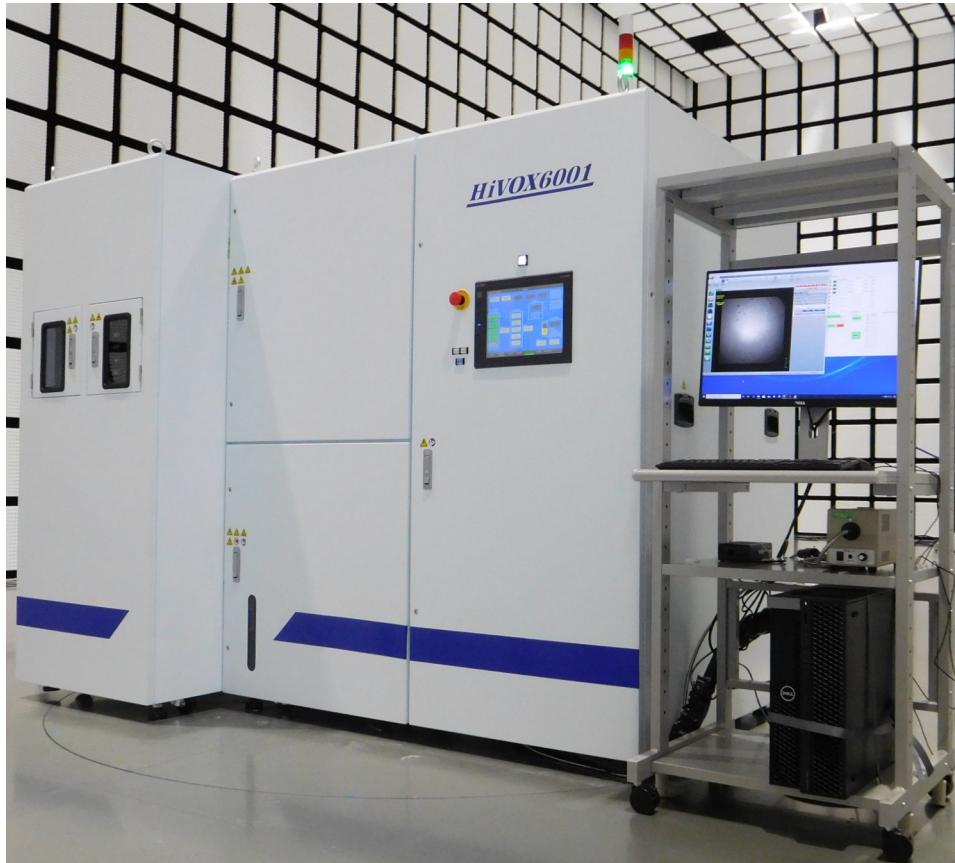


Oxidation System for VCSELs Production

HiVOX6001



The Best System for manufacturing of VCSELs



- **In-situ monitoring system**

Precision aperture control

- **Precise oxidation ability**

High uniformity, High repeatability

- **Highest throughput**

High oxidation rate, High cooling rate

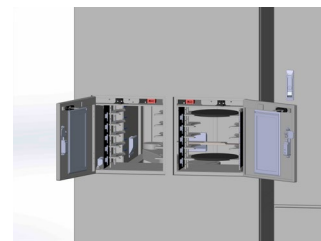
- **Robot transfer system**

Easy and Safety operation

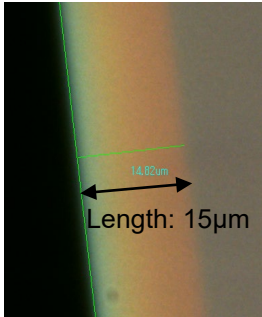
- **Automation**

Full all processes of oxidation will be done automatically by one button.

- **Easy maintenance**



● Specifications

Chamber	Substrate size	1 × 6inch substrate (Tray size: Φ180) 1 × 4inch substrate (Tray size: Φ180) 3 × 3inch substrate (Tray size: Φ180) 7 × 2inch substrate (Tray size: Φ180)	
	Substrate heating mechanism	Resistance heating method (Maximum heating temperature / 600 °C)	
	Substrate rotation mechanism	Max. 10 rpm	
	Gas introduction nozzle	Ring type	
	Chamber heating temperature	120°C	
Gas supply system	Flow rate control system	Liquid mass flow controller method	
	Vaporization method	Heat type vaporizer (Maximum heating temperature /180 °C)	
Vacuum exhaust system	Diaphragm pump		
Control system	Sequence controller software for the interlock		
Oxidation ability (Oxidation length)	Uniformity	10 μm±0.4 μm (except for edge)	
	Repeatability	10 μm±0.4 μm (run to run)	
	※Typical, depend on many factors		
Microscope Image(10X)			<p>(Conditions)</p> <p>Oxidation Temperature: 450 °C</p> <p>Oxidation Time: 15min</p>
Utilities	Electric power	3Φ AC230V Max.40A	
	Cooling water	10 l/min (Maximum)	
		7 l/min (Common use)	
		Temperature: 10~30°C (Regular 20°C)	
	Compressed air	Supplier pressure: 0.3~0.6MPa	
		Supplier pressure: 0.4~0.6MPa	
High purity nitrogen	70l/min(Maximum)		
	Supplier pressure: 0.6~0.7 MPa		
			<p>Dimension/Weight</p> <p>Main unit: Size:1550(W)*1150(D)*1800(H) Weight:980kg</p> <p>Robot transfer system: Size:720(W)*1450(D)*1800(H) Weight:290kg</p> <p>PC rack: Size:600(W)*600(D)*1500(H) Weight:65kg</p>

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