



Dry Electropolishing Systems

DLyte®

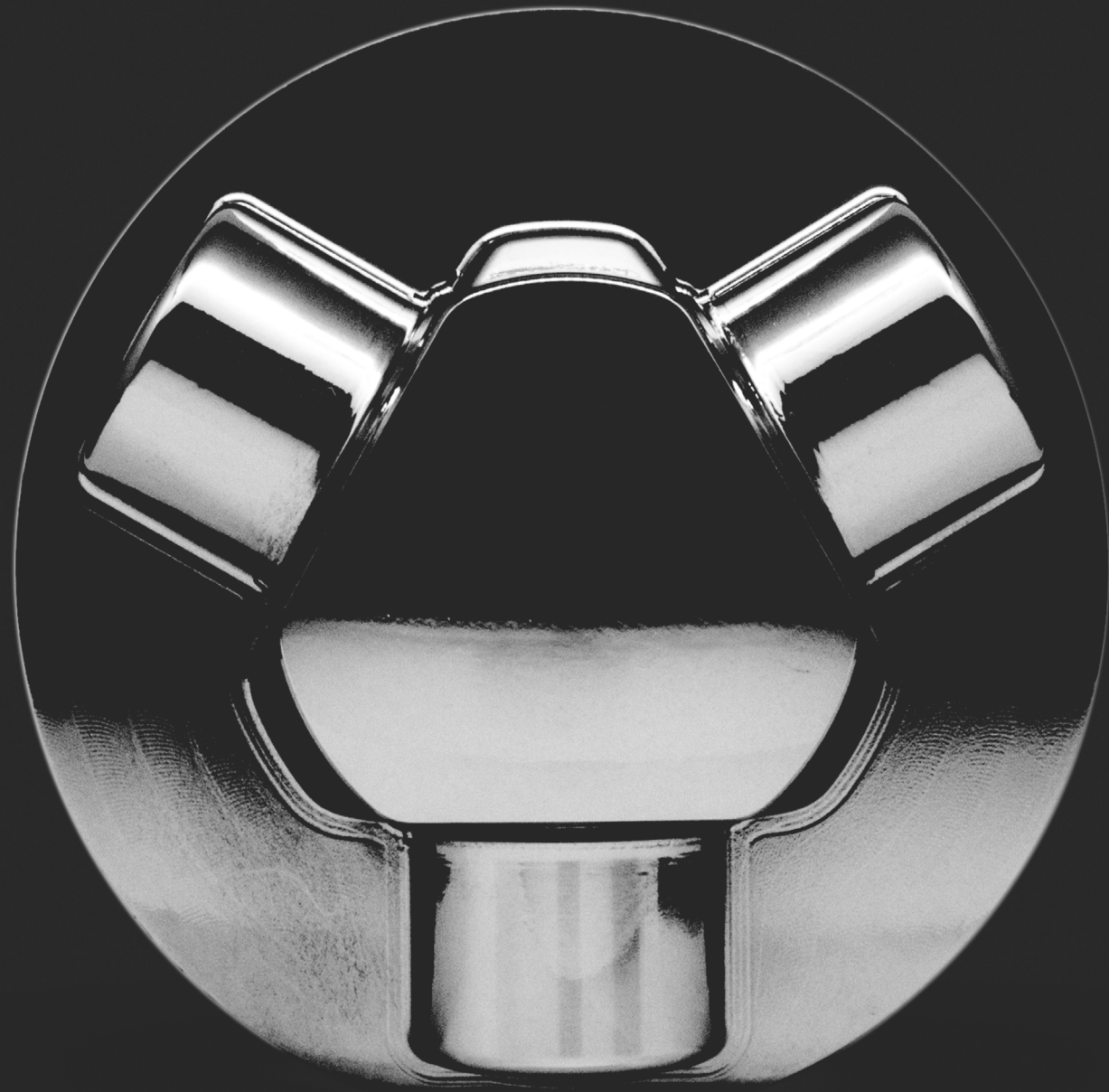
DryLyte® Technology

Main Benefits

—

DLyte® Applications

DLyte® Series



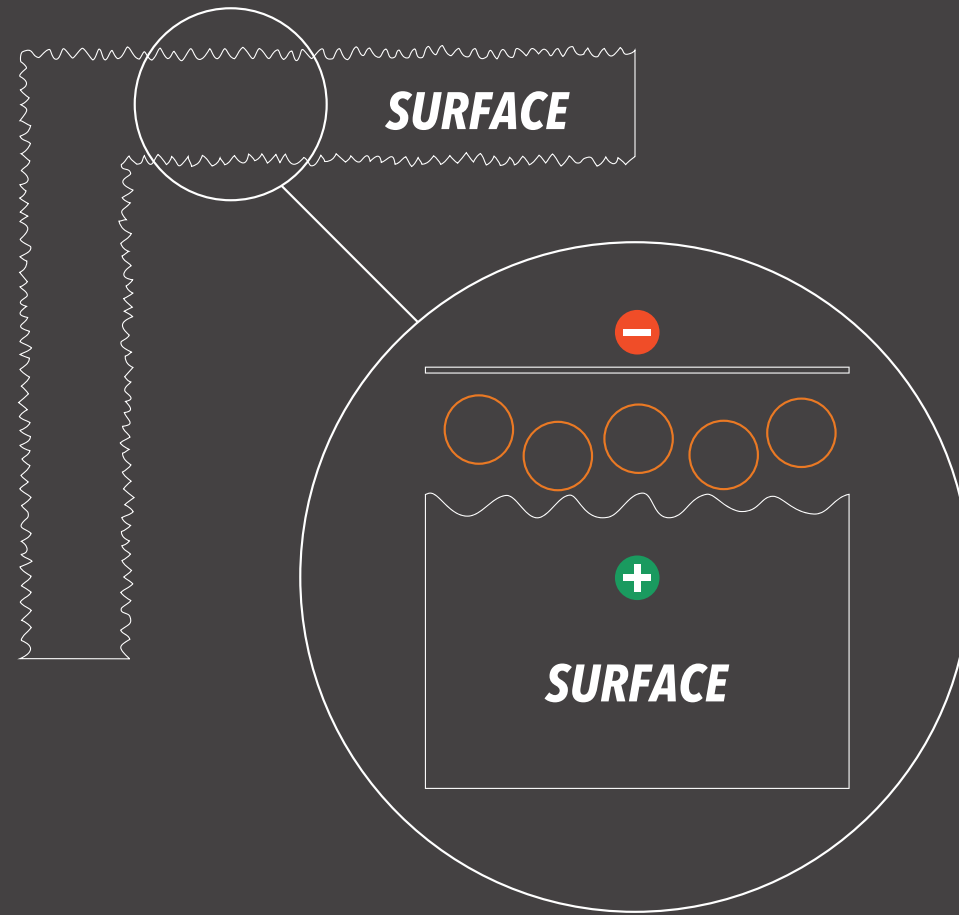
***D**Lyte*

**The First Dry
Electropolishing System**

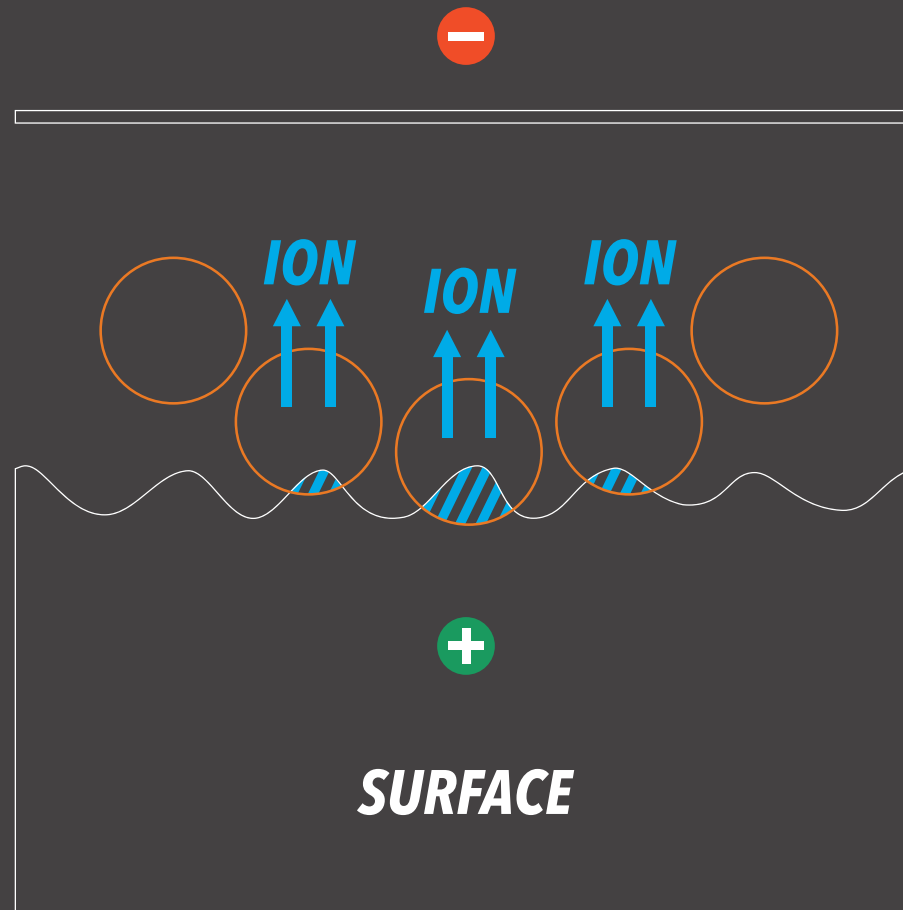


DryLyte[®] new patented technology for grinding and polishing metals by ion transport using free solid bodies. Revolutionary dry electropolishing that does not use any liquid as electrolyte.

METAL **DRYLYTE**[®] ELECTROPOLISHING

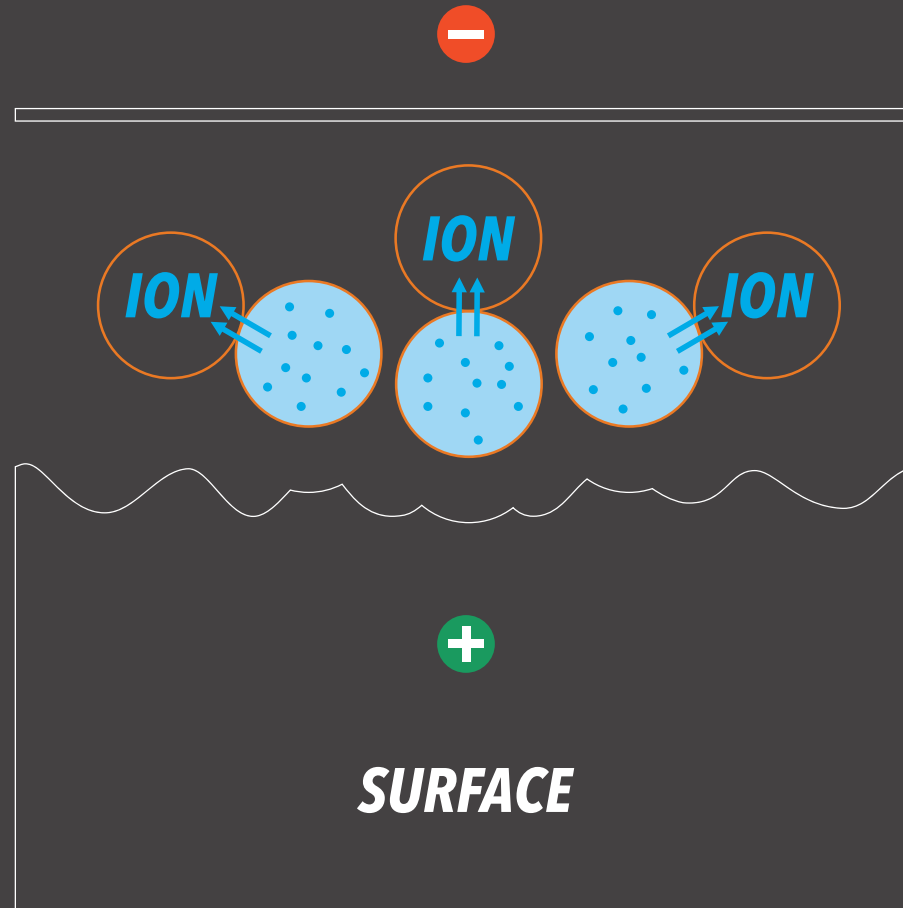


METAL **DRYLYTE**[®] ELECTROPOLISHING



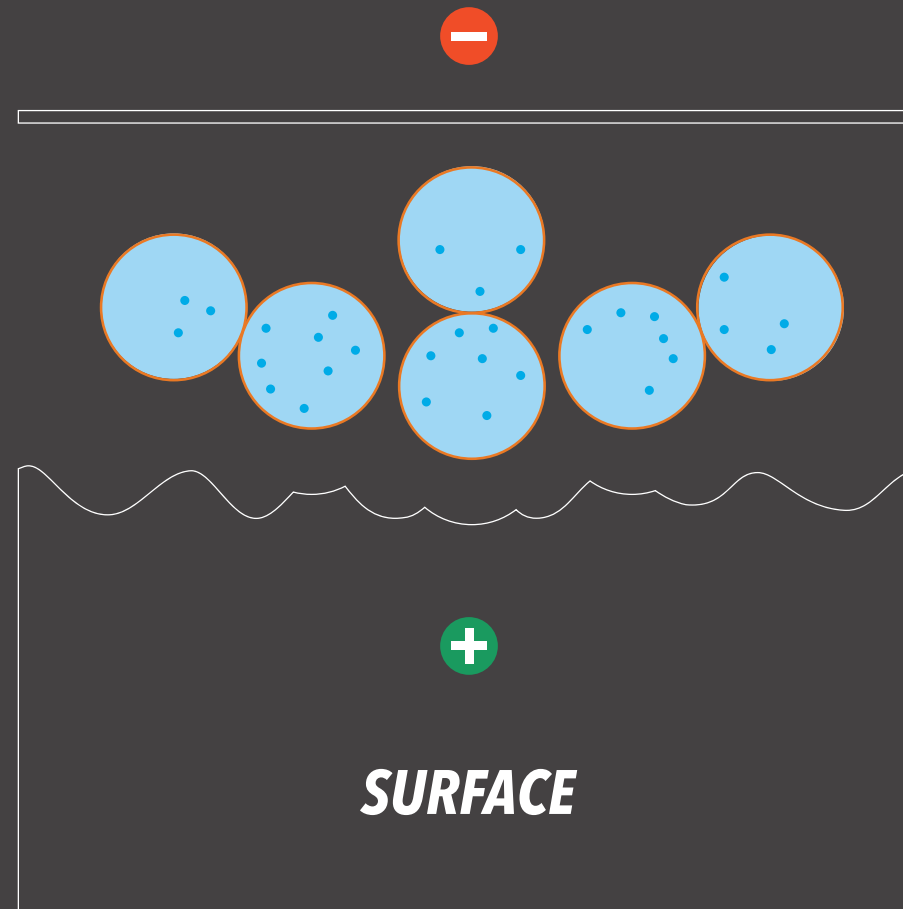
The process removes material only from the peaks of roughness

METAL **DRYLYTE**[®] ELECTROPOLISHING



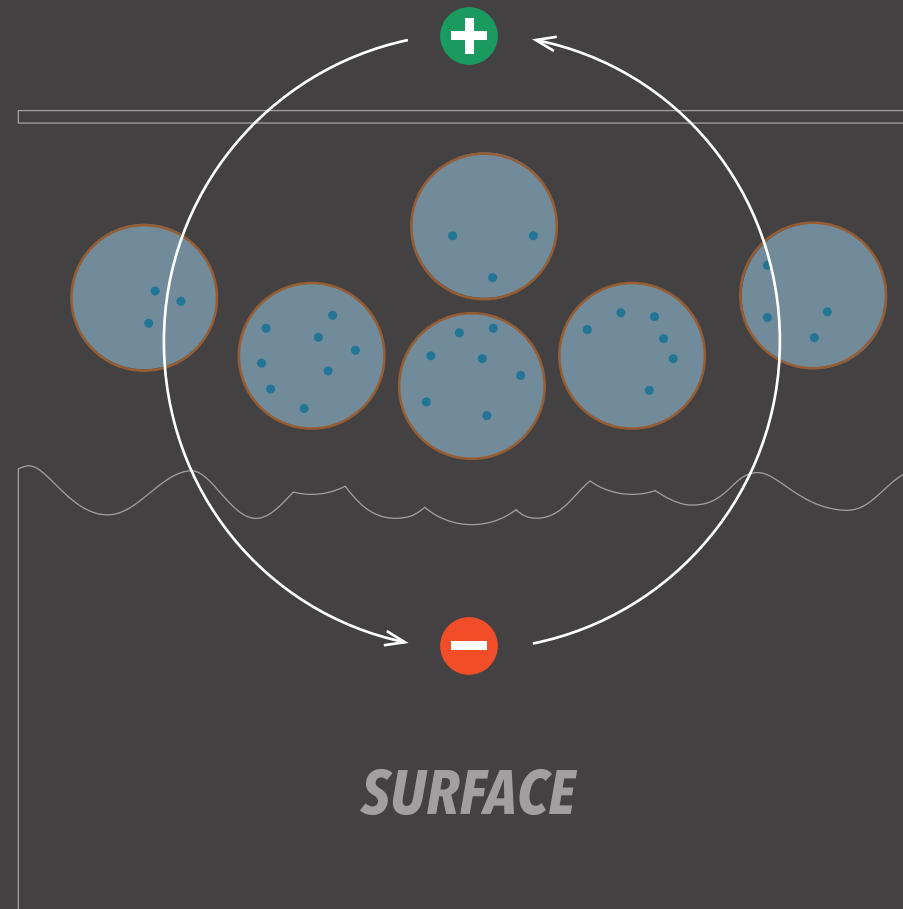
The IONS move from particle to particle

METAL **DRYLYTE**[®] ELECTROPOLISHING



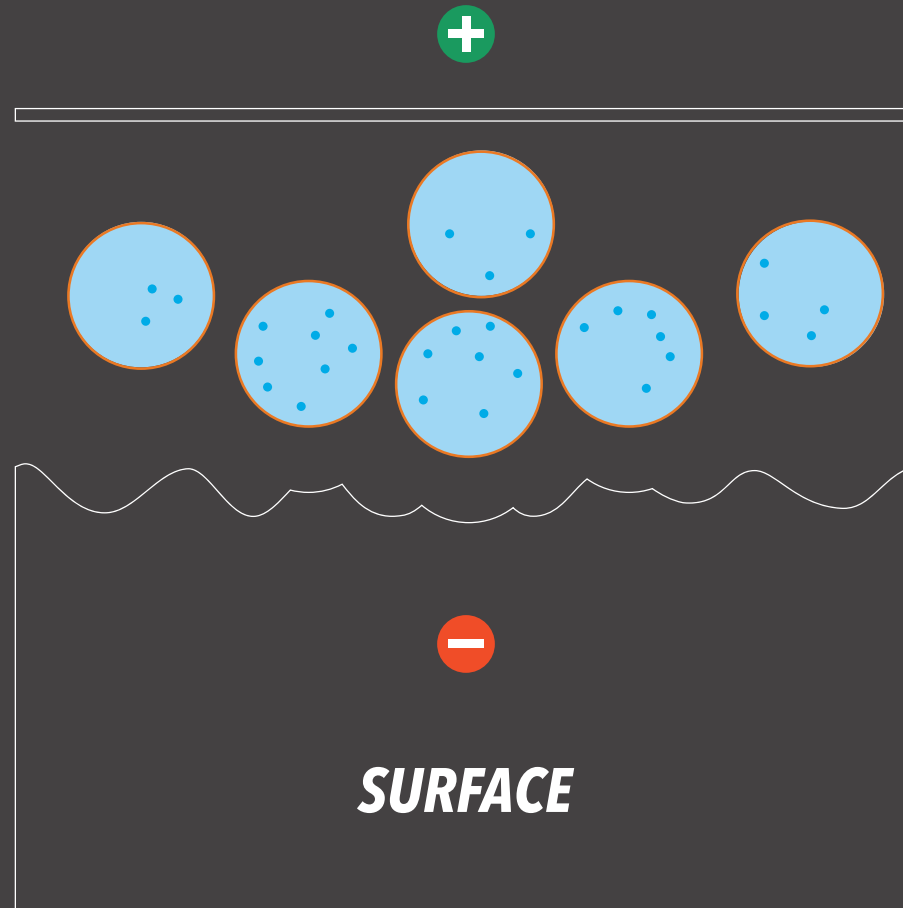
The IONS move from particle to particle

METAL **DRYLYTE**[®] ELECTROPOLISHING

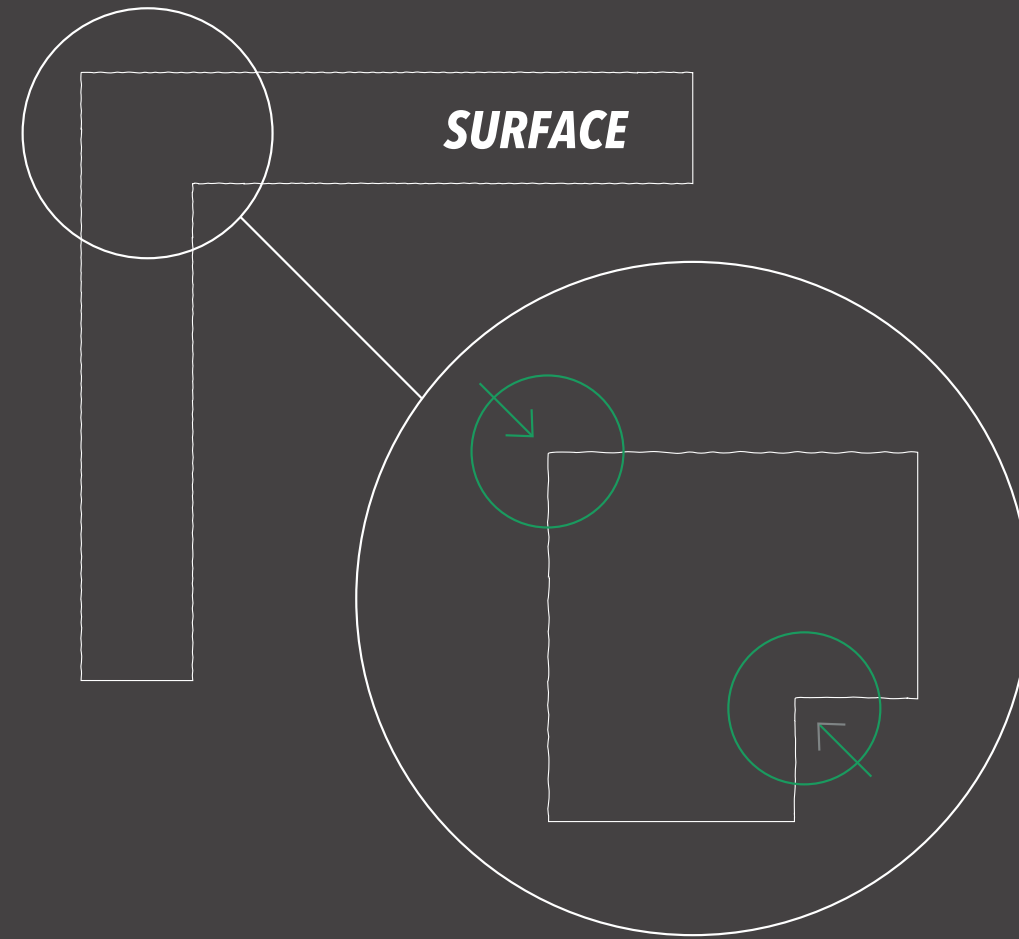


The polarity changes

METAL **DRYLYTE**[®] ELECTROPOLISHING



METAL **DRYLYTE**[®] ELECTROPOLISHING



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

Automatic Process in One Step

**CASTING
SINTERING**

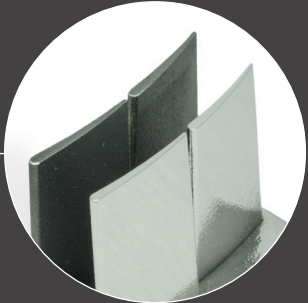
Sandblasting

GPAINNOVA study the case and develop a specific project for client needs.

DLyte[®]

DLyte[®] finishing process time depends on the type of manufacturing.

MILLING



Main Benefits

Polishing to mirror-finishing
in one step and full automatic.

**Homogeneous polishing across
the surface,** main advantage
vs mechanical polishing.

**Respect of tolerances and
preservation of initial shape
even cutting edges.**

Traceable industrial process.

Increase of resistance to corrosion.

No contamination on the
surface and does not leave traces
of hydrogen on the surface.

Controlled costs and
predictable lead times.

Main Benefits

Achieves negative surface skewness (rsk) which increases the surface bearing contact area (allowing uniform lubricant film distribution).

Generates no grinding texture patterns improving part wear and fracture resistance, bearing ratio and improves fatigue resistance.

Reproducibility and homogeneity.

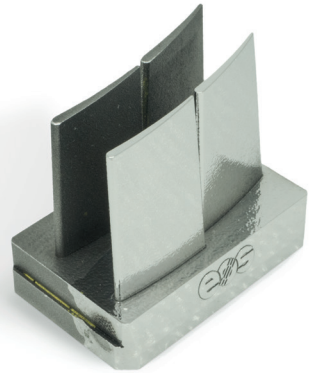
No micro-scratches on the surface.

Allows processing complex geometries without programming.
(Special for AM)

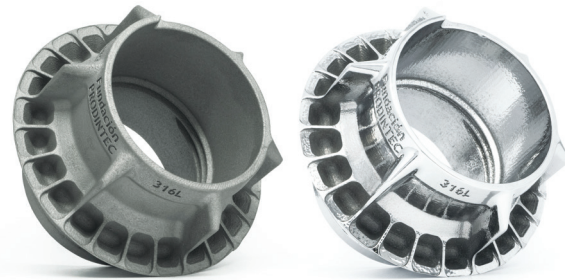
Ra under 0,09 micrometers
(For additive manufacturing parts).

Allows processing channels and cavities.

DLyte® Applications



SINTERED / INCONEL 718



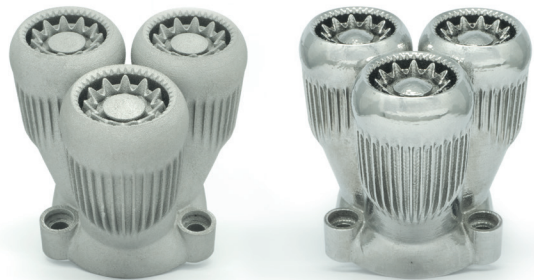
SINTERED / INOX316L



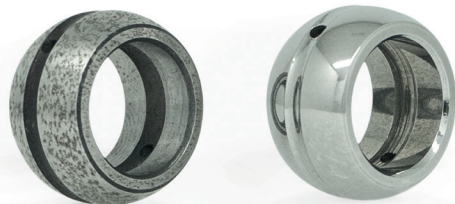
SINTERED / INOX316L



CNC / INOX316L



SINTERED / CHROME COBALT



CNC / HSS1.3505



CNC / HSS 1.3343

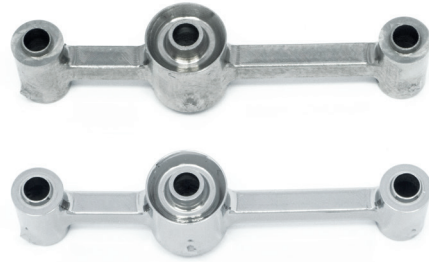


CASTING / COPPER

*D*Lyte[®] Applications



CASTING / CHROME COBALT



MILLING / TITANIUM



MILLING / CHROME COBALT



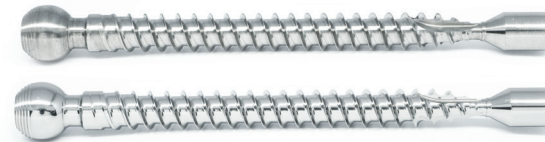
SINTERED / CHROME COBALT



SINTERED / TITANIUM



LASER CUT / NITINOL



MILLING / TITANIUM



MILLING / TITANIUM

*D*Lyte[®] Applications

STAINLESS STEEL

HSS

INCONEL

CUPPER

BRASS

BRONCE

SILVER

HARD METAL

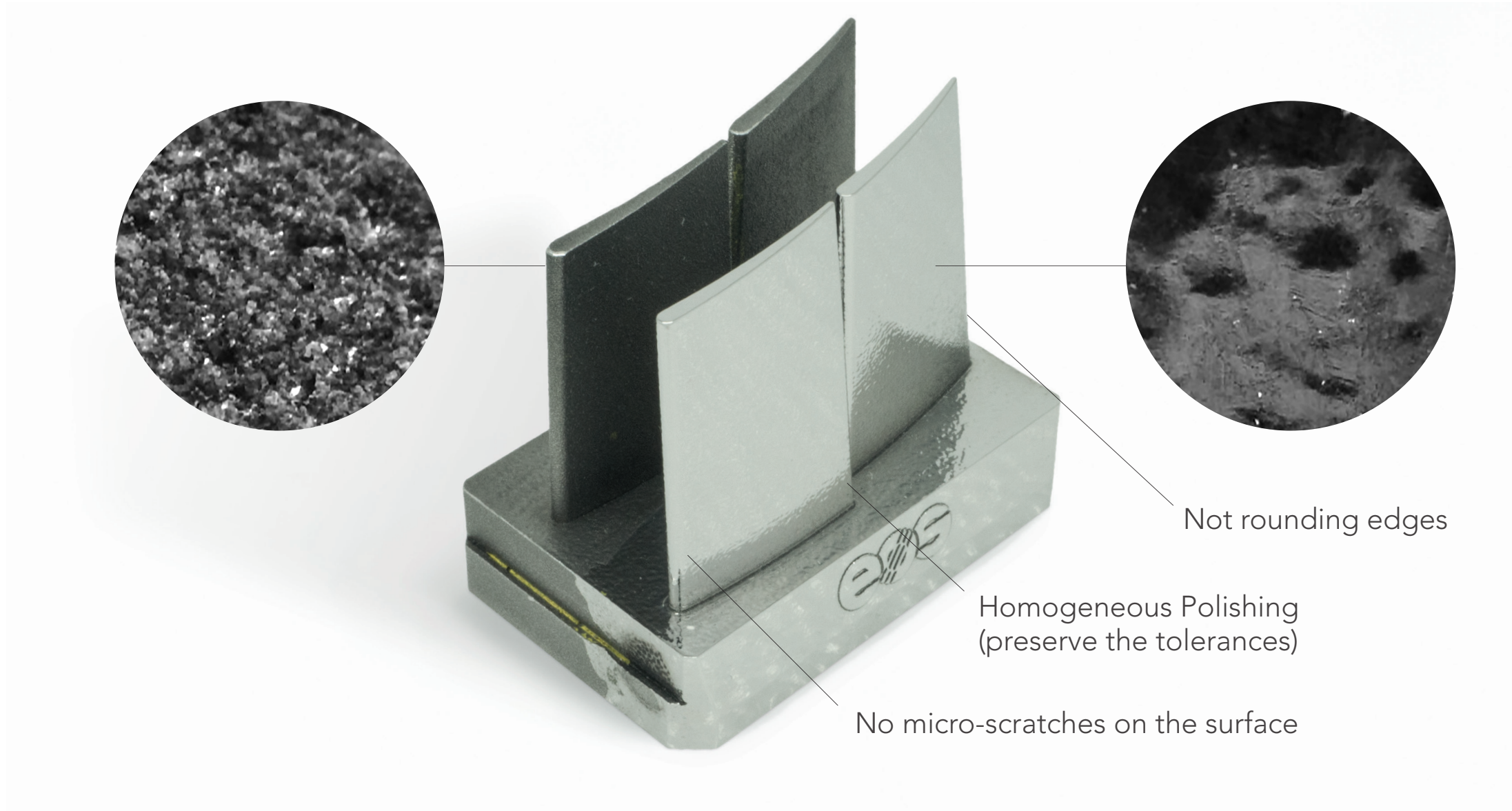
TITANIUM

NITINOL

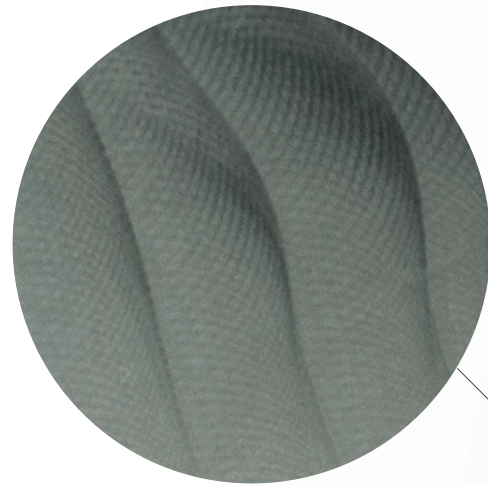
ALUMINIUM

CHROME COBALT

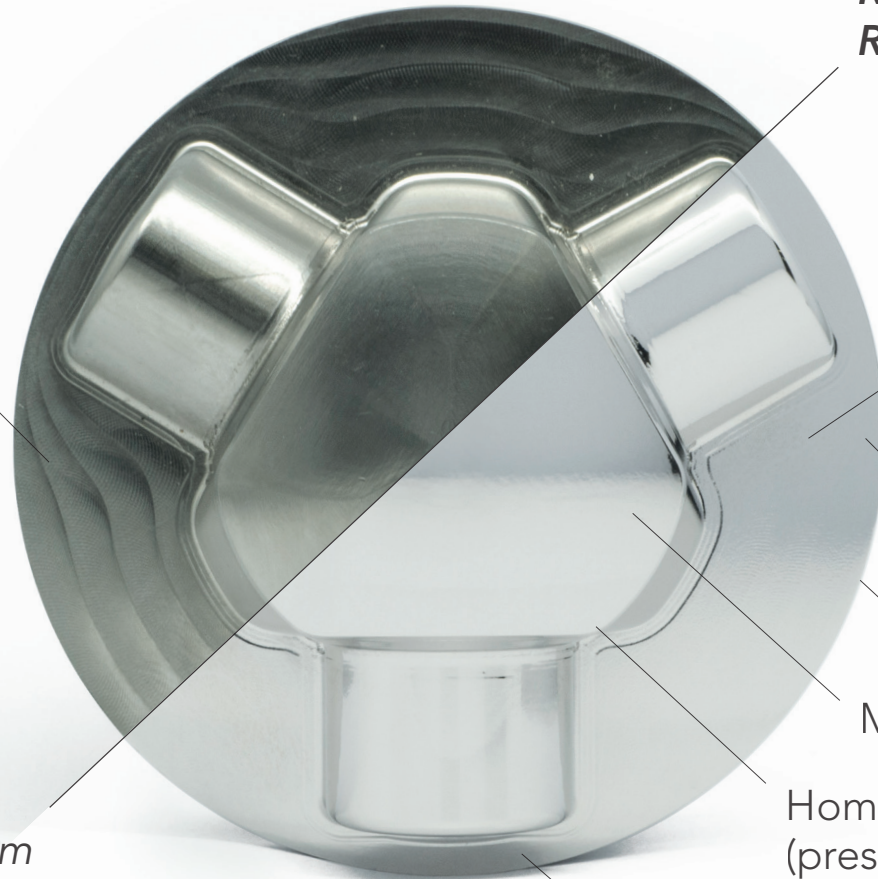
SINTERED / INCONEL 718



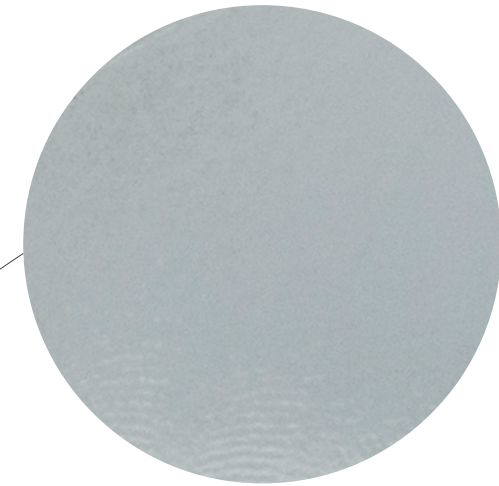
CNC / INOX 316L



Ra 0.692 μm
Rz 3.626 μm



Ra 0.125 μm
Rz 0.843 μm



No micro-scratches on the surface

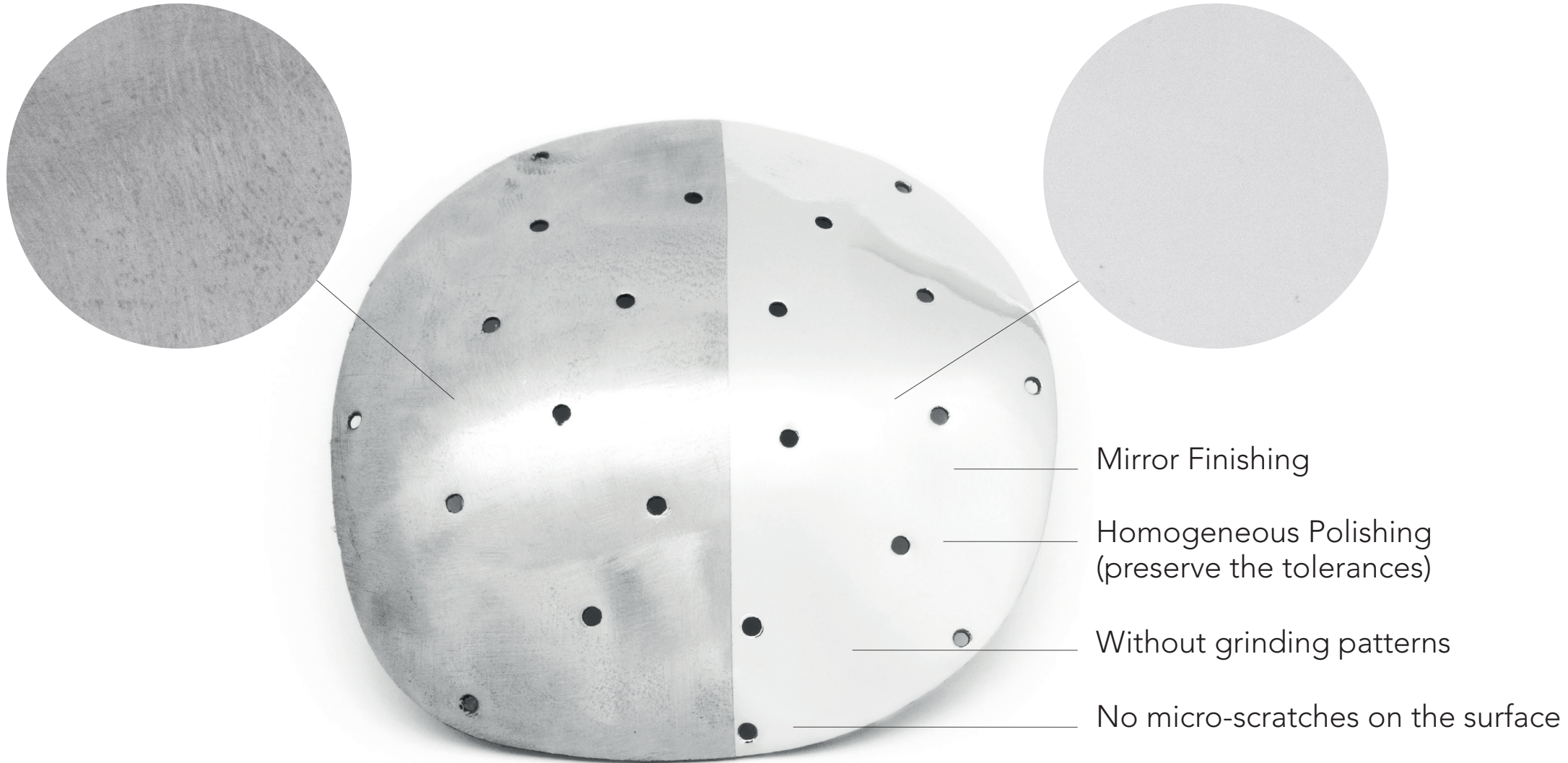
Not rounding edges

Mirror Finishing

Homogeneous Polishing
(preserve the tolerances)

Without grinding patterns
(improving fatigue resistance)

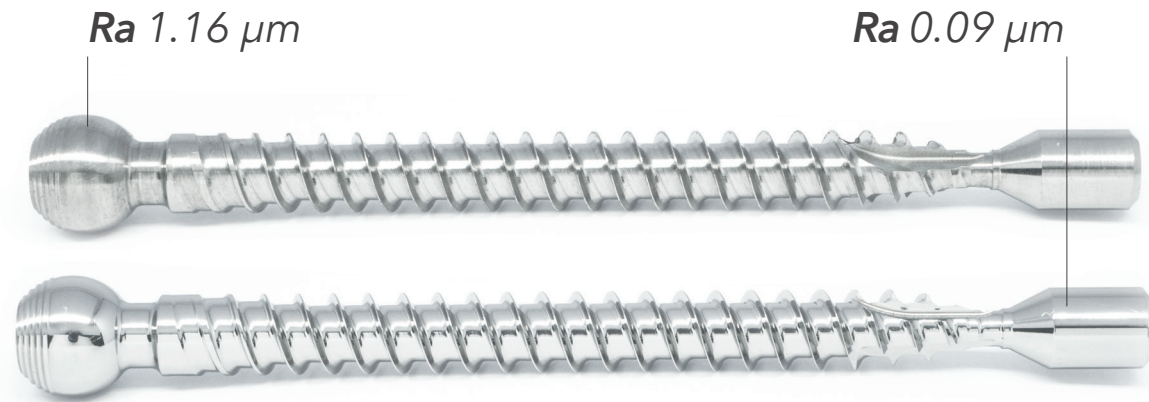
SINTERING / TITANIUM



DLyte[®] Titanium

This new Titanium application allows deburring and homogeneous polishing without changing the properties of the material and maintaining the geometry of the piece.

Despite being an electropolishing, **the process does not generate oxidation and passivation of the piece.**



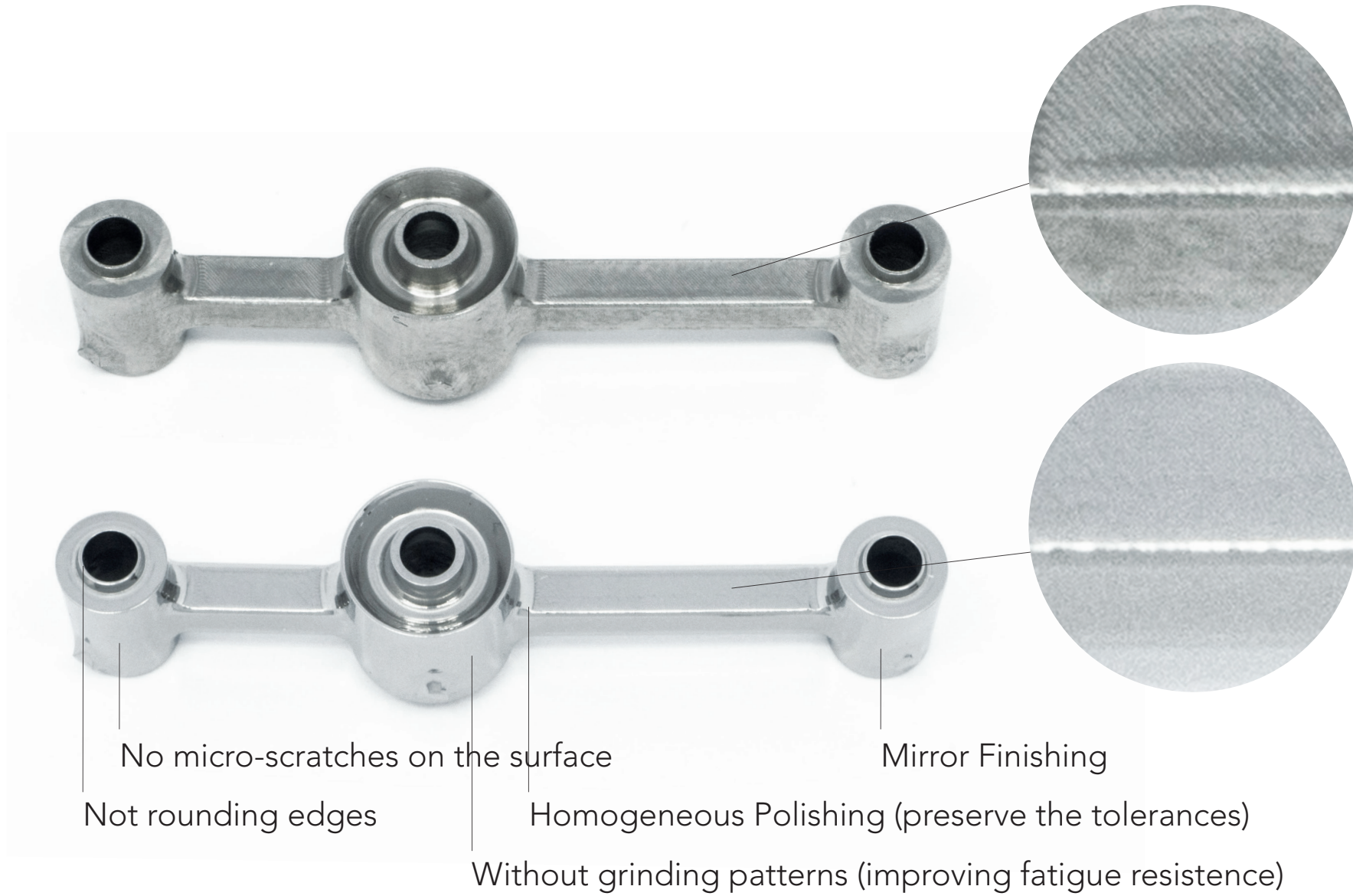
before finishing

500x

after finishing

500x

MILLING / TITANIUM



DLyte[®] Series

	<i>DLyte 1[®]</i>	<i>DLyte 10[®]</i>	<i>DLyte 100[®]</i>	<i>DLyte 1000[®]</i>
<i>DENTAL</i>	<i>DLyte 1D[®]</i>	<i>DLyte 10D[®]</i>	<i>DLyte 100D[®]</i>	<i>DLyte 1000D[®]</i>
<i>HEALTHCARE</i>	<i>DLyte 1H[®]</i>	<i>DLyte 10H[®]</i>	<i>DLyte 100H[®]</i>	<i>DLyte 1000H[®]</i>
<i>INDUSTRIAL</i>			<i>DLyte 100I[®]</i>	<i>DLyte 1000I[®]</i>
<i>AERONAUTICS</i>			<i>DLyte 100A[®]</i>	<i>DLyte 1000A[®]</i>
<i>AUTOMOTIVE</i>			<i>DLyte 100M[®]</i>	<i>DLyte 1000M[®]</i>
<i>Bucket Volume</i>	6 L	9 L	16 L	-
<i>Max. Size Piece</i>	75Ømm x 50mm	120Ømm x 50mm	180Ømm x 80mm	-

Aeronautics Series



DLyte 1000A*
DLyte 1000A+Ti*



New Machine for Mass Finishing
AVAILABLE SOON

	DLyte 100A*	DLyte 100A+Ti*	DLyte 1000A*
BUCKET VOLUME	16 Litres (Electrolyte)	16 Litres (Electrolyte)	
MODEL	DLyte 100A*	DLyte 100A+Ti*	DLyte 1000A*
CAPACITY	1800 mm x 80 mm	1800 mm x 80 mm	-
MACHINE DIMENSIONS	950 x 690 x 1410 mm	950 x 690 x 1410 mm	-
SUPPORT DIMENSIONS	950 x 1040 x 700 mm	950 x 1040 x 700 mm	-
MACHINE WEIGHT	217.5 kg	217.5 kg	-
SUPPORT WEIGHT	100 kg	100 kg	-
POWER	5 kW	5 kW	-
VOLTAGE	220-240 V or 110-115 V	220-240 V or 110-115 V	-
AIR PRESSURE	4-5 bar	4-5 bar	-



The use of Patented DryLyte Technology is a concession approved by DryLyte Company

Machine patented and manufactured by **GPA INNOVA**

Automotive Series



New Machine for Mass Finishing
AVAILABLE SOON

	DLyte 100M*	DLyte 100M+Ti*	DLyte 1000M*
BUCKET VOLUME	16 Litres (Electrolyte)	16 Litres (Electrolyte)	
MODEL	DLyte 100M*	DLyte 100M+Ti*	DLyte 1000M*
CAPACITY	1800 mm x 80 mm	1800 mm x 80 mm	-
MACHINE DIMENSIONS	950 x 690 x 1410 mm	950 x 690 x 1410 mm	-
SUPPORT DIMENSIONS	950 x 1040 x 700 mm	950 x 1040 x 700 mm	-
MACHINE WEIGHT	217.5 kg	217.5 kg	-
SUPPORT WEIGHT	100 kg	100 kg	-
POWER	5 kW	5 kW	-
VOLTAGE	220-240 V or 110-115 V	220-240 V or 110-115 V	-
AIR PRESSURE	4-5 bar	4-5 bar	-

Industrial Series

DLyte



DLyte 100I

DLyte 100I+Ti

Chrome Cobalt Electrolyte -01/-02

Titanium Electrolyte

DLyte 1000I
DLyte 1000I+Ti



New Machine for Mass Finishing
AVAILABLE SOON

BUCKET VOLUME	16 Litres (Electrolyte)	16 Litres (Electrolyte)	
MODEL	DLyte 100I	DLyte 100I+Ti	DLyte 1000I
CAPACITY	1800 mm x 80 mm	1800 mm x 80 mm	-
MACHINE DIMENSIONS	950 x 690 x 1410 mm	950 x 690 x 1410 mm	-
SUPPORT DIMENSIONS	950 x 1040 x 700 mm	950 x 1040 x 700 mm	-
MACHINE WEIGHT	217.5 kg	217.5 kg	-
SUPPORT WEIGHT	100 kg	100 kg	-
POWER	5 kW	5 kW	-
VOLTAGE	220-240 V or 110-115 V	220-240 V or 110-115 V	-
AIR PRESSURE	4-5 bar	4-5 bar	-

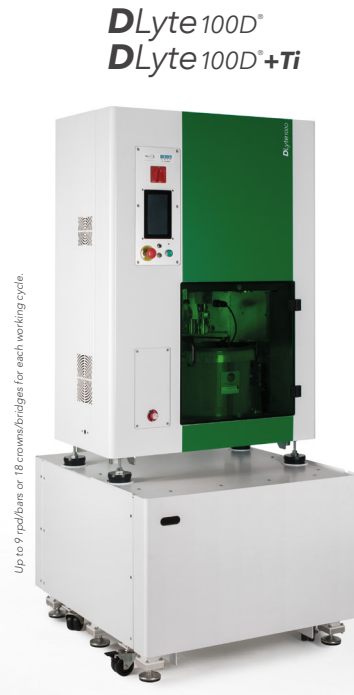


GPA INNOVA

Machine patented and manufactured by

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Dental Series



New Machine for Mass Finishing
AVAILABLE SOON

BUCKET VOLUME	6 Litres (Electrolyte)	9 Litres (Electrolyte)	16 Litres (Electrolyte)	
MODEL	DLyte 1D[®]	DLyte 10D[®]	DLyte 100D[®]	DLyte 1000D[®]
CAPACITY	1 piece	3/6 pieces	9/18 pieces	-
MACHINE DIMENSIONS	500 x 555 x 1145 mm	820 x 640 x 1220 mm	950 x 690 x 1410 mm	-
SUPPORT DIMENSIONS	-	820 x 1025 x 750 mm	950 x 1040 x 700 mm	-
MACHINE WEIGHT	96 kg	173.5 kg	217.5 kg	-
SUPPORT WEIGHT	-	87 kg	100 kg	-
POWER	2 kW	3 kW	5 kW	-
VOLTAGE	220-240 V or 110-115 V	220-240 V or 110-115 V	220-240 V or 110-115 V	-
AIR PRESSURE	-	4-5 bar	4-5 bar	-



GPAINNOVA

Machine patented and manufactured by

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Healthcare Series



New Machine for Mass Finishing
AVAILABLE SOON

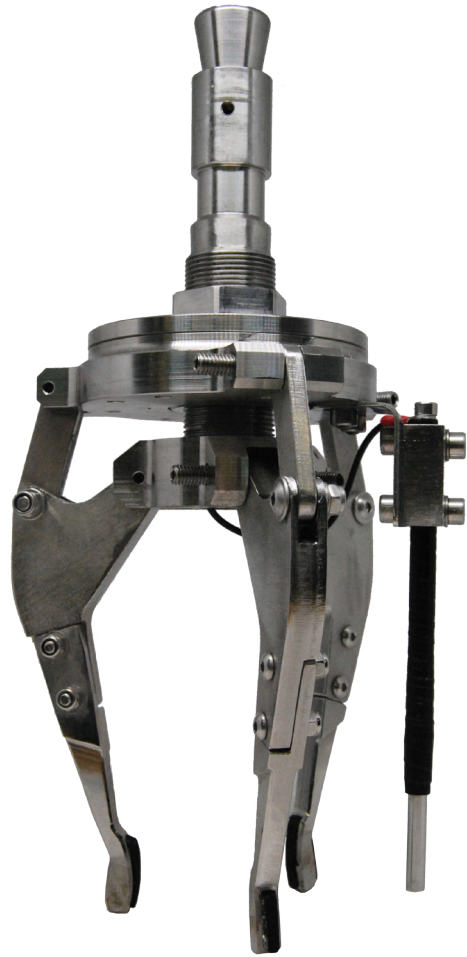
BUCKET VOLUME	6 Litres (Electrolyte)	9 Litres (Electrolyte)	16 Litres (Electrolyte)	
MODEL	DLyte 1H[®]	DLyte 10H[®]	DLyte 100H[®]	DLyte 1000H[®]
CAPACITY	750 mm x 50 mm	1200 mm x 50 mm	1800 mm x 80 mm	-
MACHINE DIMENSIONS	500 x 555 x 1145 mm	820 x 640 x 1220 mm	950 x 690 x 1410 mm	-
SUPPORT DIMENSIONS	-	820 x 1025 x 750 mm	950 x 1040 x 700 mm	-
MACHINE WEIGHT	96 kg	173.5 kg	217.5 kg	-
SUPPORT WEIGHT	-	87 kg	100 kg	-
POWER	2 kW	3 kW	5 kW	-
VOLTAGE	220-240 V or 110-115 V	220-240 V or 110-115 V	220-240 V or 110-115 V	-
AIR PRESSURE	-	4-5 bar	4-5 bar	-



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Machine patented and manufactured by **GPAINNOVA**

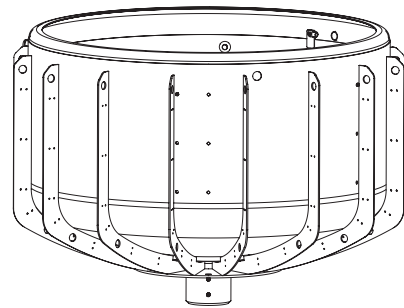
*D*Lyte[®] Holders



DLyte[®] Customized Solution

GPAINNOVA offers a *DLyte*[®] customized solution designed specifically to fullfit industrial mass production requirements. A customizable system that adapts its design to the production chain where they must be integrated.

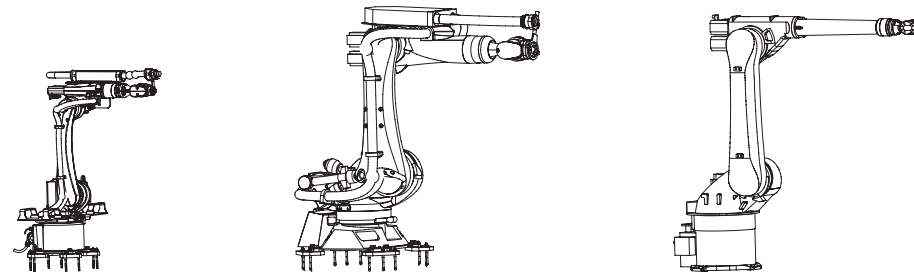
Industrial Bucket



1,5 m³

Capacity (up to 800Ømm x 500mm)

Industrial Robots





thank you.

GPA INNOVA