

# Diffusion Furnace (LP)

Designed to generate Phosphorous and Boron emitter and form a p-n junction. This furnace platform is applied in both of p-type and n-type solar cell manufacturing and it is a critical component of silicon solar cells.

## SOLAR TECHNOLOGY CELL PROCESS MACHINE

### Technical Specification

	POCl <sub>3</sub>	BBr <sub>3</sub>
Format(mm)	3,000(W) x 7,805(L) x 4,010(H)	
Gas Supply	N <sub>2</sub> , O <sub>2</sub> , POCl <sub>3</sub>	N <sub>2</sub> , O <sub>2</sub> , BBr <sub>3</sub>
Number of Chamber	10	
Cycle Time(min)	110	240
Uptime(%)	98	
Breakage Rate(%)	0.2	
Wafer Throughput(wafers/hr)	7,636	3,500
Number of Boat per System	14	
Wafer Pitch(mm)	2.38	
Slots for Process Wafers	1,400 wafers/boat (Back to Back)	
Cell Type	Monocrystalline, Multicrystalline Silicon wafers	
Cell Size(mm)	M2(156*156) ~ M8(185*185)	
Process Temperature(°C)	700 ~ 900	800 ~ 1,050
Process Pressure(mbar)	50~60	30~40

### Dimension

