

High Volume Unit



PLATIT® 11 - Series

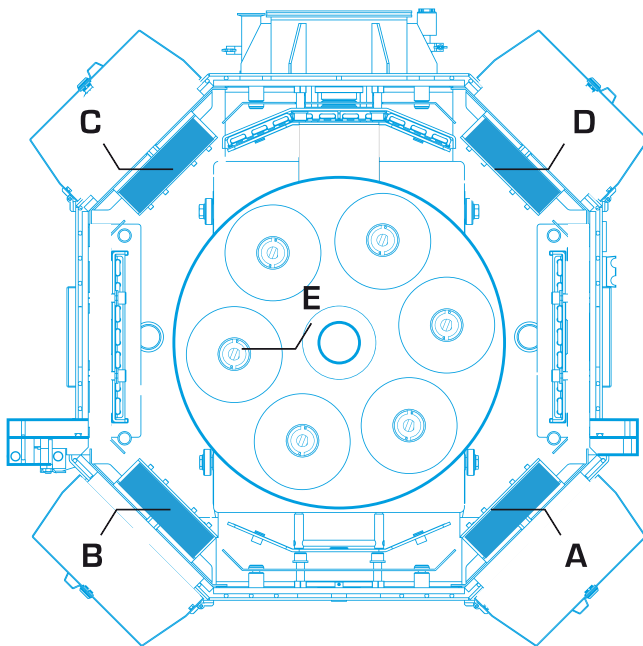
- Supreme Arc Technology
- Dense, high-quality coatings
- Outstanding surface quality
- 30% faster coating deposition time

NEW

Newest coating unit in the PL1011 family

PL1011 G4 SAT

The PL1011 G4 SAT (Supreme Arc Technology) with revolutionary double-pulsed technology features four planar arc cathodes and eight arc power supplies, setting a new standard in PVD coating. As the next generation of PLATIT's robust coating units, it serves as the backbone of any high-volume coating center.



Technologies applied:

- 4 x Planar ARC cathode with 8 x ARC power supplies in both DC and pulsed modes

- A Planar Cathode
- B Planar Cathode
- C Planar Cathode
- D Planar Cathode
- E Carousel



Engineered for customers who prioritize both process reliability and high deposition rates, it delivers premium-quality coatings at low costs per tool. Its modernized design improves service accessibility, making maintenance more efficient and user-friendly.

Double-Pulsed technology

The PL1011 G4 SAT (Supreme Arc Technology) with revolutionary double-pulsed technology sets a new benchmark in PVD coating. Traditional arc evaporation, while enabling high deposition rates through high currents, often leads to rougher coatings. In contrast, the PL1011 G4 SAT achieves a significantly smoother surface with minimal droplet formation.

What sets this technology apart is its ability to generate a highly dense, strongly ionized plasma by combining advanced high-current medium-frequency power sources for pulsed arc with improved cathode technology for superior arc steering. The result is a dense, high-quality coating with reduced roughness, delivering outstanding surface quality.

This advanced double-pulsed technology offers exceptional efficiency, lower energy consumption, and shorter batch times thanks to enhanced evaporation rates. It also ensures a more uniform coating thickness across the entire height and optimizes target utilization.

Highlights

- Dense, ionized plasma using advanced power sources and enhanced cathode technology
- High productivity with 30 % faster coating deposition time
- Superior coating quality with a smoother surface and minimal droplet formation
- Optimized target utilization for increased efficiency and cost-effectiveness



Targets
4



Signature Coatings



Cycle
≥ 5.5 h



Max. Load
750 kg



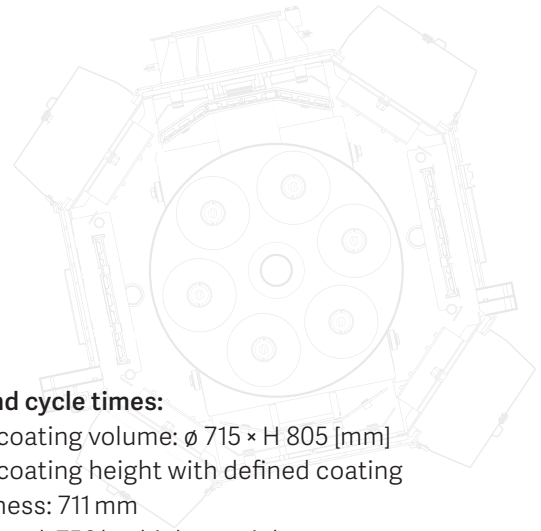
Solution
Turnkey



Service
Worldwide



1011 G4 SAT



Specifications

Etching technologies applied:

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

Load and cycle times:

- Max. coating volume: \varnothing 715 × H 805 [mm]
- Max. coating height with defined coating thickness: 711 mm
- Max. load: 750 kg; higher weights upon request

3–4 batches / day for*:

Shank tools (2 μm):	\varnothing 8 × 70 [mm]	1,008 pcs.	5.5–6.5 h
Inserts (3 μm):	\varnothing 12 × 4 [mm]	11,760 pcs.	7–7.5 h
Hobs (4 μm):	\varnothing 80 × 180 [mm]	36 pcs.	6–6.5 h
Hobs (4 μm):	\varnothing 80 × 100 [mm]	72 pcs.	6–6.5 h

* Average cycle times in an ongoing production with max. number of cathodes in use.

Software:

- PLATIT SmartSoftware (PC and PLC system) with touch screen
- Statistics and help function via user interface
- Data recording and real-time display of process parameters and flow
- Manual and automatic process control
- Remote diagnostics and maintenance
- Newly designed recipe editor

Modular carousel systems:

- 1 to 12 axes

Machine dimensions:

- Footprint: W 4,700 × D 2,250 × H 2,350 [mm]

Tool type	Tool diameter	Tool length	Satellites	Discs / satellite	Holders / disc	Tools / holder	Tools / disc	Tools / batch	Holder type
Shaft Tool	6 mm	50 mm	4	7	15	4	60	1,680	E
	6 mm	50 mm	4	7	42	1	42	1,176	B
	8 mm	60 mm	4	7	42	1	36	1,176	B
	10 mm	70 mm	4	6	42	1	30	1,008	B
	20 mm	100 mm	4	5	23	1	23	460	B
Insert	12 mm	4 mm	4	2 × 35	42	1	1470	11,760	C
Hob	140 mm	100 mm	10	6	1	1	1	60	F
	80 mm	100 mm	12	6	1	1	1	72	F

Holder type:

- A** Tool in a sleeve, driven by a gearbox
- B** Tool in a sleeve, driven by a kicker
- C** Insert with a hole, speared on a rod
- D** Tool in a revolver, driven by a gearbox

- E** Tool in a revolver, driven by a kicker
- F** Hob on a satellite / rod
- G** Tool in a sleeve, driven by a quad gearbox

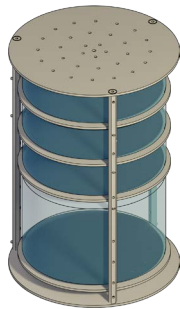
Carousels

1011

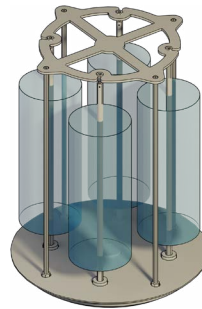
Holders

Max. coatable height

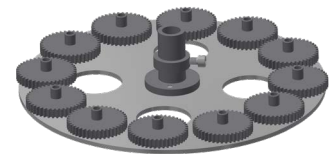
805 mm



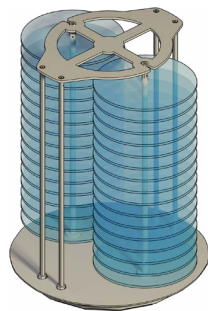
Single rotation
D ≤ 700 mm



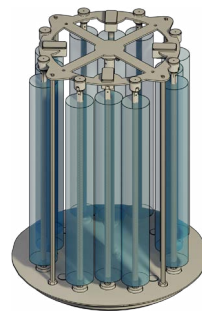
4 axes for kicker
D ≤ 270 mm



Disc with gears



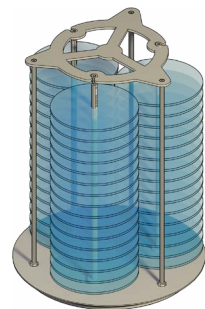
2 axes for saw blades with overlap
D ≤ 450 mm



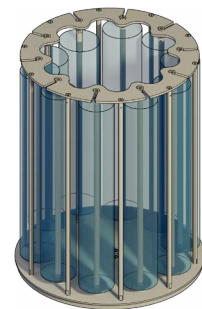
4/8/12 axes for kicker
D ≤ 170 mm



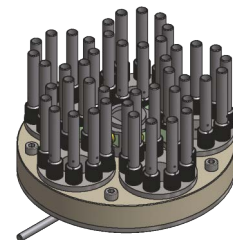
Gearbox with triple rotation



3 axes for saw blades
D ≤ 420 mm with overlap,
D ≤ 250 mm without overlap



10 axes for gearboxes
D ≤ 143 mm



Quad gearbox for quad rotation

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