



HELIOS series
Technical data

System		HELIOS 800	HELIOS 1200
Technology		Plasma-assisted reactive magnetron -sputtering (PARMS/ PARMS+)	
Applications		MF sputtering (optional: RF, DC sputtering)	MF sputtering
Coating material		SiO ₂ , Al ₂ O ₃ , Nb ₂ O ₅ , Ta ₂ O ₅ , HfO ₂ , ZrO ₂ , HfO ₂ , Si ₃ N ₄ , ITO, Al, Ag, SiH	
Capacity		12* pcs. at Ø 200 mm / 8"	10 pcs. at Ø 300 mm/ 12" (including sub-rotation)
Process stations	Dual-magnetrons	3x	4x**
	RF plasma sources	1x	1x
	Coating Ø (standard)	≤ 200 mm / ≤ 8"	≤ 300 mm / ≤ 12"
	(optional)	≤ 150 mm / ≤ 6"	≤ 200 mm / ≤ 8"
Layer monitoring	Time control	Yes	Yes
	Optical monitoring	LEYBOLD OPTICS OMS 5100, LEYBOLD OPTICS WB-OMS (1200)	
Dimensions	Width x length x height	7.3 m x 6.2 m x 3.0 m 288" x 242" x 118"	8.0 m x 4.5 m x 3.4 m 315" x 177" x 133"
Substrate handling	Manual Loading	<ul style="list-style-type: none"> • Single wafer loading • Single cassette loading (up to 13 wafers) • Multi cassette loading (up to 3x 13 wafers) 	<ul style="list-style-type: none"> • Multi cassette loading (3x 13 wafers)
	Semiconductor-ready loading solutions	<ul style="list-style-type: none"> • Wafer cassette loading (up to 25 wafers) • SMIF integration 	<ul style="list-style-type: none"> • FOUP and EFEM integration

(*) One substrate less when optical monitoring is used (**) Mix of rotatable/planar cathodes customizable