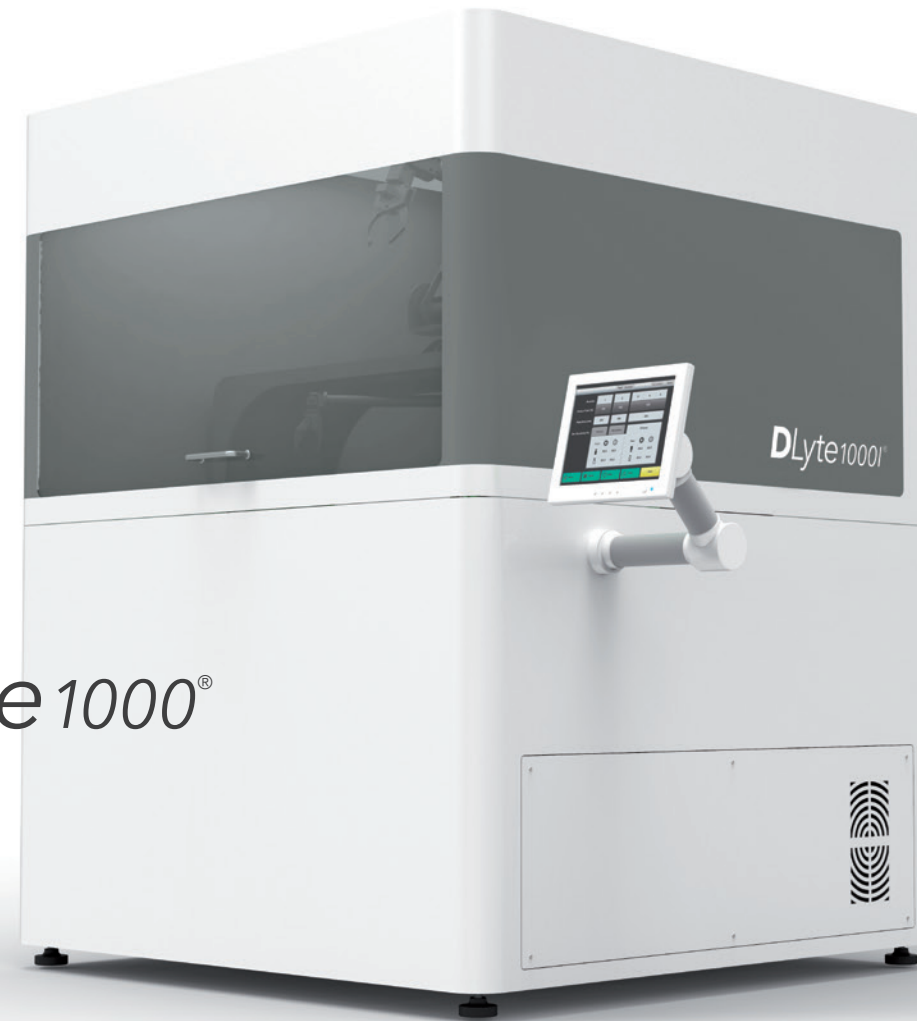


Serie DLyte100 Bucket Volume

MODEL	<i>DLyte</i> 100 / 100Ti / 100+Ti
CAPACITY	1800 mm x 80 mm
MACHINE DIMENSIONS	950 x 690 x 1410 mm
SUPPORT DIMENSIONS	950 x 1040 x 700 mm
MACHINE WEIGHT	217.5 kg
SUPPORT WEIGHT	100 kg
POWER	5 kW
VOLTAGE	220-240 V or 110-115 V
AIR PRESSURE	4-5 bar

Consumo de 40 l / min. La calidad del aire debe ser 1.5.1 * de acuerdo con ISO 8573.
 (*) Calidad del aire requerida para un mantenimiento cada 6 meses (cambio de filtros).

DLyte Compact Series



Serie *DLyte* 1000[®]

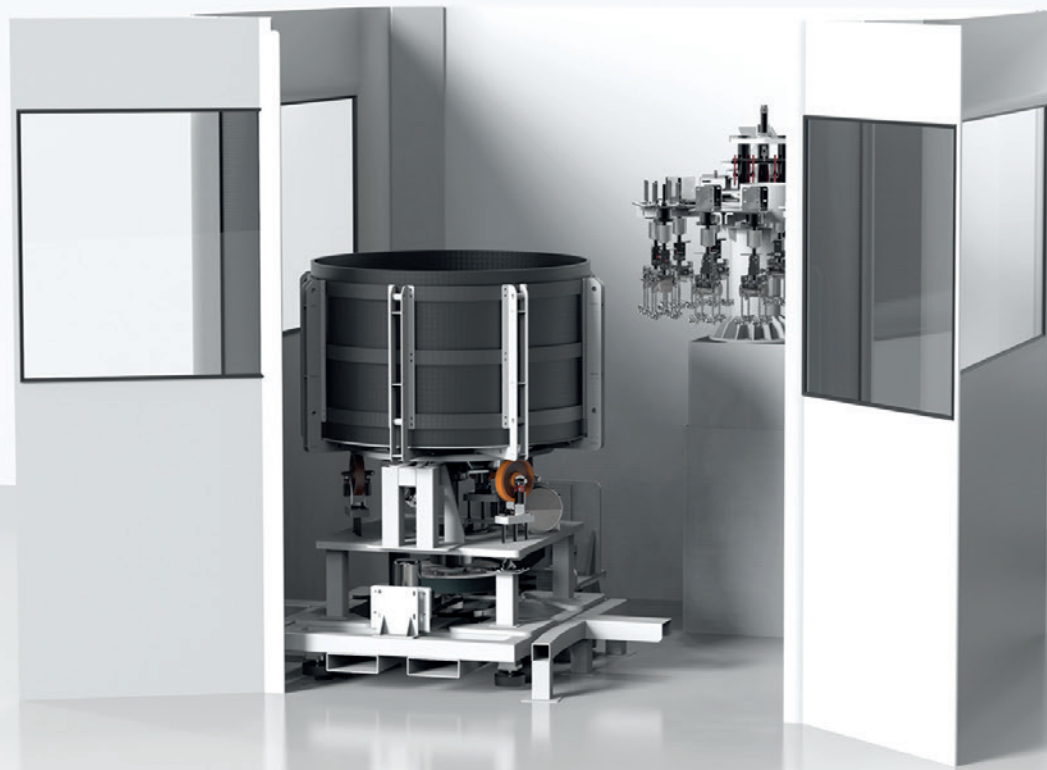
New Machine for Mass Finishing
AVAILABLE SOON



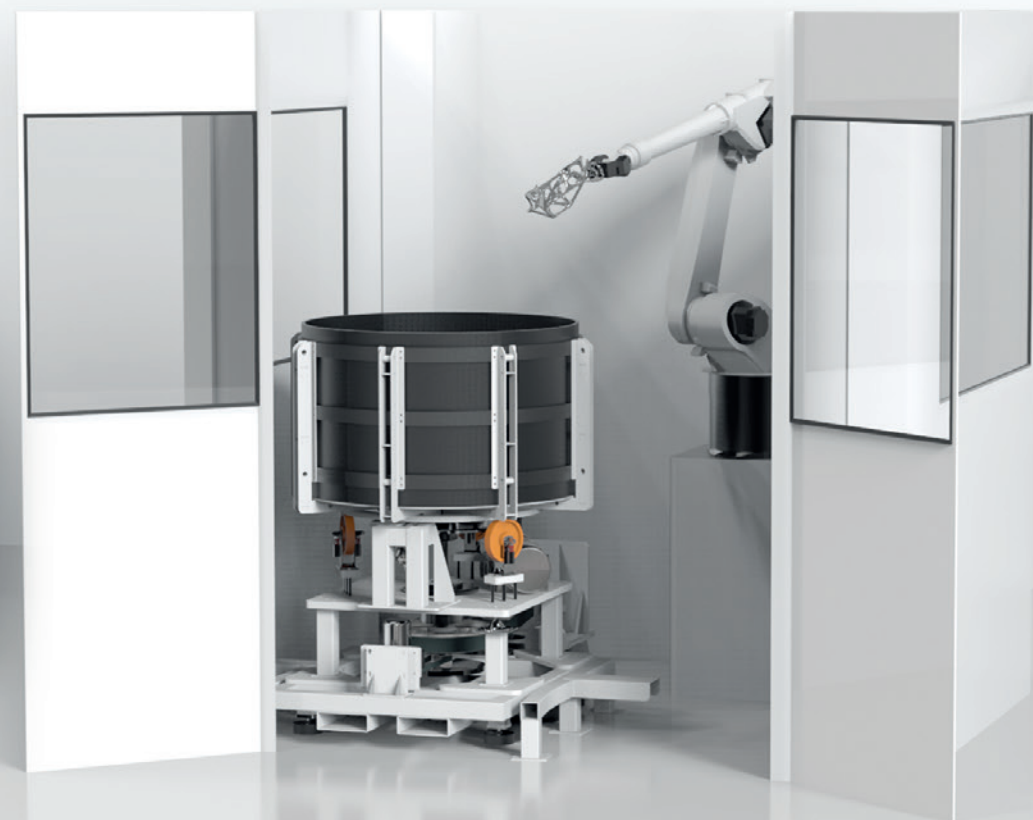
DLyte Modular Solution

DLyte

DLyte Modular Solution

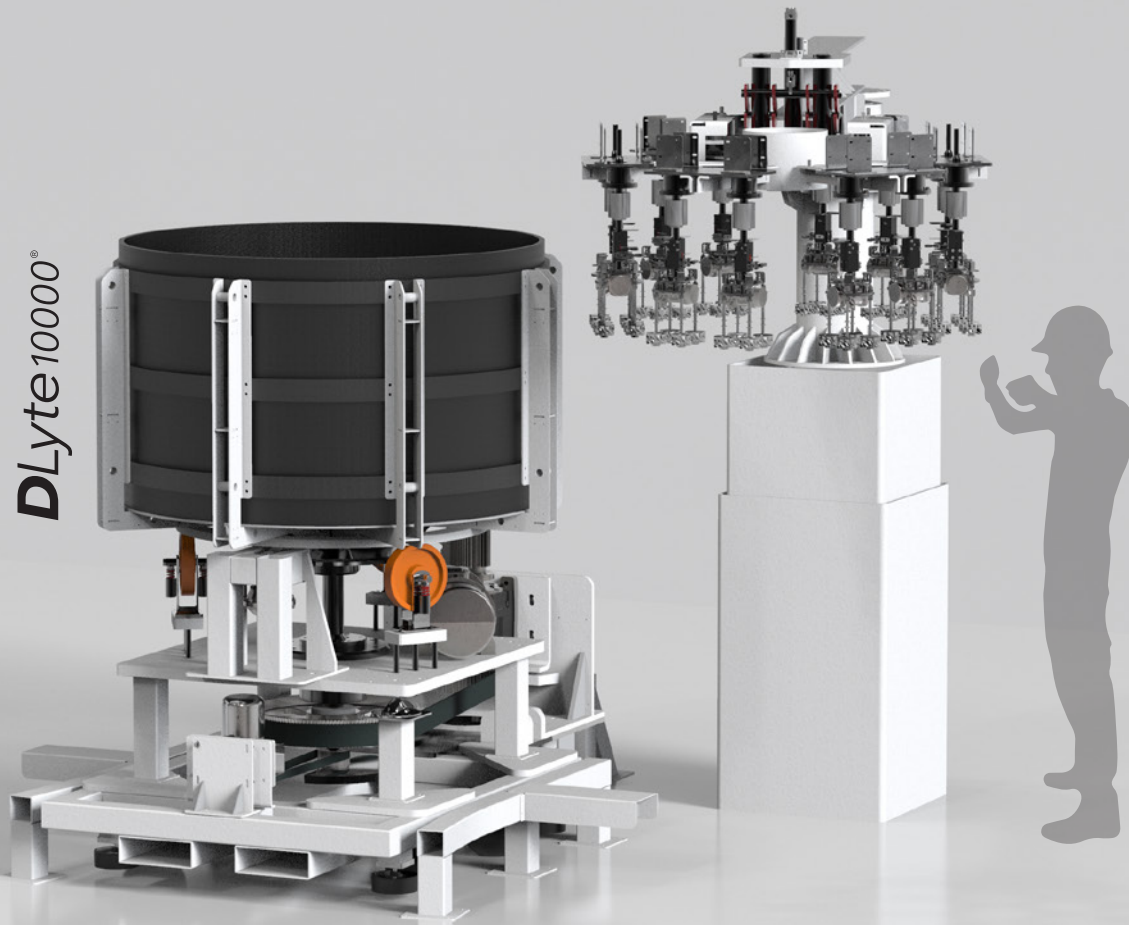


Work Tank + Industrial Holder



Work Tank + Industrial Robot

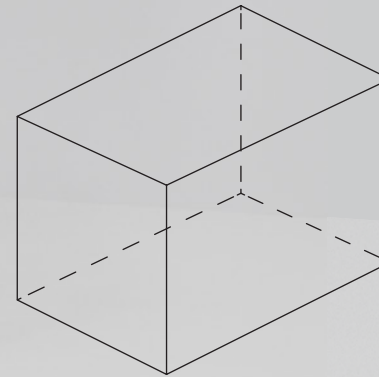
DLyte Modular Solution



DLyte¹⁰⁰⁰⁰

Capacity

1,2m³
TANK VOLUME



FROM

1 piece

Up to 750x500x500mm

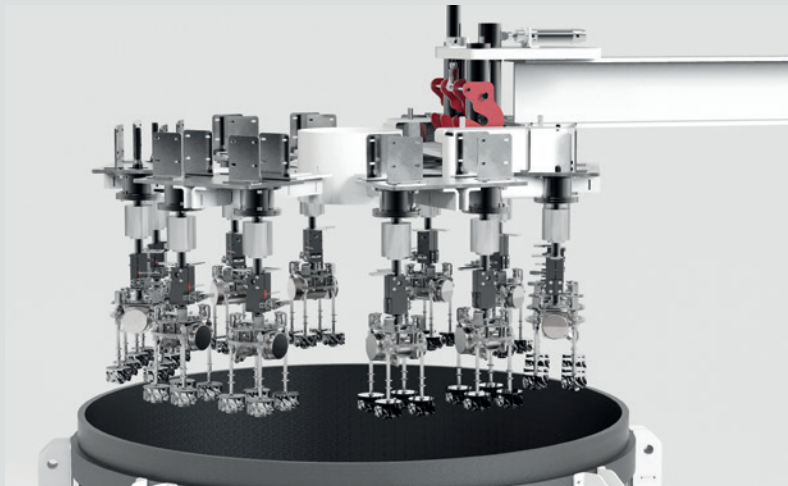
TO

 **200 pieces**

Up to 50x50x50mm

DLyte Modular Solution

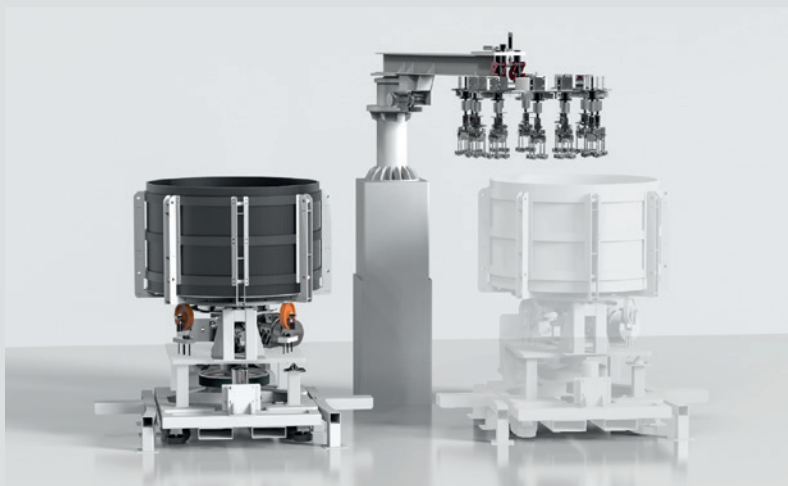
Industrial Holder



Industrial Robot



Industrial Holder with Double Work Tank



Industrial Robot with Double Work Tank





DLyte[®]

*The First **Dry** Electropolishing System*

thank you.

www.dlyte.es