OC-2050 Coating system

Chamber inside dimensions 600 to 2050
Evaporation Power 10Kw to 30Kw

본 Coating system은 정밀 PVD(물리증착) 광학 다층막 진공증착장비 이며 박막증착, 각종렌즈생산, 필터생산, 원도우생산, 반도체생산, 신소재개발, 물질합성, 물질격리, 이온크리닝, 이온보조증착, 진공전자빔용접 등 연구실험 및 생산장비 입니다.

구성은 진공챔버, 진공펌프, 냉각장치, 전기제어, 공압제어, 진공압력제어, 증착막 두께제어, 가스량제어, 전자빔파워소스, 이온빔파워소스, 인터넷 원격 제어 및 모니터링 이 가능 할 수 있도록 최신 기술을 적용하여 생산성 향상 및 제품
품질에 을 높일 수 있도록 설계된 장비입니다.

This product, OC-2050 Coating system is accuracy PVD (Physical Vapor Deposition) optical multi-layer vacuum evaporation device and can be used in thin film evaporation, lens production, filter production, windows production, semiconductor production, new material development, material composition, material isolation, ion cleaning, ion assistance evaporation, vacuum electron beam welding.
OC-2050 consists of vacuum chamber, vacuum pump, refrigerator, electricity controller, pneumatic controller, vacuum controller, evaporation thickness controller, gas injection controller, electron beam power supply, ion beam power supply.
For the sake of productivity&product quality improvement, Up-to-date technology is applied to the OC-2050 and also enables remote control through the Internet and monitoring..

Technical specifications

Chamber inside dimensions	600, 750, 1200, 1500, 1600, 2000, 2050, Option
EB-Power supplies	"ORIGIN" ISA-7000 type 180,270deflection 10,15,30Kw Option
Crucible	1, 4, 8, 12, Etc Pocket to 25cc & Option
ION-Power supplies	"ORIGIN" ISA-8000 End hole Type 4Kw & Option
Chamber main material & Coating jig	SUS304 & Substrate rotation system & Option
View port	150 Diameter tempered glass include shutter, 1 to 3 Port
Uniformity mask	Connector type SUS alloy
Vacuum measuring	"Granville-phillips" GP-307 & Option
Deposition controller	"Inficon" IC-5 & Option
Chamber inside shield	Separation type SUS alloy
Gas supplies	2 to 3 MFC Purity 99.9% more
Pressure control, Coating control	Auto, Manual
pressure (Approx)	Ultimate 6.0E-7 Torr, Working 2.0E-5 Torr
High vacuum pump	Oil diffusion pump & Option
Booster vacuum pump	Option
Rotary vacuum pump	Option
Poly cold	Option
Substrate heater	Halogen heater & Option
Main controller	Programmable logic controller "Siemens" S7-300 & Option
Line Power	220Vac and 380Vac 3ph 60Hz +/- 5% Approx 80KVA
Nonlinearity	+/- 2% FS
Operating vibration	Approx X,Y,Z < 0.2G Less Than
Operating temperation & humidity	17…25℃, 20…70% RH

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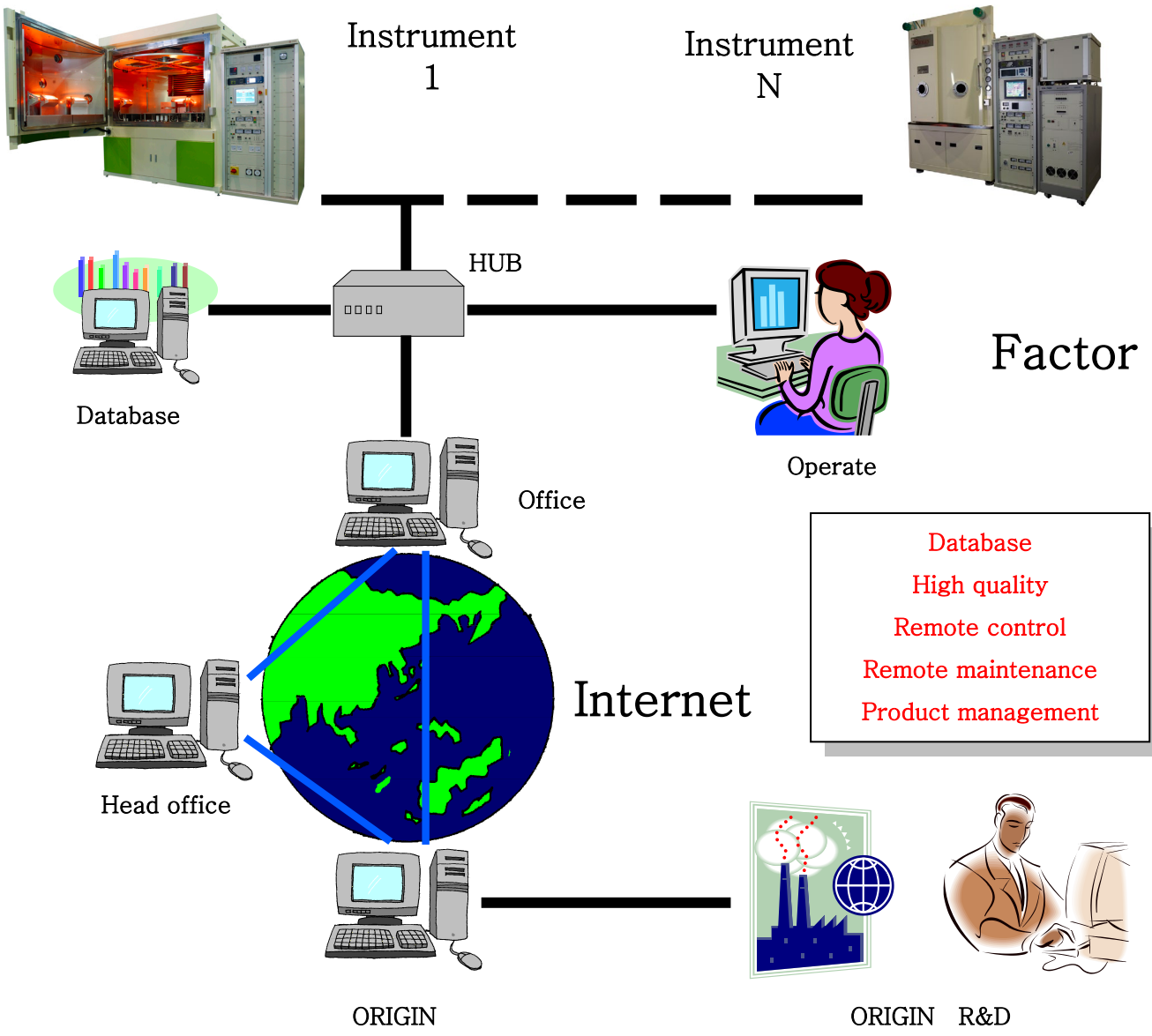
Network system

본 제품은 멀티진공증착장비와 사무실의 컴퓨터가 네트워크를 통하여 연결이 되어 다음과 같이 효과적인 시스템 관리가 가능합니다.

1. 실시간 원격 모니터링
   - 장비상태를 네트워크를 통해 모니터링 할 수 있습니다.
2. 원격제어
   - 원격으로 장비상태를 점검하고 현장과 동일하게 제어할 수 있습니다.
3. 생산관리
   - 제품생산, 기기상태, 운영상태 등 데이터베이스에 기록하여 품질관리, 생산관리가 가능합니

This product guarantees effective system management as follows through the network system between the multi vacuum evaporation equipment and offide computer.

1. Real time remote monitoring
   - Equipment state can monitored through the network.
2. Remote control
   - this enables remote inspection of the equipment state as equally as on the spot.
3. Production management
   - Quality control, production management is available through saving the data from the product manufacturing, the equipment state, operation state etc. into database.



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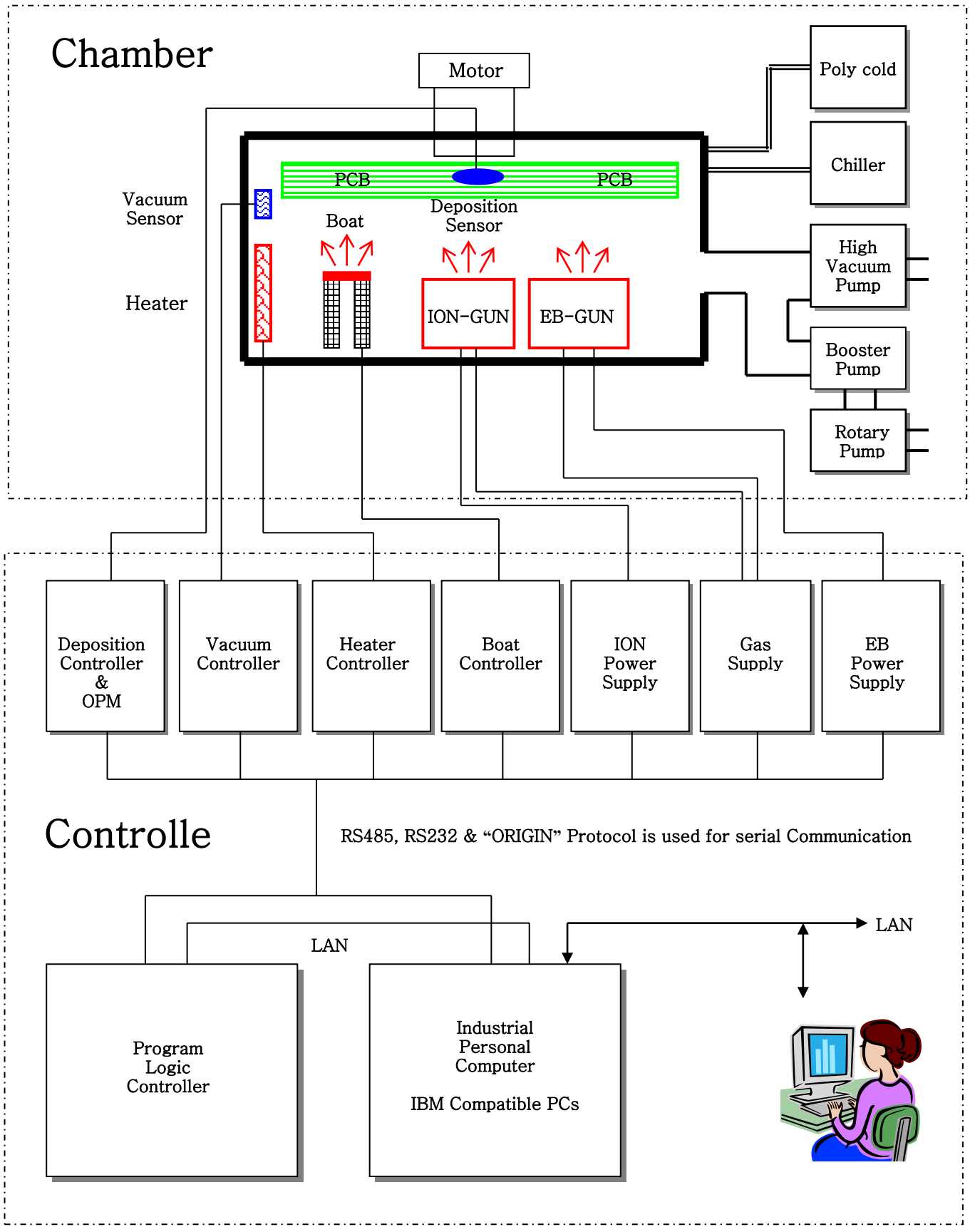
Block diagram



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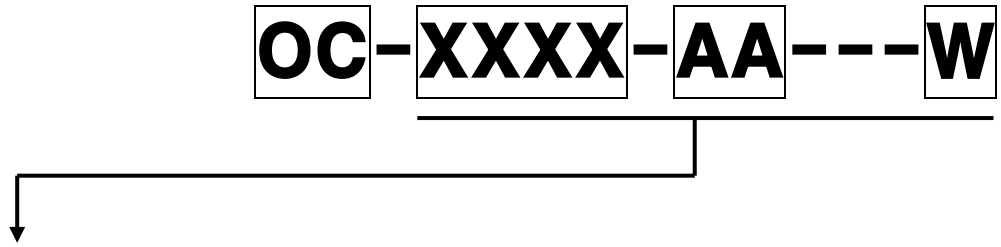
Order code



X	Chamber inside dimensions Ø	0000, 0600, 0750, 1200, 1500, 1600, 2000, 2050
A	Electric main controller	00=Non, 01=PLC
B	EB-Power supplies	0=Non, 1=ISA-7000, 2=ISA-7010
C	EB-Gun	0=Non, 1=ISA-9000, 2=ISA-9020, 3=ISA-9030
D	ION-Power supplies	0=Non, 1=ISA-8000, 2=ISA-8010
E	ION- Gun	0=Non, 1=ISA-9500, 2=ISA-9510
F	Operation control	0=Non, 1=PLC Touch screen, 2=Computer Touch screen
G	Operation program	0=Non, 1=ORIGIN-SP
H	Internet control program	0=Non, 1=ORIGIN-SPIC
I	Database system	0=Non, 1=ORIGIN-SPDS
J	Resistor evaporation	0=Non, 1=Contain
K	Deposition controller	0=Non, 1=Contain (IC-5)
L	Vacuum measuring	0=Non, 1=Contain (GP-307)
M	High vacuum pump	0=Non, 1=Contain
N	Booster vacuum pump	0=Non, 1=Contain
O	Rotary vacuum pump	0=Non, 1=Contain
P	Poly cold	0=Non, 1=Contain
Q	Chiller	0=Non, 1=Contain
R	Gas supplies	0=Non, 1, 2, 3, 4, 5
S	Substrate heater	0=Non, 1=Halogen, 2=CG heater
T	PCB Side(Coating side)	0=Non, 1=Single, 2=Double
U	Substrate rotation system	0=Non, 1=Rotation, 2= Revolution Rotation
V	Spare1	
W	Spare2	

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