

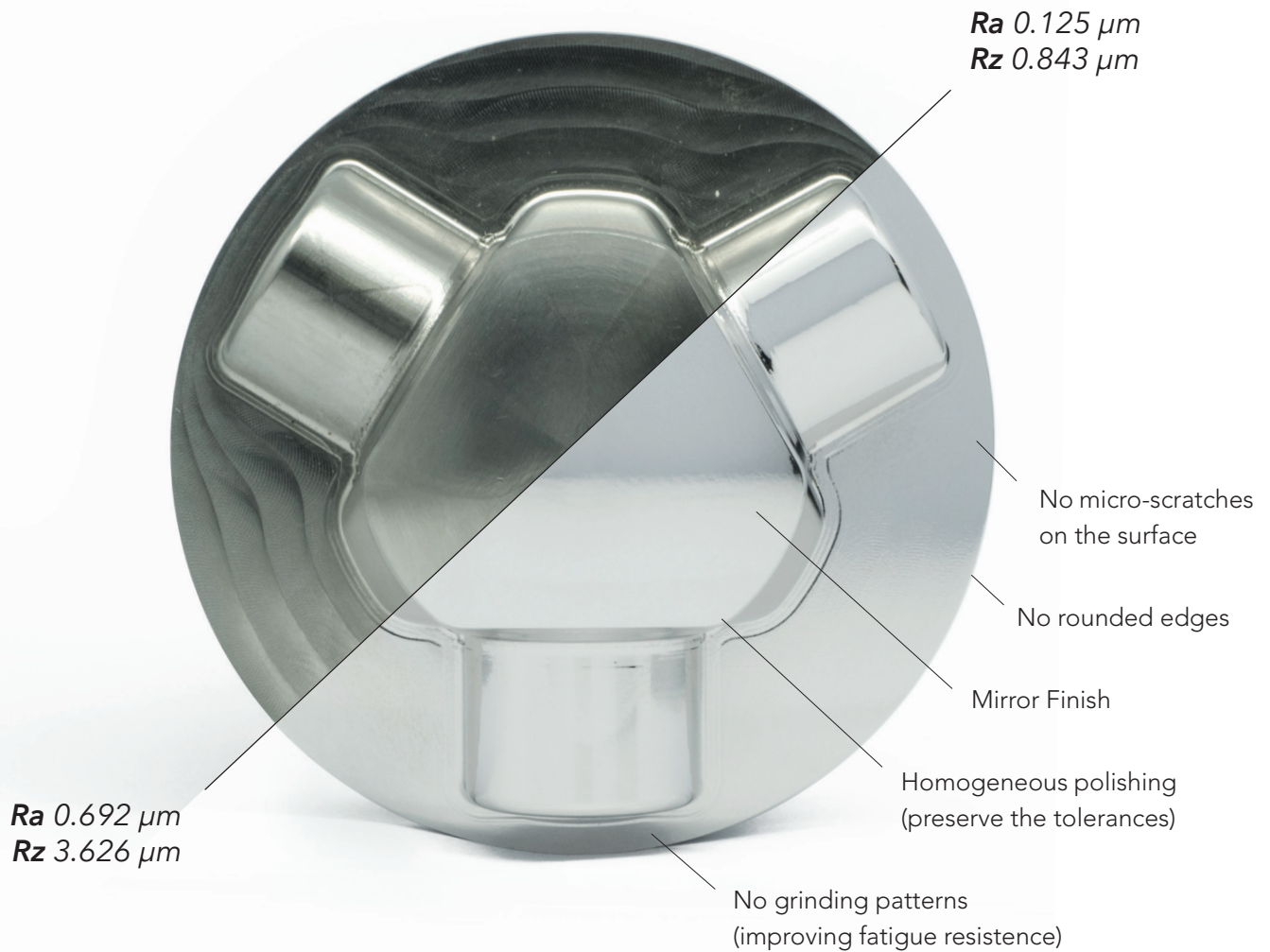


The First Dry Electropolishing System

INDUSTRIAL

- Preservation of the initial shape even the cutting edges
- Homogeneous polishing across the surface without grinding patterns
- Process complex geometries
- No micro-scratches on the surface

CNC / STAINLESS STEEL 316L / Processed by **DLyte** 1001



A New Concept of Polishing



Machine patented and manufactured by **GPAINNOVA**

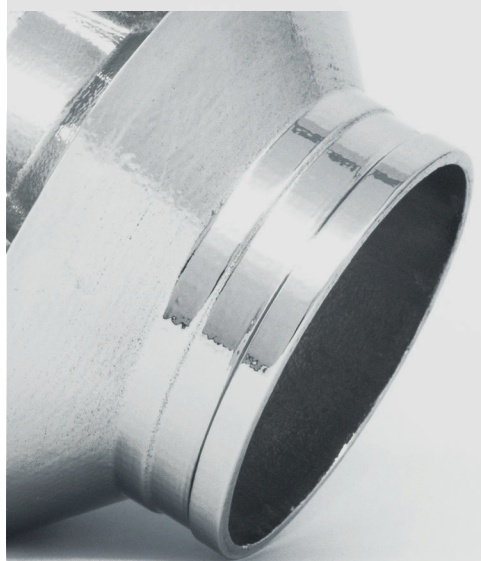
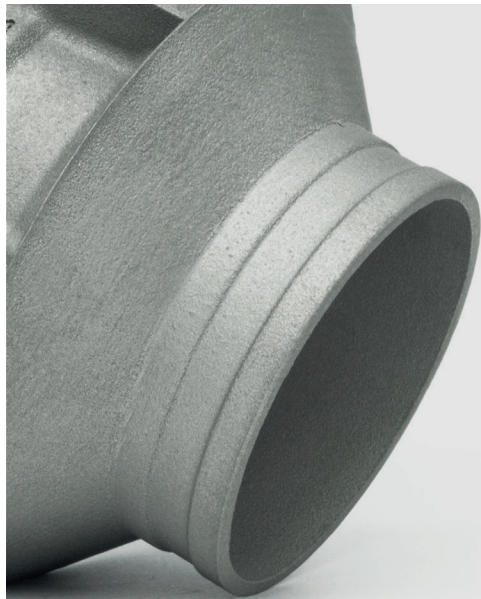


The use of Patented DryLyte Technology is a concession approved by DryLyte Company

DryLyte® Technology

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.

Unlike traditional polishing, **DryLyte®** Technology differentiates itself by its ability to preserve the initial shapes, even the cutting edges, and penetrate into all dead zones. It creates a homogeneous polishing across the surface, without grinding patterns and has the ability to process complex geometries without leaving micro-scratches on the surface. **DryLyte®** Technology respects the tolerances and delivers brilliant mirror-like finishes, with one step, and with predictable costs.



SINTERING / INOX316L
Part manufactured by PRODINTEC



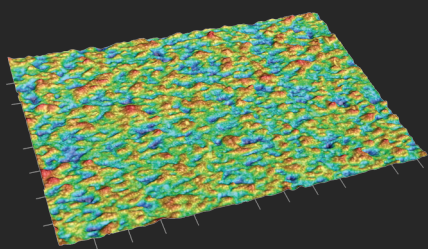
Locknut before finish



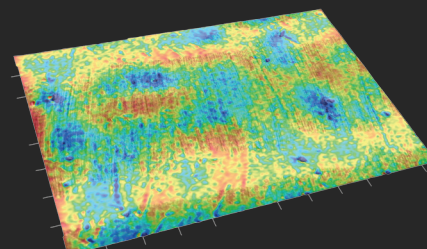
Locknut after finish

Technical Reports

Clutch before finish



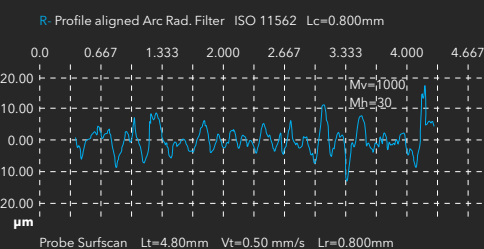
Clutch after finish



Blade before finish



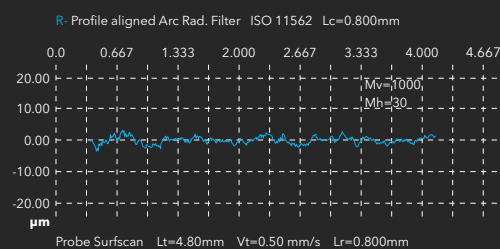
Ra 3.040 μm
Rz 18.616 μm
Rsk 0.416



Blade after finish



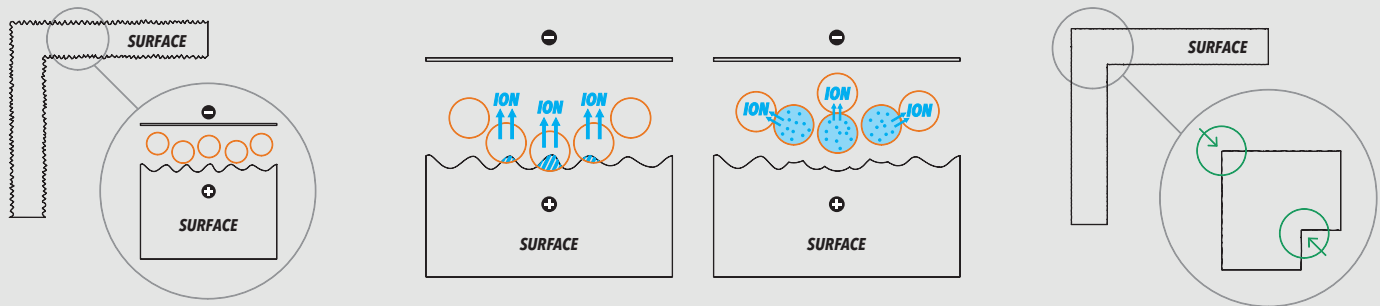
Ra 0.094 μm
Rz 0.505 μm
Rsk -0.042



Part manufactured by TOOLCRAFT

DLyte® allows polishing of Casting, Sintered and CNC parts. **DLyte**® offers a high quality polish for Cobalt Chrome, Carbon, Stainless Steels and High Speed Steels, Copper, Nickel, Aluminium and Titanium alloys and Precious metals.

METAL **DRYLYTE**® ELECTROPOLISHING



The process removes material only from the peaks of roughness

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

Applications

DENTAL	Skeletons, Crowns, Bridges, Bars, Inlays
HEALTHCARE	Implants, Instrumentation, Prosthetic Components, Hearing Aid, Needle
INDUSTRIAL	Moulds, Dies, Industrial Precision Parts, Cutting Tools, Engine Parts, Watch Case
AERONAUTICS	Blisks, Stators, Blades, Manifolds, Brackets, Guide Vanes, Bearings, Gears
AUTOMOTIVE	Impellers, Shafts, Gears, Bearings, Joint balls, Fuel Injectors, Brake parts, Luxury Inserts

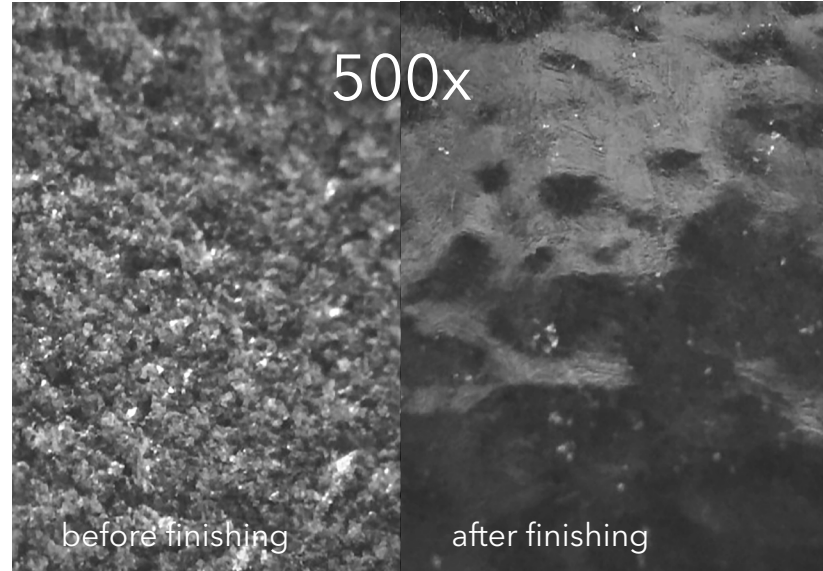
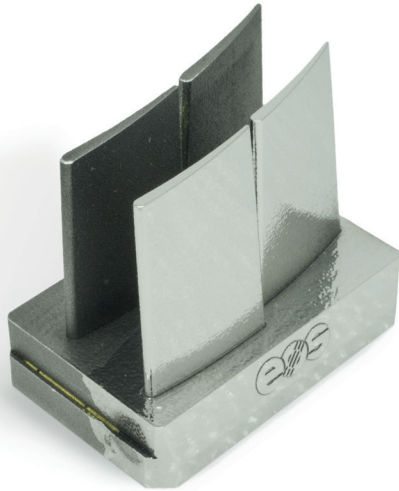
Benefits

- 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.
- Achieves homogeneous texture results across the surface.
- No contamination on the surface and no traces of hydrogen on the surface.
- Achieves negative surface skewness (rsk) which increases the surface bearing contact area (allowing uniform lubricant film distribution).
- Controlled costs and predictable lead times.
- Does not generate grinding texture patterns, improving resistance to part wear and fracture resistance, improving the bearing ratio, and improving fatigue resistance.
- Reproducibility and homogeneity.
- 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.

Homogeneous finishing

DLyte® achieves high quality finishing for machined, sintered and casting parts obtaining mirror finishing results.

SINTERING / INCONEL 718



Automatic One Step Process

**CASTING
SINTERING**

GPAINNOVA works with each client to develop a specific solution for individual needs.

DLyte®

The process time changes depending on the type of manufacturing

MILLING

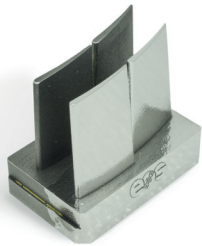
Big Time Savings

An optimal performance is achieved, due to a high energy extracting process. At same time, the whole process is carried out using the same machine, reducing the waiting and preparation time. It is even possible to process 3 pieces simultaneously.

Low Costs

The treatment process does not require any abrasive items, which prevents a constant expenditure on consumables.

DLyte Applications



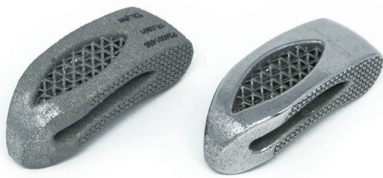
SINTERED / INCONEL 718



SINTERED / INOX316L



SINTERED / INOX316L



SINTERED / TITANIUM



CNC / INOX316L



SINTERED / COBALT CHROME



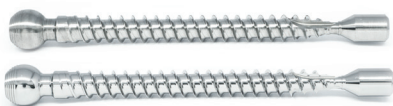
CASTING / COPPER



CNC / TITANIUM



SINTERED / TITANIUM



CNC / TITANIUM



CNC / HSS1.3505



CNC / HSS 1.3343

Send us your samples and see the results for yourself

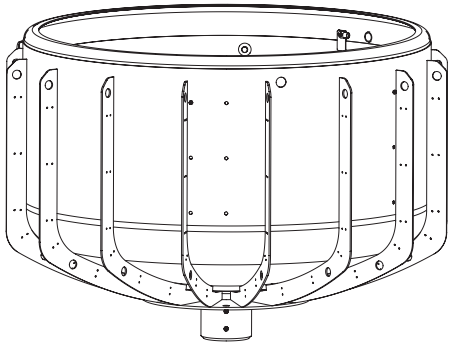
GPAINNOVA

C/ Caracas 13-15, Nau 6 - 08030 Barcelona | Phone +34 931 256 536 | samples@gpainnova.com | www.dlyte.es

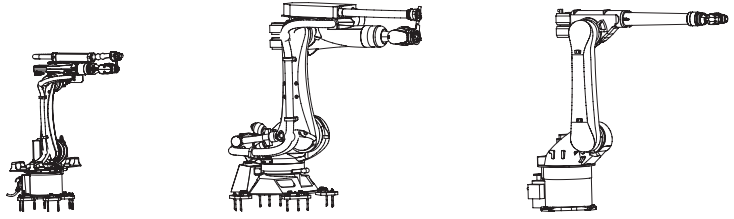
DLyte Customized Solution

GPAINNOVA offers a DLyte customized solution designed specifically to fit industrial mass production requirements, adapting the design to integrate seamlessly into the production chain.

Industrial Bucket



Industrial Robots

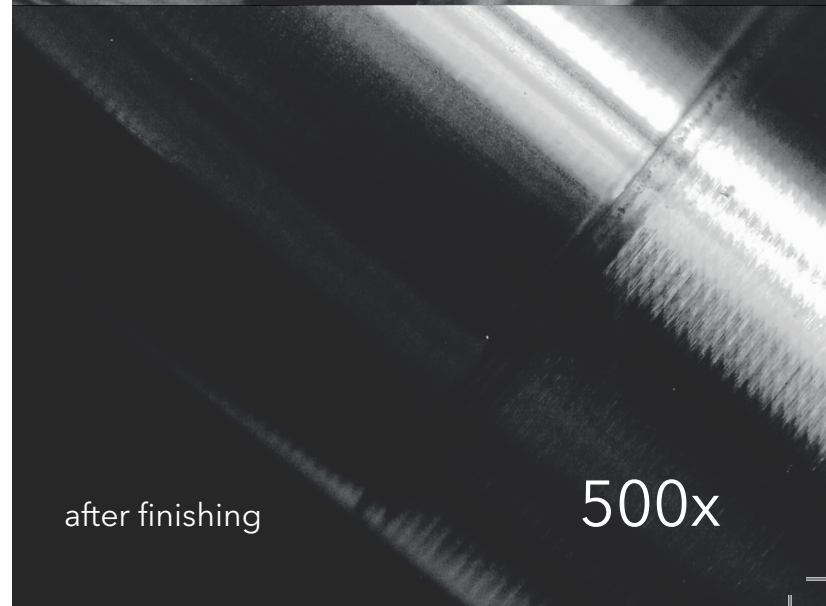
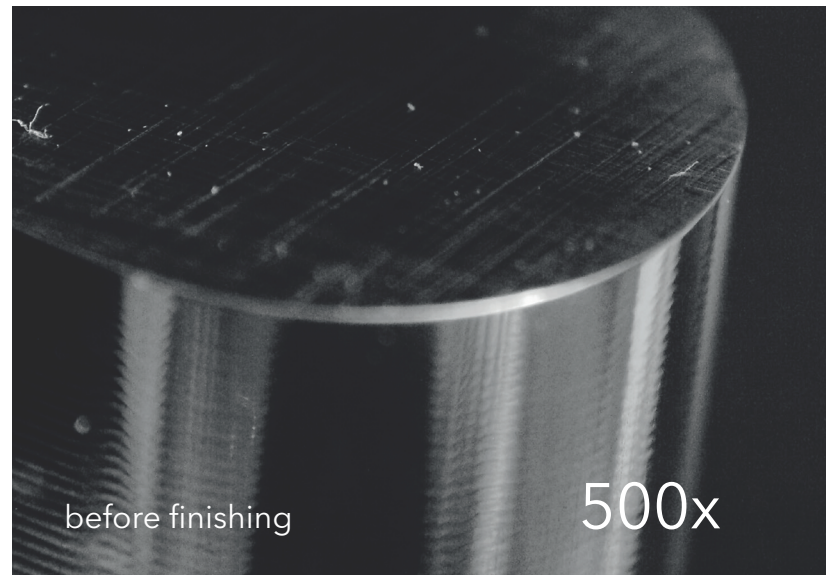


DLyte for Tool Industry

The process achieves homogeneous finishing along the piece, giving values of final roughness below $0.1 \mu\text{m}$ (Ra).
DLyte® offers high quality finishing increasing the wear resistance and enlarging its lifetime.

Ra 0.4 μm

Ra 0.08 μm



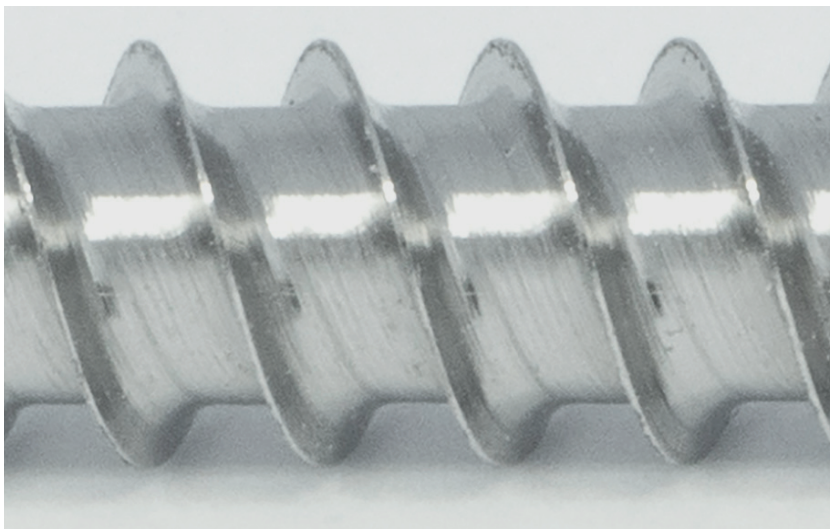
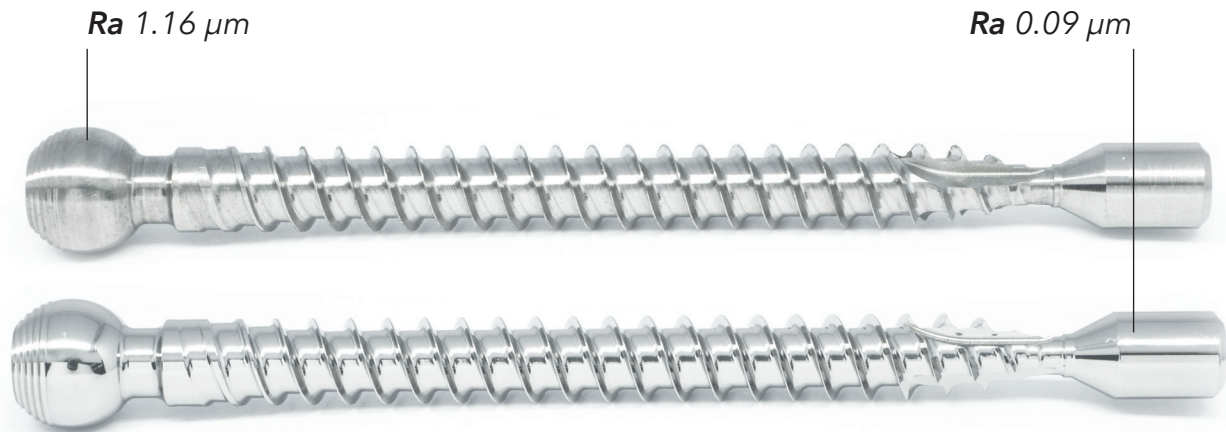
CNC / HSS 1.3343

DLyte Titanium Series

DLyte® Titanium Series is the newest range of products able to grind and polish Titanium alloys for the Aeronautics, Healthcare and Dental industries **with the same benefits as the Cobalt Chrome Series.**

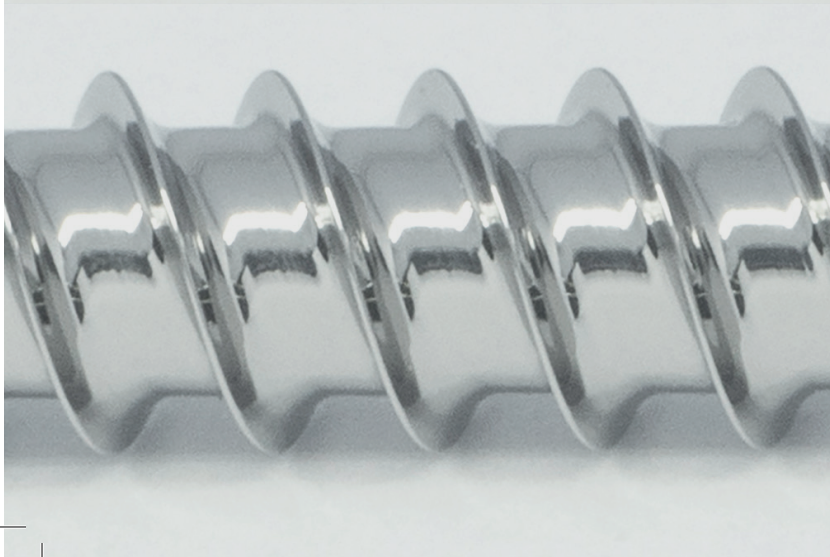
This new titanium application allows **deburring and homogeneous polishing without changing the properties** of the material, while **maintaining the geometry of the piece.**

CNC / TITANIUM



before finishing

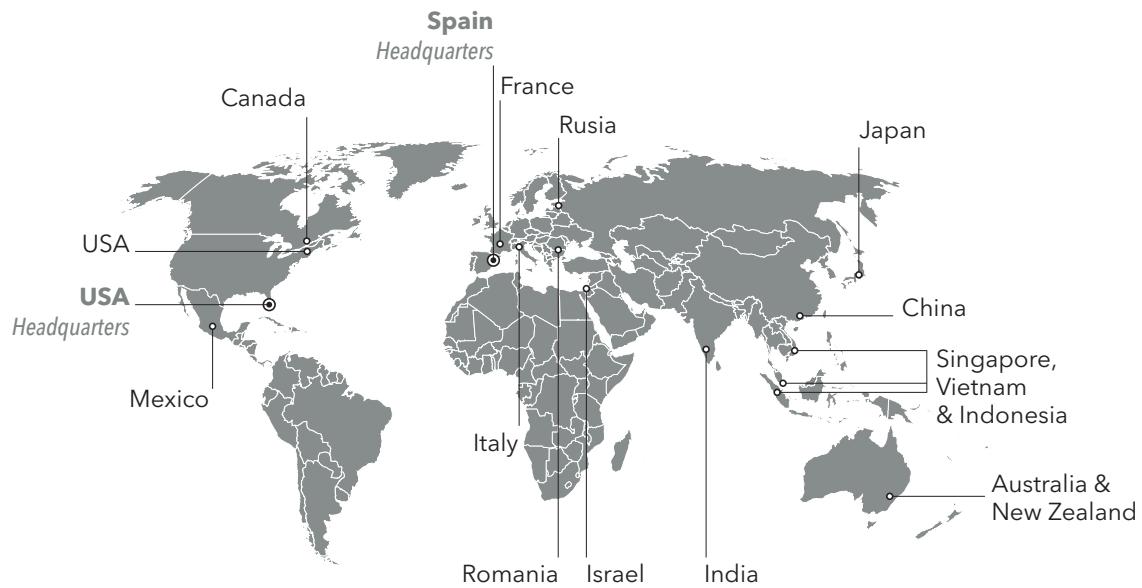
500x



after finishing

500x

DLyte Around the World



CONTACT US

dlyte.es

SINGAPORE

—
Creatz3D Pte Ltd

180 Paya Lebar Road, #08-07
Yi Guang Factory Building,
Singapore 409032

T. +65 6631 8555
info@creatz3d.com
www.creatz3d.com.sg

VIETNAM

—
Creatz3D Viet Nam Co., Ltd

Ho Chi Minh City
Ground Floor, HB Tower
No. 406 Ung Van Khiem Street
Ward 25, Binh Thanh District

T. +848 6283 8244
vn.info@creatz3d.com
www.creatz3d.com.vn

Hanoi

Floor 07, 6A Son Tay
Kim Ma Ward, Ba Dinh District

T. +844 6273 0936
vn.info@creatz3d.com
www.creatz3d.com.vn

INDONESIA

—
PT. Hong Chek

Kawasan Pergudangan. Era Prima
Blok P-19, Jalan Daan Mogot KM21,
Poris Gaga - Batuceper.
Kota Tangerang 15122

T. +62 21 55721405
indonesia@hongchek.com
www.hongchek.com