

# DLyte Desktop PRO<sup>®</sup>



Powered by **DryLyte**<sup>®</sup> TECHNOLOGY

# All the features from a DLyte machine, now available in an ultra-compact system

The new **DLyte Desktop PRO** is an ultra-compact system that gathers all the advantages of any DLyte system currently available on the market. This new equipment allows any company (no matter the size), to access the disruptive dry electropolishing technology. It is accessible to small laboratories, workshops, workrooms and SMEs needing a cost-effective solution for metal surface finishing processes.

From grinding to mirror finishing, this new set-up offers a new easy way to process any casting, sintering or milling metal parts.

***Fast & Accurate · Accessible · Clean & Safe***

***DLyte Desktop PRO***<sup>®</sup>

the Revolution in Metal Surface Finishing

powered by  
**GPAINNOVA**



The Revolutionary  
DryLyte Technology,  
Available at Your  
Fingertips

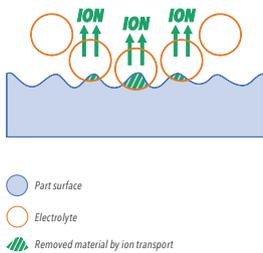
## How it Works



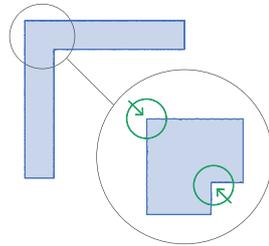
### TECHNOLOGY INTRODUCTION



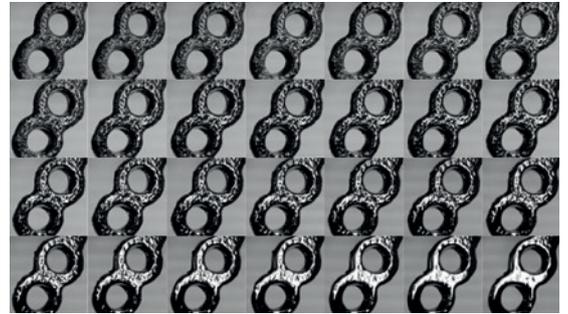
Powered by DryLyte Technology, DLyte Desktop PRO works by combining the electrical flow created by the **high precision** rectifier with the movement of the pieces through the electropolishing media. This results in an ion exchange, removing material only from the peaks of roughness. The process does not round edges and can access internal corners that are not easily accessed mechanically.



The process removes material only from the peaks of the roughness.



The process does not round edges and can penetrate the internal cavities of the piece.



Macro sequence of a DryLyte Technology Polishing Process.

## Fast & Accurate

DLyte Desktop PRO combines the exceptional performance of DryLyte technology with the ease of a plug-and-play system, allowing a higher quality surface finishing than manual polishing processes. The advanced dry electropolishing technology ensures minimal material removal, geometry preservation and a brilliant shine.



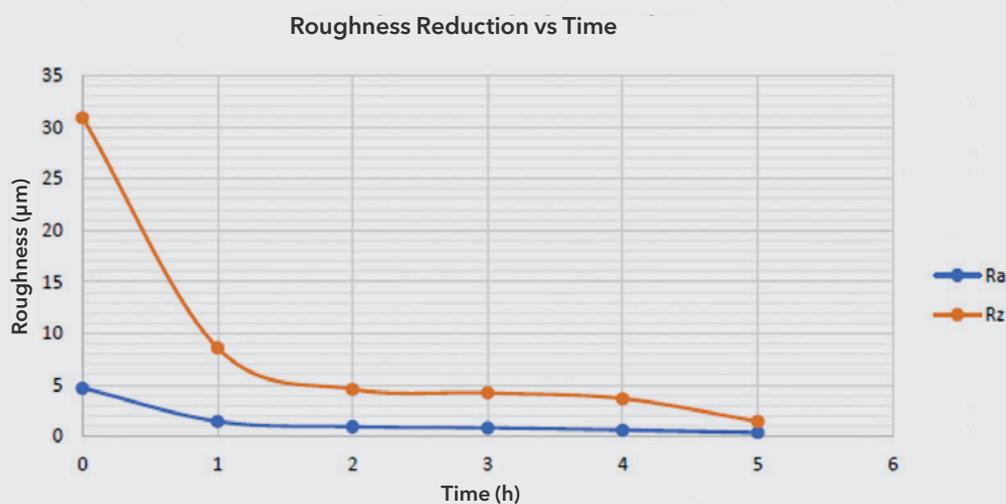
## Consistency & Durability

Our automated surface finishing ensures uniformity between batches and parts so that every part meets your specifications.



# Reduce the Number of Steps in Your Polishing Process

With DLyte Desktop PRO, metal frameworks are homogenously finished, **up to 10 times work faster than any other equipment\***. DLyte increases productivity and allows any technician to focus on high-value activities while the equipment is finishing the parts.



\*Source: Internal studies among DLyte customers (2020)

## Accessible to All

With a wide range of materials, easy-to-use platform, and affordability, DLyte Desktop PRO offers high-quality surface finishing that every single company can access.

## Plug and Play

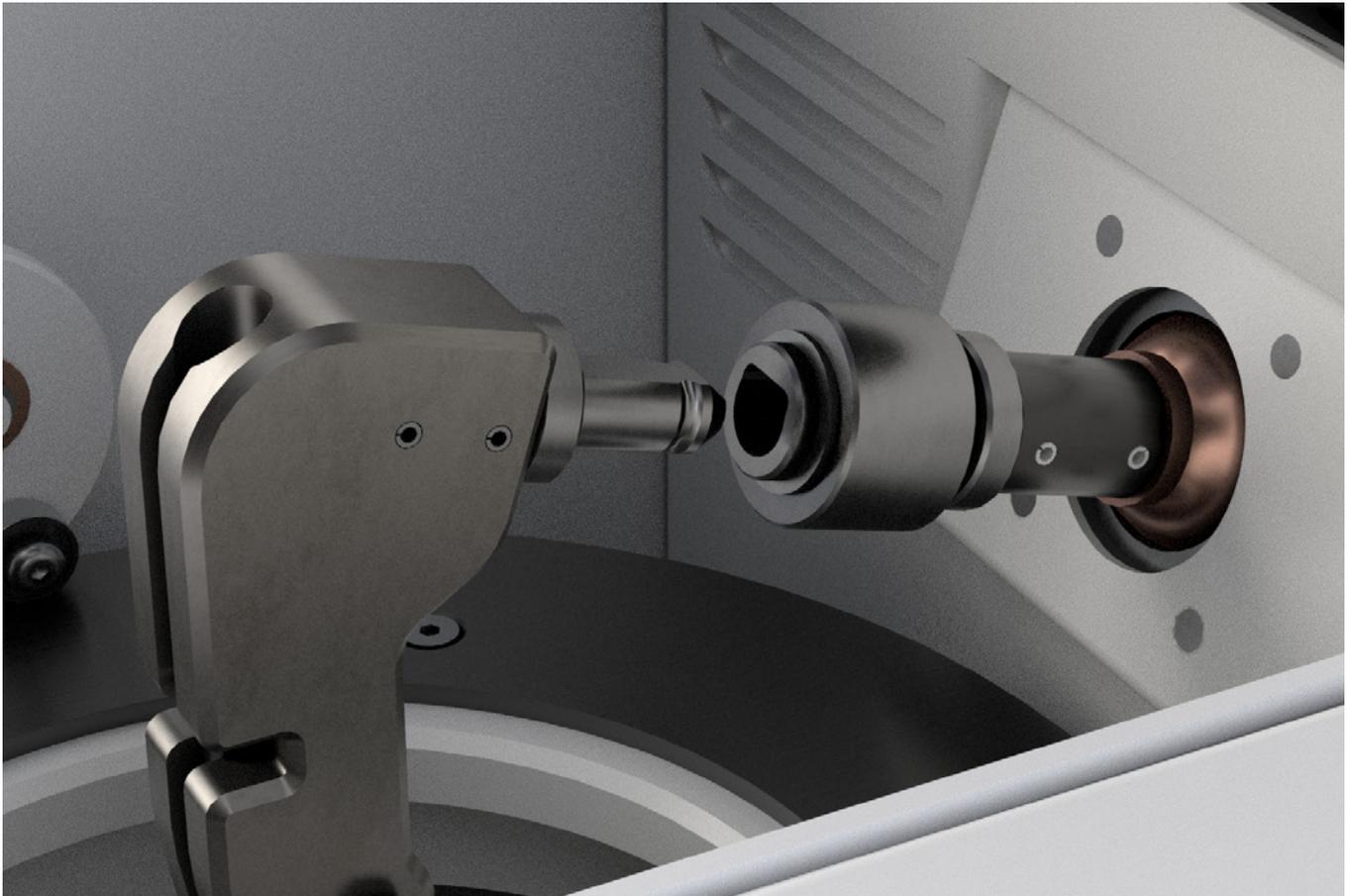
In a matter of minutes, users can begin surface finishing metal parts from the comfort of their desktop. Pre-set settings and opt-in advanced controls allow every technician to finish high-quality metal parts at the press of a button.

The DLyte Desktop does not require special installation. It operates with a standard household electrical plug.



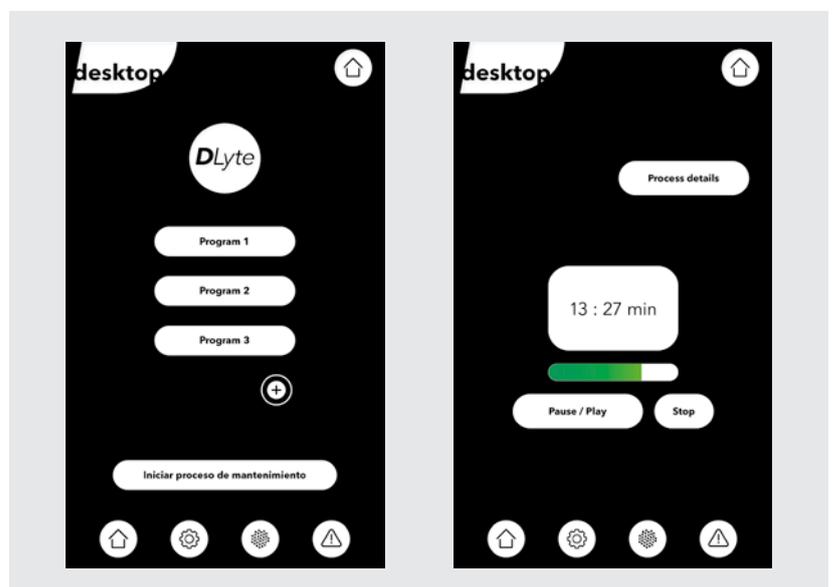
# Quick Coupling and Releasing of the Holder

The new and convenient holder fixation system with easy pressure and automatic locking system reduces the loading and unloading times.



# Advanced and Intuitive Interface

Any professional will learn how to use DLyte Desktop PRO easily, without prior knowledge.



## Ultra-compact & Silent

The equipment boasts the latest technology and it fits into a tiny box. It is extremely space-saving as it can be operated on top of a 450 mm x 521 mm table. When space is limited, DLyte Desktop PRO brings high output in a very small case. The new mechanical design ensures an exceptionally smooth and silent operation.

## Affordable



DLyte Desktop PRO allows excellent quality automation, and offers unrivaled utility at a fraction of the cost per piece of any other surface finishing method. With DLyte Desktop PRO, a technician can automate surface finishing with high quality, speed, and affordably.

**The new DLyte Desktop PRO offers a state-of-the-art solution for all kinds of companies. Additionally, maintenance and consumables provide an unbeaten cost per piece.**



### TECHNICAL SPECIFICATIONS

Machine dimensions	450 x 521 x 471 mm
Machine weight	33 kg
Power	1.7 kW
Voltage	230 V

## Clean & Safe

The automation of surface finishing with DLyte Desktop PRO protects technicians from the exposure to the chemical **agents at work. The consumables used are safe and clean**, without hazards of chemical liquid waste or dust during the process.





## Simple Electrolyte Handling and Storage

The use of a solid electrolyte guarantees an easy, quick and safe electrolyte media loading and unloading. This process with our 3L electrolyte container can be completed in less than a minute.

When the machine is not being used, the electrolyte should be taken out and stored to preserve optimum performance. The simple loading and unloading process makes it easy to keep your machine operating at peak performance.

## Easy Maintenance

DLyte Desktop PRO has been designed with high-quality components and outstanding design guaranteeing the lowest possible maintenance cost.

Our new removable electrical box allows for easy maintenance that can be completed in less than an hour.



## How it Works

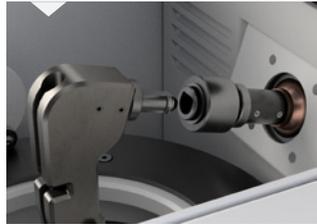
### Step 1

The parts are clamped onto the holder



### Step 2

The holder is introduced into the machine



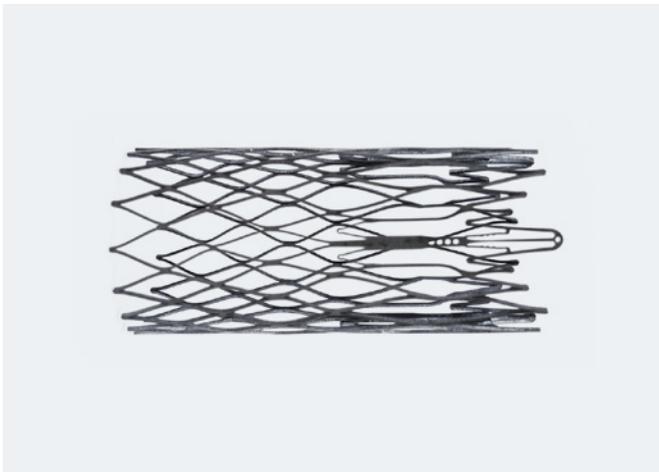
### Step 3

The program is selected

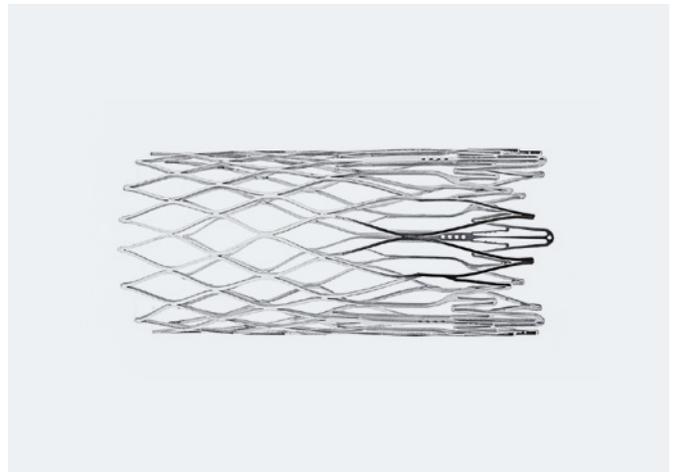


### Step 4

Surface finishing treatment is performed



Before DLyte



After DLyte

## Wide Range of Materials Compatibility

DLyte Desktop PRO can be used with a wide range of materials, thanks to its complete range of parameters, including a combination of a high/low frequency process. DLyte Desktop PRO has been designed to treat CoCr, Titanium and Stainless Steel pieces, among other metals and alloys. It also includes a holder finger and holder bars with analogs.

### SOFTWARE PACKAGES

	MODEL	DESCRIPTION
STANDARD PACKAGE	CoCr Group	Software to treat Cobalt Chrome materials.
	Stainless Steel Group	Software to treat Stainless Steel materials.
	Titanium Group	Software to treat Titanium Group materials.
OPTIONAL	Copper Group	Software to treat Copper Group materials.
	Nickel Group	Software to treat Nickel Group materials.
	Aluminium Group	Software to treat Aluminium Group materials.
	Steel Group	Software to treat Steel Group materials.
	Full software package (all materials)	Software to treat all Group materials.

**REDUCE COSTS  
BY UP TO 80%**

**MAKE YOUR  
PRODUCTION  
MORE FLEXIBLE**

**STANDARDIZE  
YOUR PRODUCT**

## Holding and Fixing

Dlyte Desktop PRO's standard package includes one holder finger, to hold one single piece and one holder bars with analogs.



The additional spring holder will allow you to hold multiple small pieces. Our holder customization service will find the solution that meets your needs.

## Lower Costs

The treatment does not require manual processing, reducing labor costs and eliminating the need to rework parts and the production of defective parts.

## Time Saving

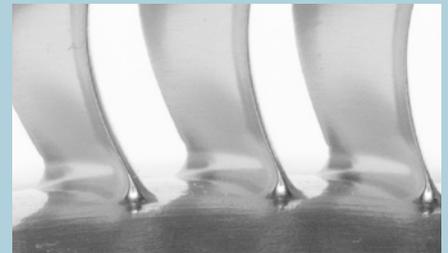
Dlyte is an automatic one-step process which reduces the time and complexity of the current multi-step processes.

## Controlled Workflows

Dlyte offers a unique solution to meet the needs of dental laboratories, goldsmiths, healthcare companies, and other small industries in general, with traceable and predictable results, according to polishing needs, production quantities, and/or piece dimensions.



# Benefits of the Technology



1

Achieves **homogeneous** results across the surface and eliminates micro-scratches. The system works efficiently at micro and macroscopic levels.

2

**Geometry preservation.** Our process respects the tolerances and preserves the initial shape, even the cutting edges. The edges do not become rounded as there is no abrasion of the surface.

3

**Best in class surface roughness** (Ra under 0,01 micrometers).



4

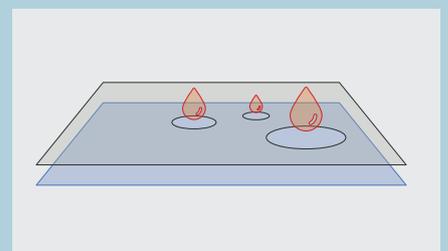
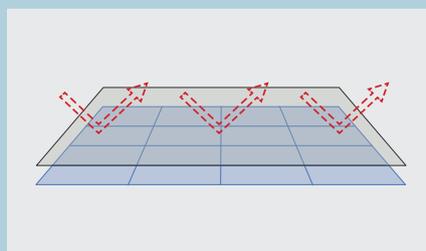
**Repeatability and homogeneity** guaranteed. The DLyte process guarantees consistent results between batches within the electrolyte media lifespan. There is no wear as it would typically occur with abrasive particles.

5

It is **up to 10x faster** than other current processes. It can replace multiple process steps at a **competitive cost** per part.

6

It has proven **biocompatibility** and offers clean, **non-hazardous** and easy waste management. Alternative abrasive processes lead to extremely dusty and noisy environments.



7

The Dlyte process enhances negative surface skewness (rsk) which increases the surface bearing contact area (allowing uniform lubricant film distribution) **improving the bearing ratio and reducing the friction** between the pieces.

8

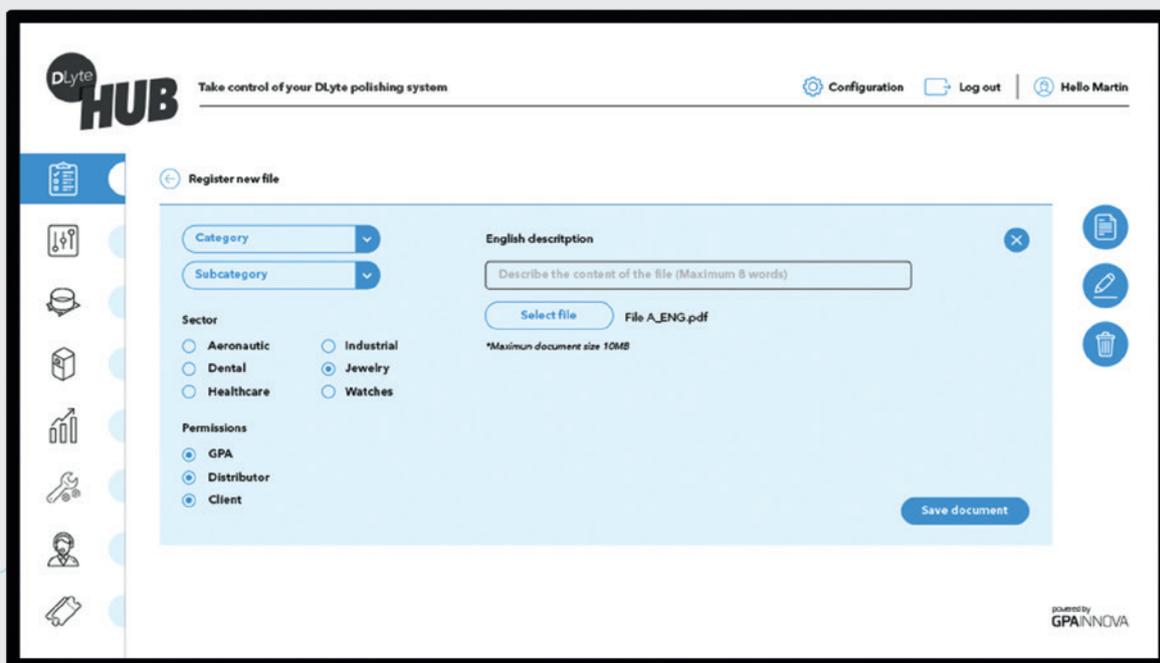
This process does not generate grinding texture patterns, **improving wear and fracture resistance, and improving fatigue resistance.** All surfaces are isotropic.

9

DLyte is the only system able to remove roughness and **improve the corrosion resistance** of the metal pieces while at the same time reducing the number of processes required in the manufacturing process.



# The new customer portal that unifies all the services you need to achieve high quality finishing



Take control of your  
DLyte polishing system

Process Consulting | Maintenance Platform | Polishing Management  
Electrolyte Management | Knowledge Platform | Machine Monitoring