

# Ultra Flexible Unit



PLATIT COATING INTELLIGENCE

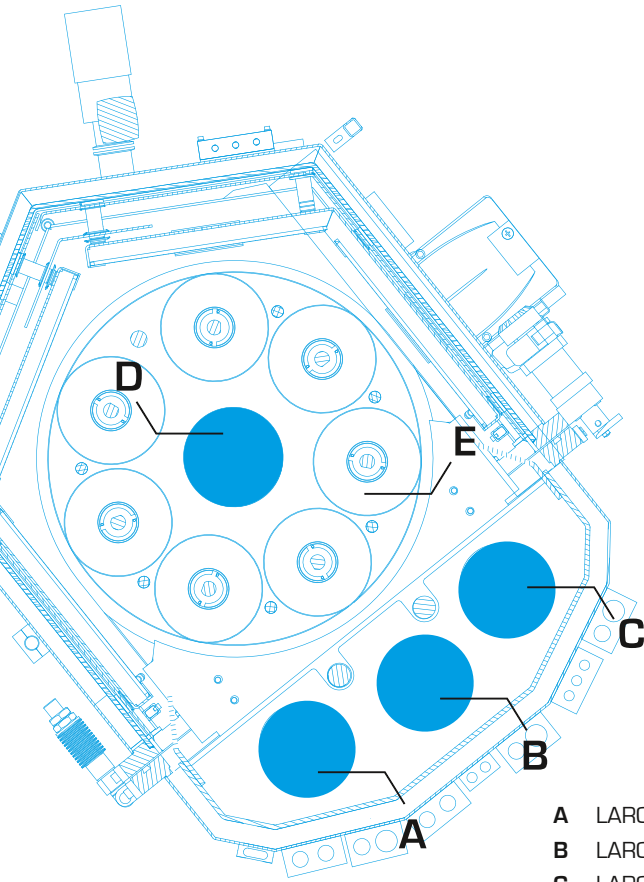
# 411

PLATIT® **11** Series

# 411 Ultra Flexible Unit



## THE CONCEPT OF THE ROTATING CENTRAL CATHODE



# 411 **ULTRA Flexible**

The broad variety of configuration options as well as the flexibility made possible by the rotating cathodes allows for the development of customer-specific top-performance coatings. Thus, this coating unit addresses the needs of customers who are seeking maximum flexibility with a full range of coating technologies easily accessible in one machine.

- A LARC® Cathode
- B LARC® Cathode
- C LARC® Cathode
- D CERC®/ SCIL® Cathode
- E Carousel



Due to its modular design and the range of available technologies, the Pi411 PLUS is the world's most flexible coating unit. Its basic configuration as an ARC unit with three rotating cathodes inside the door can be modularly upgraded on-site with an ARC or SPUTTER central cathode as well as with PECVD and OXI processes. Unique to this unit is also the availability of LACS® hybrid technology, which allows for the simultaneous deposition of coatings using both ARC and SPUTTER technology.

## CONFIGURATIONS










### Technologies applied:

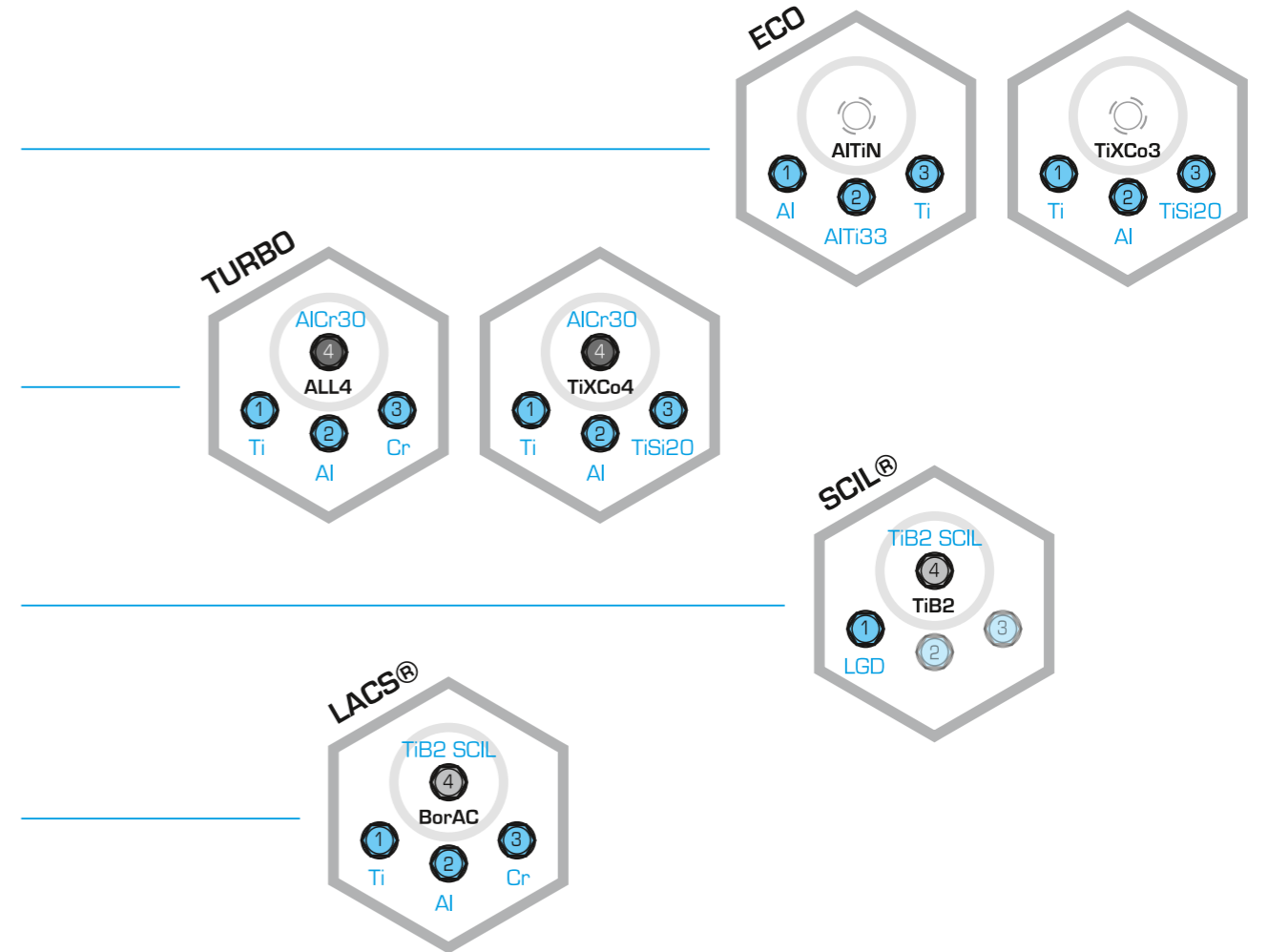
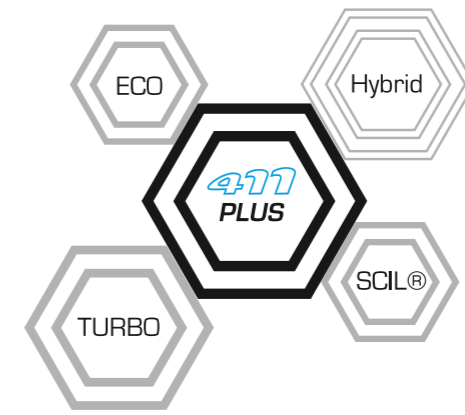
- ECO:** Basic configuration with 3 x LARC® (Lateral Rotating Cathode) inside the door for ARC deposition
- PECVD (DLC2):** For a-C:H:Si coatings
- TURBO:** ECO + CERC® (Central Rotating Cathode) with ARC technology to increase productivity and allow for highly complex coatings
- OXI:** For oxide coatings in a corundum structure

- SCIL® (SPUTTERED Coating Induced by Lateral Glow Discharge):** High-performance SPUTTERING from the central cathode, e.g. for ta-C coatings
- Hybrid LACS®:** Simultaneous ARC and SPUTTER processes with LARC® inside the door and a central SCIL® cathode

PLATITE®

Targets	Hybrid	Signature	Cycle	Max. Load	Solution	Service
3 - 4	LACS®	Coatings	≥ 4,5 h	200 kg	Turnkey	Worldwide
						

# 411



## 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:  $\varnothing$  540 x H 500 [mm]
- Max. coating height with defined coating thickness: 414 mm
- Max. load: 200 kg

### Up to 5 batches/day for\*:

Shank tools (2 $\mu$ m):	$\varnothing$ 10 x 70 [mm]	504 pcs.	4.5 h
Inserts (3 $\mu$ m):	$\varnothing/\square$ 20/14 x 6 [mm]	2940 pcs.	5.5 h
Hobs (4 $\mu$ m):	$\varnothing$ 80 x 180 [mm]	28 pcs.	7 h

\* Average cycle times for a typical coating mix in a production environment.

### Modular carousel systems:

- 1 to 14 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 2950 x D 1900 x H 2400 [mm]



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