

The First **Dry** Electropolishing System



# HEALTHCAR

# THE NEW CONCEPT OF POLISHING

## Automatic one step process



# **Big time savings**

**D**Lyte is an automatic process which reduces the complexity of the current multi-step processes. The entire process is completed using one machine, reducing the waiting and preparation time.

#### Lower costs

The treatment does not require manual processing, reducing the labor costs and eliminating reworks and defective parts.

The cost of using the *DLyte* system is only 27% of the current hand polishing procedure cost.

#### Send us your samples and see the results for yourself

#### **GPA**INNOVA

# **Main benefits**

- **1. FULLY AUTOMATIC POLISHING TO A MIRROR FINISH IN ONE STEP**
- 2. CONTROLLED COSTS AND PREDICTABLE LEAD TIMES
- 3. RESPECT OF TOLERANCES AND PRESERVATION OF INITIAL SHAPE, EVEN CUTTING EDGES
- 4. NO CONTAMINATION ON THE SURFACE AND NO TRACES OF HYDROGEN ON THE SURFACE
- 5. HOMOGENEOUS POLISHING ACROSS THE SURFACE WITHOUT GRINDING PATTERNS
- 6. THE ABILITY TO PROCESS COMPLEX GEOMETRIES WITHOUT PROGRAMMING
- 7. ENVIRONMENTALLY FRIENDLY



Unlike traditional polishing, **Dry**Lyte 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. **Dry**Lyte technology respects the tolerances and delivers brilliant mirror-like finishes, with one step, and with predictable costs.

# DryLyte technology

**D**Lyte system works with **Dry**Lyte technology, a 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







The process removes material only from the peaks of roughness



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

The polishing action reaches every corner of the piece, so it can process inner cavities which can not be accessed mechanically. **D**Lyte allows polishing of casting, sintered and milling parts. **D**Lyte offers a high quality polish for cobalt chrome, stainless steel, nitinol and titanium alloys.

# Manual vs DLyte system



# **Solutions for each material**

**D**Lyte is the first dry electropolishing system for grinding and polishing metals by ion transport using free solid bodies. Revolutionary dry electropolishing that does not use any liquid as electrolyte. **D**Lyte works with different electrolytes for each material and designed for different specifications.

Healthcare Electrolytes	Material	
CoCr Group <b>CoCr 01</b>	CoCr alloys	
CoCr Group <b>CoCr 02</b> Only for mirror finishings and complex geometries.	CoCr alloys	
SS Group <b>SS 01</b>	Stainless Steel alloys	
SS Group <b>SS 02</b> Only for mirror finishings and complex geometries.	Stainless Steel alloys	
Ti Group <b>Ti 01</b>	Nitinol and Titanium alloys	



# Healthcare applications

Unlike traditional polishing, **Dry**Lyte 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. **Dry**Lyte technology respects the tolerances and delivers brilliant mirror-like finishes, with one step, and with predictable costs.

Coronary stent / LASER CUT / NITINOL



Knee joint prosthesis / MILLING / COBALT CHROME



Jaw prosthesis / SINTERING / TITANIUM



Interbody spinal / SINTERING / TITANIUM



Craneal implant / MILLING / TITANIUM



Osteosynthesis plate / MILLING / TITANIUM

## For cobalt chrome

#### Milling / Cobalt chrome



No contamination on the surface

No micro-scratches on the surface

No grinding patterns (improving fatigue resistance)

Mirror finish

No rounded edges

Homogeneous polishing (preserve the tolerances)

#### For stainless steel

**Sintering / Stainless steel** 



# For titanium

DLyte titanium series (Ti and +Ti) is the newest range of products able to grind and polish nitinol and titanium alloys for the healthcare industry 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. Despite being an electropolishing method, the process does not generate oxidation and passivation of the piece.



#### before finishing





## **D**Lyte1H<sup>®</sup> series



DLyte 1H<sup>®</sup> series models

For Cobalt Chrome and Stainless Steel DLyte 1H°

For Titanium and Nitinol **D**Lyte 1H **Ti**°

For Cobalt Chrome, Stainless Steel, Nitinol and Titanium DLyte1H+Ti°

ERE CE

DLyte1H\* series are new patented machines for grinding and polishing cobalt chrome, stainless steel, nitinol and titanium alloys for the healthcare industry. Available for all types of implants, instrumentation, prosthetic components, hearing aids and needles. Capacity up to 75mm Ø x 50mm (maximum volume part) for each working cycle.



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

## **D**Lyte10H<sup>®</sup> series



- **D**Lyte 10H<sup>®</sup> series models —

For Cobalt Chrome and Stainless Steel DLyte 10H°

**For Titanium and Nitinol D**Lyte 10H**Ti**°

For Cobalt Chrome, Stainless Steel, Nitinol and Titanium DLyte 10H+Ti°

ERE CE CULUS

DLyte10H° series are new patented machines for grinding and polishing cobalt chrome, stainless steel, nitinol and titanium alloys for the healthcare industry. Available for all types of implants, instrumentation, prosthetic components, hearing aids and needles. Capacity up to **120mm Ø x 50mm (maximum volume)** for each working cycle.

Machine patented and manufactured by GPAINNOVA



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

### **D**Lyte100H<sup>®</sup> series



DLyte100H\* series are new patented machines for grinding and polishing cobalt chrome, stainless steel, nitinol and titanium alloys for the healthcare industry. Available for all types of implants, instrumentation, prosthetic components, hearing aids and needles. Capacity up to 180mm Ø x 80mm (maximum volume) for each working cycle.

Machine patented and manufactured by GPAINNOVA



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



DLyte<sup>®</sup> The most advanced, powerful and versatile surface finishing machine on the market



#### dlyte.es

#### **GPA**INNOVA

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

www.dlyte.es



Distributed by



Unit 80 Hotchkiss Way, Binley Industrial Estate, Coventry, CV3 2RL +44 (0) 2476 22 66 11 | info@advancedgrindingsolutions.co.uk