

INLINECOATER™FC

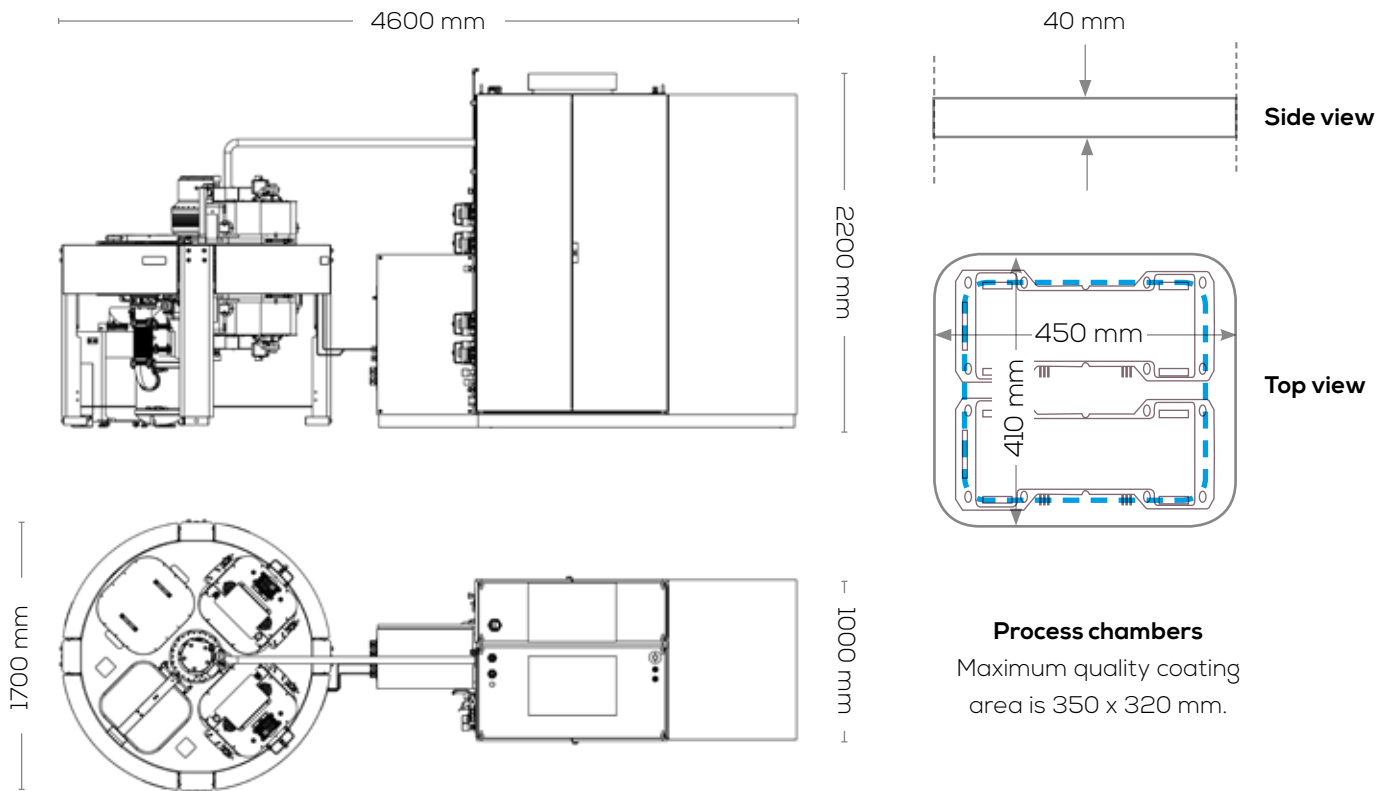


Industrial vacuum coating equipment for fuel cell metal bipolar plates

- High quality bipolar plate coatings
- Cost effective production equipment
- Integration in automated production

The INLINECOATER™FC is dedicated to the coating of metal bipolar plates for fuel cells, using deposition configuration optimized for Ceramic MAXPHASE™ coating.

Very short cycle times allow integration of the INLINECOATER™FC in automated production. The result is the most cost effective coating solution for metal bipolar plates, meeting technical and quality requirements by automotive customers worldwide.



TECHNICAL DATA

System configuration

Loadlock	Automatic or manual
Number of process chambers	3
Substrate transfer	Rotating revolver, under vacuum
Substrate holder	Fixed in rotating revolver

Processes and sources

Deposition sources	For Ceramic MAXPHASE™ coating (others available on demand)
Number of deposition sources	4
Source orientation	Top and bottom, for simultaneous double-sided deposition

Vacuum system

Base pressure	$<1 \times 10^{-5}$ Torr
Turbo molecular pump	2300 l/s
Backing pump	Mechanical pump
Pump, loadlock evacuation	Dry pump

Productivity

Cycle time	Down to 36 s
Batches per hour	Approx. 100

Control system	PLC (Mitsubishi) Panel PC, Citect HMI
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Utilities

Electricity	400V 3N~, 125A, 50 Hz
Cooling water	100 l/min, maximum 3 bar
Compressed air	6-10 bar input, <0.003 mg/m ³ hydrocarbon
Process gases	Argon and reactive gas for Ceramic MAXPHASE™ coating

System weight	Approx. 3000 kg
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Note: Specifications may change without notice