# HiPIMS 3D Unit



# PLATIT COATING INTELLIGENCE



PLATIT® 77 - Series



## **OVERVIEW**









The PL711 is a compact SPUTTER coating unit based on HiPIMS technology (High Power Impulse Magnetron SPUTTERING). It's equipped with two Planar HiPIMS cathodes and allows for the deposition of selected nitride as well as carbon-based coatings (DLC1, DLC2, DLC3) using highly productive processes. Efficient plasma utilization is achieved through an additional booster, the PLATIT 3D module.



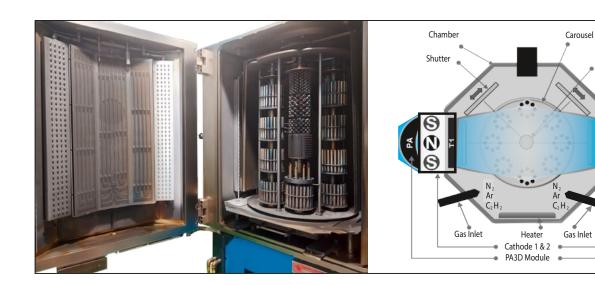
## ENHANCED PLASMA FOCUS



# Technologies applied:

- 2 x Planar SPUTTER cathode with HiPIMS technology
- The PA3D module (newly developed Helmholtz system) with a central anode focuses a dense, three-dimensional plasma with a high ionization degree in the carousel, generating homogeneous coatings and reaching a high deposition rate. Coatings from the PL711 provide outstandingly smooth surfaces with a high density, hardness and excellent adhesion.





**Targets** 2



Sputter HiPiMS



Signature Coatings



**Cycle** ≥ 6 h



**Max. Load** 250 kg



**Solution** Turnkey

Anode



**Service** Worldwide





#### SPECIFICATIONS

## Etching technologies applied:

- LGD® (Lateral Glow Discharge)
- · Plasma etching with argon, glow discharge
- Metal ion etching (Ti, Cr)

# Deposition types:

SPUTTER nitride coatings

- Reactive and non-reactive processes
- Targets: Ti, Zr, Cr
- Coating temperature at 400°C or < 200°C in the low-temperature version

#### SPUTTER Cr and a-C:H:Si

- DLC2 (PECVD)
- Targets: Cr
- Coating temperature [°C]: 180 220

#### SPUTTER Cr and ta-C + a-C

- DLC3
- Targets: C, Cr
- Coating temperature [°C]: 180 250

## Load and cycle times:

- Max. coating volume: 4 x ø 225 x H 800 [mm]
- Max. coating height with defined coating thickness: 550 mm
- Max. load: 250 kg

#### 2 batches/day for\*:

Shank tools (2 µm):	ø 10 x 55 [mm]	CrN	540 pcs.	11 h
Molds and dies (3 µm):	up to ø 225 x 140 [mm]	CrN	16 pcs.	10 h
Sliding parts (3 µm):	25 x 150 x 10 [mm]	DLC2	96 pcs.	8-9h

<sup>\*</sup> Average cycle times for a typical coating mix in a production environment.

## Modular carousel systems:

• 1 or 3 or 6 axes

## Software:

- Simple use and maintenance
- PLATIT SmartSoftware (PC and PLC system)
- Modern control system with touch screen
- Data recording and real-time display of process parameters and flow
- Manual and automatic process control
- Remote diagnostics and maintenance

# Machine dimensions:

• Footprint: W 3450 x D 2250 x H 2350 [mm]



VISIT US AT: WWW.PLATIT.COM



#### PLATIT CONTACT INFORMATION

## PLATIT AG

Headquarters
Eichholzstrasse 9
CH-2545 Selzach
info@platit.com
+41 32 544 6200

#### **PLATIT AG**

Custom Coating Solutions (CCS) Champ-Paccot 21 CH-1627 Vaulruz info@platit.com +41 32 544 6290

# Subsidiaries:

#### PLATIT a.s.

Production, R&D, Service, CEC Prumyslová 3020/3 CZ-78701 Šumperk info@platit.com +420 583 241 588

# PLATIT Advanced Coating Systems (Shanghai) Co., Ltd

Sales, Service, CEC
No. 161 Rijing Road (Shanghai) PFTZ
CN-200131 Pudong Shanghai
china@platit.com
+86 2158 6739 76

## PLATIT Inc.

Sales, Service, CEC 1840 Industrial Drive, Suite 220 Libertyville, IL 60048, US usa@platit.com +1 847 680 5270 Fax: +1 847 680 5271

#### PLATIT Scandinavia ApS

Sales
Universitetsparken 7 / PO Box 30
DK-4000 Roskilde
scandinavia@platit.com
+45 46 74 02 38



