Graphene / CNT/ Nano Wire / SiGe / SiC CVD System

CARBO series

ULTECH Co., Ltd.

CNT/ Nano Wire CVD

	
CARBO-W-002	**CARBO-W-003**
• CNT remote CVD • Piece wafer, 1 wafer/batch • 1-zone heater, max.1200℃ • ICP source + RF power 1kW • Rotary pump (fomblin oil type) • Throttle valve + APC controller • MFC: C2H2, CH4, NH3, H2, O2 • Loadlock chamber (MTR type) • PC control	• Si nano wire growing • Sputter chamber + Hot wall LPCVD chamber + Cold wall LPCVD chamber + 3way transfer chamber • 20mm*20mm wafer, 1 wafer/batch • 1-zone heater, max.1100℃ • TMP + Rotary pump (fomblin oil type) • Throttle valve + APC controller • MFC : 10%SiH4/He(50sccm), H2(500sccm), Ar(500sccm) • Loadlock chamber (MTR type) • Manual control (switch panel)
CNT Remote CVD	***Si Nano Wire Growing Multi-chamber***

Graphene CVD

	
CARBO-W-004	**CARBO-W-005**
- Graphene CVD - Piece wafer, 1 wafer/batch - Lamp heater, max.1000℃ - LM type loader (manual moving) - ICP source + RF power 600W - Rotary pump (fomblin oil type) - Manual angle valve - MFC: Ar(500sccm), CH_4(500sccm), H_2(500sccm) - Manual control (switch panel)	- Graphene CVD - Piece wafer, 1 wafer/batch - Lamp heater, max.1000℃ - LM type loader (manual moving) - ICP source + RF power 600W - TMP + Rotary pump (fomblin oil type) - Throttle valve + APC controller - MFC: Ar(500sccm), CH_4(500sccm), H_2(500sccm) - Loadlock chamber (MTR type) - Manual control (switch panel)
Graphene CVD	***Graphene CVD with Loadlock***

SiC / SiGe CVD

	
CARBO-F-001	**CARBO-F-002**
● Tube#1 - SiC epi. LPCVD (vertical tube) Tube#2 – LTO LPCVD (horizontal tube) ● 2inch wafer, 2 wafers/batch ● Induction heater, max.1900℃ ● High frequency induction oscillator unit (60kW, 30kHz) ● Optical pyrometer ● Double quartz reactor (water cooling) ● Graphite susceptor up/down (motor) ● TMP + Dry pump ● Throttle valve + APC controller ● MFC: Tube#1 - SiH4, H2, C3H8, Ar, N2 ● PC control	● Doped poly Si (SiGe) LPCVD (UHV-CVD) ● Piece wafer, 1 wafer/batch ● 1-zone heater, max.1000℃ ● TMP + Dry pump ● MFC : SiH4, GeH4, H2, B2H6, PH3, CF4, N2 ● Loadlock chamber (MTR type) ● PC control
SiC Epi. Growing	***SiGe UHV-CVD***