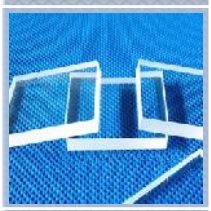

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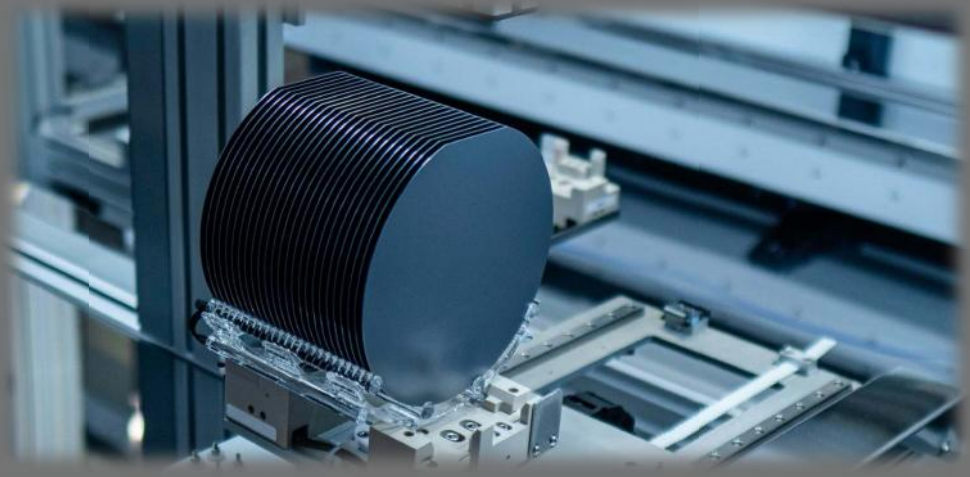

RESEARCH MATERIALS

Wafers & Thin Film Substrates
Single Crystal Substrates
Conductive Oxide Substrates
Sputtering & PLD Targets
Evaporation Materials & Sources
2D Materials & Nanomaterials
Quartz & Alumina Labwares
Grey Agate Pestle-Mortar
Electron Microscopy Consumables

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Digital Ultrasonic Cleaner
Electronic Weighing Balances
Probe Sonicator
Hotplate Magnetic Stirrer
Spin Coating System
Vacuum & Hot Air Oven
Muffle & Tubular Furnace
CVD system

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RESEARCH MATERIALS DIVISION

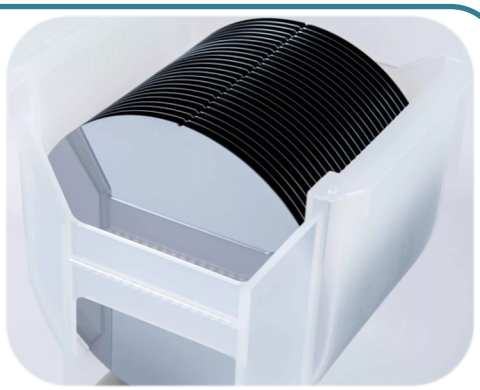
1. Wafers & Thin Film Substrates

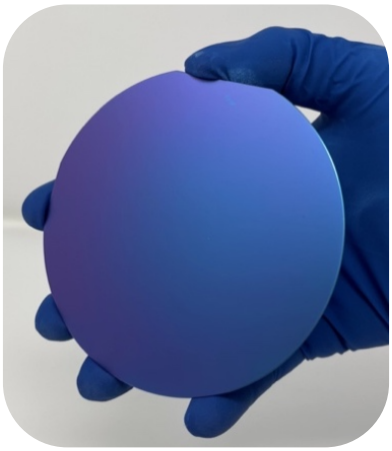
Wafers & Thin Film Substrates

1.1. Silicon (Si) Wafers:

General Specifications of Silicon wafers:

- **Growth method** : CZ/FZ
- **Diameter** : 2''/3''/4''/6''/8''/10''/12''
- **Thickness** : 275-775µm
- **Orientation** : <100>, <111> & <110>
- **Conductivity** : P-type / N-type / Intrinsic
- **Resistivity** : 0.001-10000 Ohm-cm
- **Dopant** : Boron / Phosphorous / Antimony / Arsenic
- **Surface** : One side polished (SSP) / Double sides polished (DSP)





1.2. Silicon Dioxide (SiO_2) Wafers:

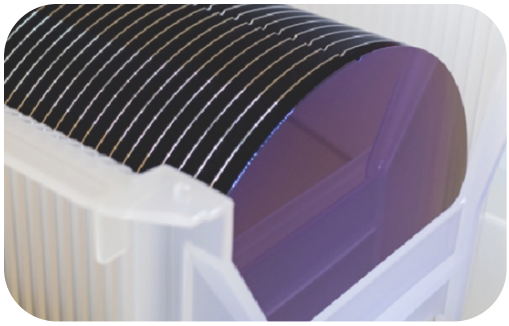
Specifications of SiO_2 wafers:

- **Oxidation Technique** : Wet Oxidation or Dry Oxidation
- **Grade** : Prime/Test or Research
- **Diameter** : 2''/3''/4''/6''/8''
- **Oxide Thickness** : 100-1000 Å
- **Tolerance** : +/-5%
- **Thickness** : 275-775µm
- **Orientation** : <100>, <111> & <110>
- **Si Conductivity** : P-type / N-type
- **Si Resistivity** : 0.001-10000 Ohm-cm
- **Grade** : Prime/Test/Dummy/Mechanical

1.3. Silicon Nitride (Si_3N_4) Epitaxial Wafers:

Specifications of Si_3N_4 wafers:

- **Type/Dopant** : P-type/Boron Doped
- **Orientation** : (100)
- **Diameter** :100 (4 Inch)
- **Wafer Thickness** : 0.525 mm
- **Surface** : Single side polished (SSP)
- **Si Resistivity** : 0.001 ~ 0.005 ohm-cm
- **Si_3N_4 film thickness** : 100 nm/300nm



1.4. Silicon On Insulator (SOI) Wafers

Specifications of SIO wafers:

Device Layer

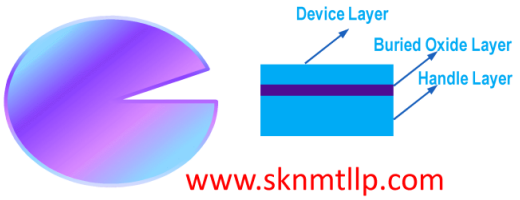
- **Growth method** : CZ/FZ
- **Diameter** : 3''/4''/6''/8''
- **Device Thickness** : 0.5-300 µm
- **Orientation** : <100>, <111> & <110>
- **Conductivity** : P - type / N - type / intrinsic
- **Resistivity** : 0.001-10000 Ohm-cm
- **Dopant** : Boron / Phosphorous / Antimony / Arsenic
- **Front Surface** : Polished
- **Surface Roughness** : ≤ 0.4nm

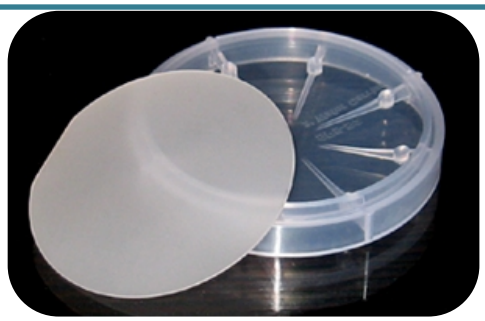
Buried Oxide (BOX) Layer

- **Oxide Thickness** : 500 Å-6 µm
- **Tolerance** : +/-5%

Handle Substrate

- **Growth method** : CZ/FZ
- **Diameter** : 3''/4''/6''/8''
- **Orientation** : <100>, <111> & <110>
- **Conductivity** : P - type / N - type / Intrinsic
- **Resistivity** : 0.001-10000 Ohm-cm
- **Dopant** : Boron / Phosphorous / Antimony / Arsenic





1.5. Sapphire Wafers:

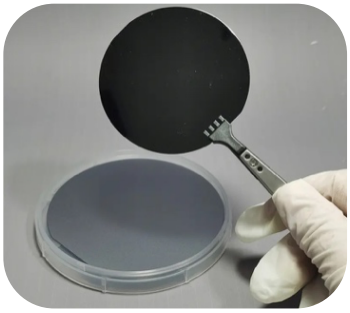
Specifications of Sapphire wafers:

- **Material** : Sapphire (Al_2O_3)
- **Diameter** : 2''/4''/6''
- **Thickness** : 0.43 mm / 0.50 mm / 1 mm
- **Orientation** : <0001>=C-plane / <1120> =A-plane
  : <1102> =R-plane & <1010>=M-plane
- **Surface** : SSP /DSP
- **Roughness** : Ra ≤ 5 Å

1.6. Gallium Nitride (GaN) Epitaxial Wafers:

Specifications of P-GaN/N-GaN on Sapphire:

- **Growth method** : MOCVD/HVPE
- **Conductivity** : P-type/N+-type
- **Dopant** : Mg/Si
- **GaN Thickness** : 1-5 µm / 500nm-100 µm
- **Concentration** : >5E17 cm^{-3} / >1E18 cm^{-3}
- **Resistivity** : < 0.05 Ohm-cm
- **Surface** : SSP / DSP
- **Substrate Diameter** : 2''/3''/4'' Sapphire wafer



1.7. Germanium (Ge) Wafers:

Specifications of Germanium wafers:

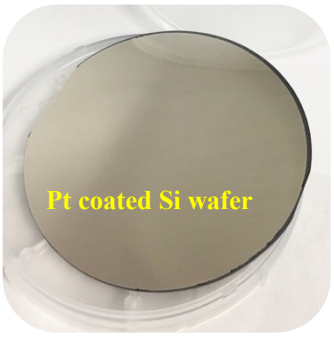
- **Diameter** : 50.8mm (2 Inch)
- **Thickness** : 0.50mm
- **Type/Dopant** : P-type
- **Orientation** : (100)
- **Resistivity** : 1-10 ohm-cm
- **Surface** : Single side polished (SSP)

1.8. Metal coated wafers

1.8.1. Platinum (Pt) coated Silicon wafers (Platinized wafer)

Specifications of Pt coated Silicon wafers:

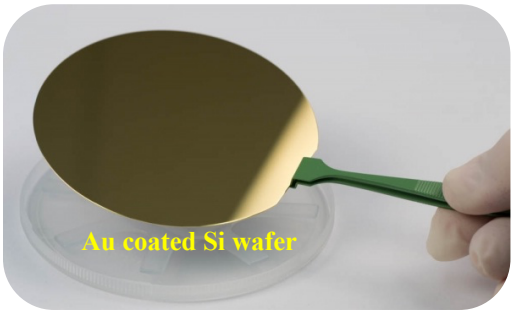
- **Pt layer** : 150nm
- **Ti layer** : 20nm
- **SiO2 layer** : 300nm
- **Diameter** : 4 Inch
- **Thickness** : 0.5 mm
- **Si Orientation** : <100>)
- **Si Type/Dopant** : P-Type (B-doped)
- **Si Resistivity** : 2~4 ohm-cm
- **Orientation of top Pt film** : <111> film

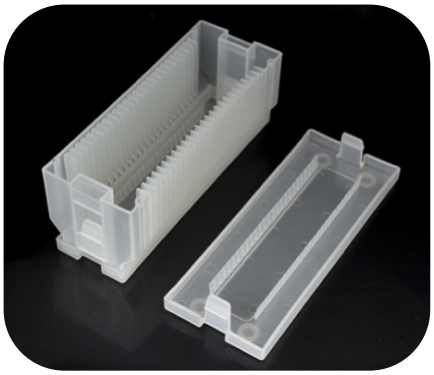


1.8.2. Gold (Au) coated Silicon wafers

Specifications of Au coated Silicon wafers:

- **Au layer** : 100 nm
- **Au purity** : 99.999%
- **Adhesion Layer** : Ti layer-5 nm
- **Diameter** : 4 Inch
- **Thickness** : 0.525 mm
- **Si Orientation** : <100>)
- **Si Type/Dopant** : P-Type (B-doped)





1.9. Wafer Carrier Containers

1.9.1. Single wafer containers

Specifications:

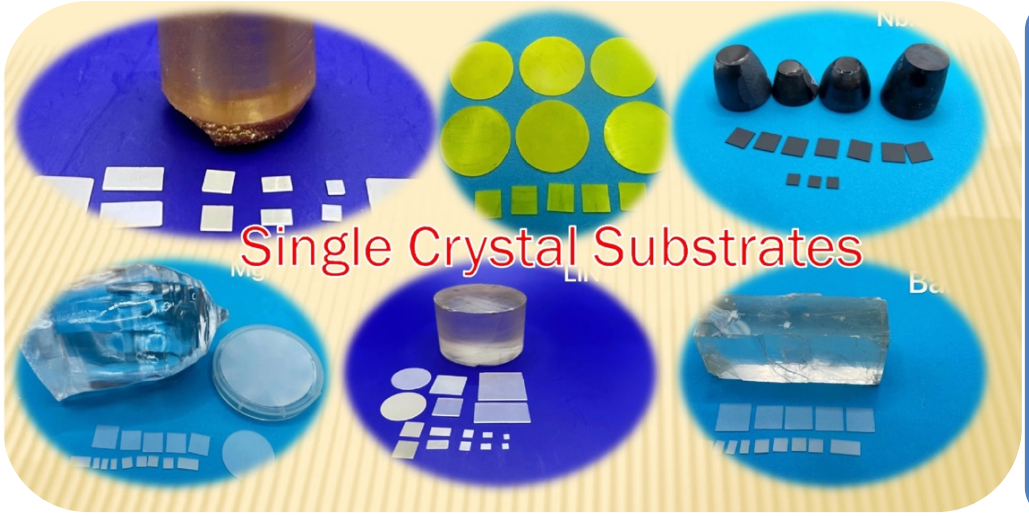
- 2-4" single wafer carrier containers
- Single Wafer Carrier Case includes a spider ring, lid and the base case.
- Material: Polypropylene (PP)

1.9.2. Multi-wafer container

Specifications:

- 2" & 3'' Wafer Boxes hold up to 25 wafers.
- Wafer Boxes include Body and Cover.
- Material: Polypropylene (PP

2. Single Crystal substrates:



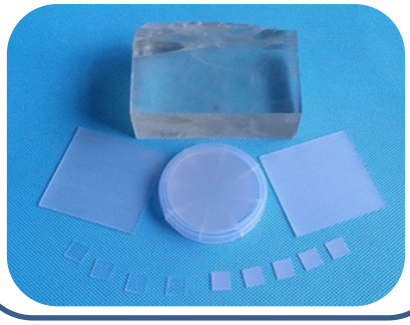
Single Crystal substrates

- 2.1. MgO substrates
- 2.2. GGG substrates
- 2.3. STO substrates
- 2.4. LAO substrates
- 2.5. MgF2 substrates
- 2.6. KTaO3 substrates
- 2.7. ZnO substrates
- 2.8. PMN-PT substrates
- 2.9. YSZ substrates

2.1. MgO Substrates

Specifications of MgO substrate

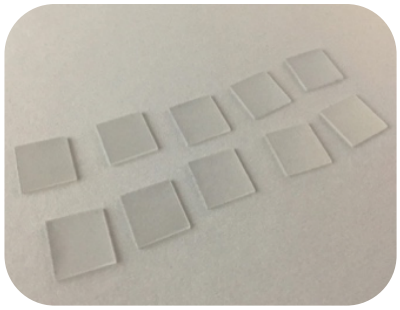
- Crystal structure: Cubic
- Typical Purity: 99.95%
- Size: 5 x 5 mm / 10 x 10 mm
- Thickness: 0.5 mm /1 mm
- Orientation: (100)/(110)/(111)
- Polish: One side polished (1sp)/2sp



2.2. GGG Substrates

Specifications of GGG substrate

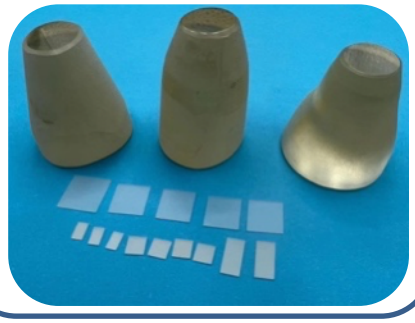
- Crystal structure: Cubic garnet
- Typical Purity: 99.99%
- Size: 5 x 5 mm / 10 x 10 mm
- Thickness: 0.5 mm /1 mm
- Orientation: (100)/(110)/(111)
- Polish: One side polished (1sp)/2sp



2.3. STO Substrates

Specifications of STO substrate

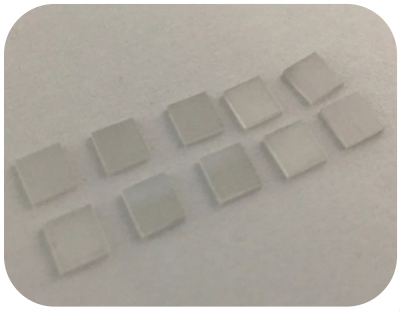
- Crystal structure: Cubic, Perovskite
- Typical Purity: 99.99%
- Size: 5 x 5 mm / 10 x 10 mm
- Thickness: 0.5 mm /1 mm
- Orientation: (100)/(110)/(111)
- Polish: One side polished (1sp)/2sp



2.4. $LaAlO_3$ Substrates

Specifications of $LaAlO_3$ substrate

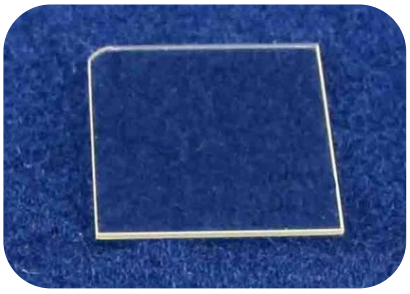
- Crystal structure: Cubic/Hexagonal
- Size: 5 x 5 mm / 10 x 10 mm
- Thickness: 0.5 mm /1 mm
- Orientation: (100)/(110)/(111)
- Polish: One side polished (1sp)/2sp



2.5. MgF_2 Substrates

Specifications of MgF_2 substrate

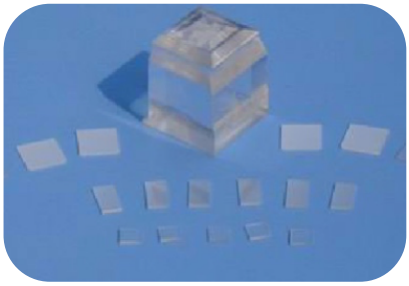
- Crystal structure: Tetragonal
- Size: 5 x 5 mm / 10 x 10 mm
- Thickness: 0.5 mm /1 mm
- Orientation: (100)/(110)/(111)/(001)
- Polish: One side polished (1sp)/2sp



2.6. $KTaO_3$ Substrates

Specifications of $KTaO_3$ substrate

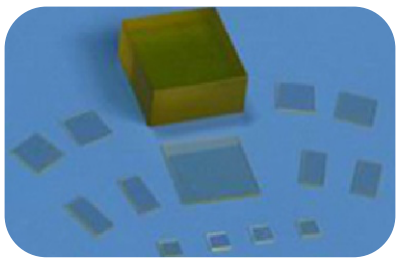
- Crystal structure: Tetragonal
- Size: 5 x 5 mm / 10 x 10 mm
- Thickness: 0.5 mm /1 mm
- Orientation: (100)/(110)/(111)/(001)
- Polish: One side polished (1sp)/2sp



2.7. ZnO Substrates

Specifications of ZnO substrate

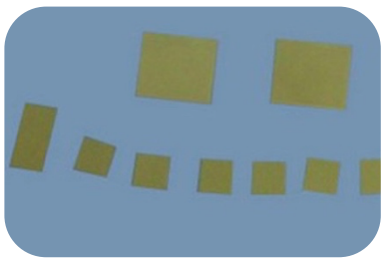
- Crystal structure: Hexagonal
- Size: 10mm x 10mm x 0.5mm
- Orientation: (0001) +/-0.5 °
- Polish: 1SP/2SP
- Roughness: Ra<5A(0.5nm)
- Zn face or O-face polished



2.8. PMN-PT Substrates

Specifications of PMN-PT substrate

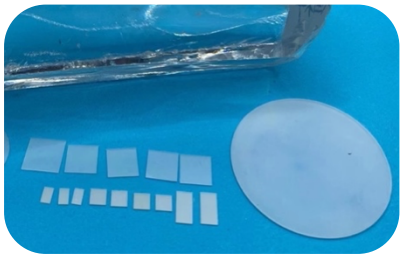
- Crystal structure: Rhombohedral
- Crystal orientations: (011)
- Edge orientations: (001)
- Sizes: 10 x 10 x 0.5 mm
- PbTiO3 content (mol%): 30%
- Single side polished (1sp)/2sp



2.9. YSZ Substrates

Specifications of YSZ substrate

- Crystal structure: Cubic
- Typical Purity: 99.99%
- Size: 5 x 5 mm / 10 x 10 mm
- Thickness: 0.5 mm /1 mm
- Orientation: (100)/(110)/(111)
- Polish: One side polished (1sp)/2sp



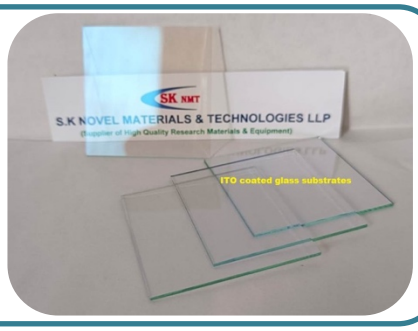
3. Conductive Oxide Substrates:

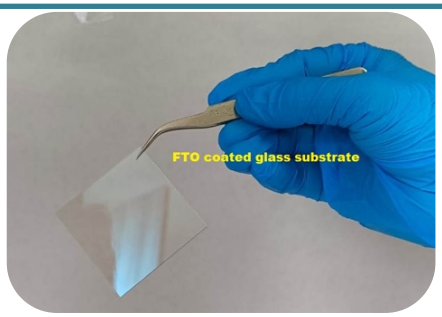
Conductive Oxide Substrate

3.1. Indium Tin Oxide (ITO) coated glass substrates:

Specifications of ITO coated glass substrates

- Surface resistance (SR): 10 Ohm/sq/
- Size: 25mm x 25mm / 50mm x 50mm / 100mm x 100mm
- Glass Thickness: 0.7 mm / 1.1 mm
- Glass type: NSG Soda Lime Glass (SLG)
- Optical Transmittance > 84%
- Working Temperature 300 °C
- ITO Coating Thickness ~185-200 nm





3.2. Fluorine doped Tin Oxide (FTO) glass substrates:

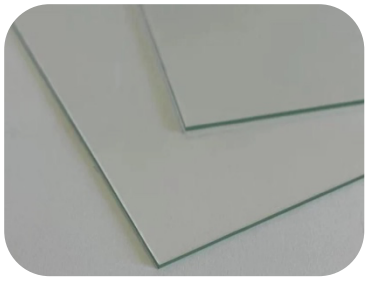
Specifications of ITO coated glass substrates

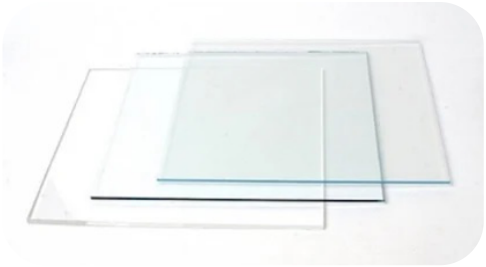
- Surface resistance (SR): < 10 Ohm/sq
- Size: 25mm x 25mm / 50mm x 50mm / 100mm x 100mm
- Glass Thickness: 1.1 mm/ 2.2 mm
- Optical Transmittance: > 83%
- Temperature ~600 Degree °C
- FTO Coating Thickness: ~450 nm

3.3. Molybdenum (Mo) coated glass substrates:

Specifications of Mo coated glass substrates

- Thickness : 2.1mm
- Resistivity: 0.8 Ω • cm
- Surface Resistivity < 1 ohms/sq
- Film Layer Thickness: 350 nm
- Temperatures up to 450˚C



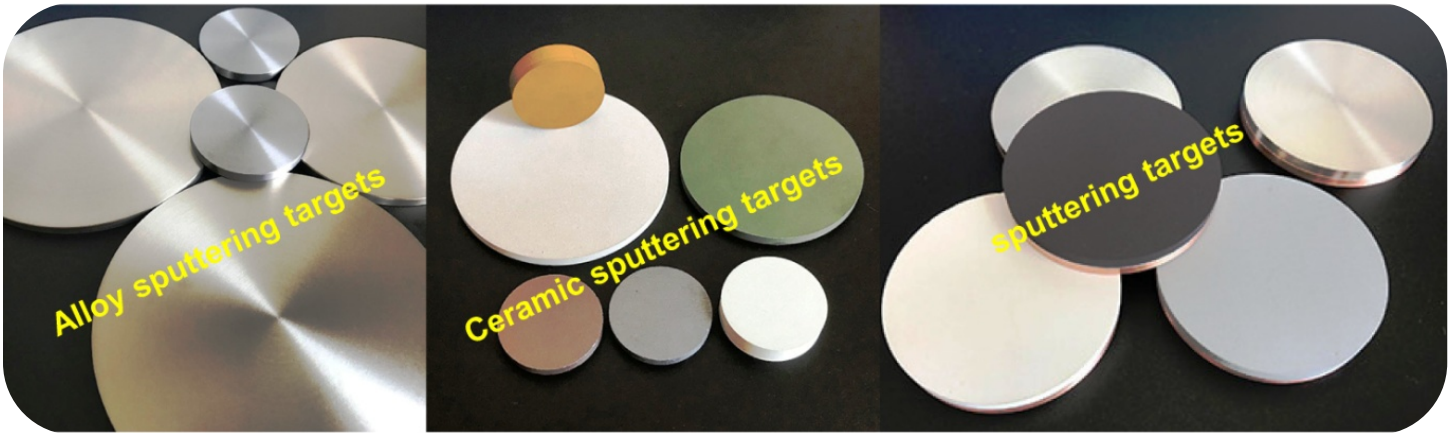


3.4. AZO coated glass substrates:

Specifications of AZO coated glass substrates

- Thickness : 3.2 mm
- Sheet Resistance – 7.7 – 10.5 ohms/sq
- Transmittance @400-1000nm – 82-83%
- Uniformity of Resistance – ≤ 10ohms/sq
- AZO Layer Thickness – 800 – 850 nm

4. Sputtering Targets



General Specifications of Sputtering Targets

- **Purity:** 99.90-99.999% or more
- **Diameter:** 25mm-150mm (1 inch-6 Inch) or customer demand
- **Target** Thickness: 0.1mm -3mm (For metal Targets) & 2mm-6mm (For other targets)
- **Cu back plate:** Recommended for oxide, nitride and fragile targets

4.1. Pure Metal Sputtering Targets:

Aluminum (Al), Gold (Au), Silver (Ag), Palladium (Pd), Platinum (Pt), Cobalt (Co), Molybdenum (Mo), Titanium (Ti), Tin (Sn), Tungsten (W), Copper (Co), Chromium (Cr), Zinc (Zn), Hafnium (Hf), Zirconium (Zr), Vanadium (V), Iridium (Ir), Antimony (Sb), Bismuth (Bi), Germanium (Ge), Indium (In), Iron (Fe), Magnesium (Mg), Nickel (Ni), Ruthenium (Ru), Tantalum (Ta) & various more.

4.2. Alloy Sputtering Targets:

Aluminum Copper (Al/Cu), Aluminum Chromium (Al/Cr), Aluminum Magnesium (Al/Mg), Aluminum Silicon (AlSi), Aluminum Silicon Copper (Al/Si/Cu), Aluminum Silver (Al/Ag), Aluminum Vanadium (AlV), Calcium Nickel Chromium Iron (Ca/Ni/Cr/Fe), Cerium Gadolinium (Ce/Gd), Chromium Silicon (Cr/Si), Cobalt Chromium (Co/Cr), Cobalt Iron (Co/Fe), Cobalt Iron Boron (Co/Fe/B), Cobalt Nickel (Co/Ni), Cobalt Nickel Chromium (Co/Ni/Cr), Chromium Copper (Cr/Cu), Copper cobalt (Cu/Co), Copper Nickel (Cu/Ni), Iridium Manganese (Ir/Mn), Iridium Rhenium (Ir/Re), Molybdenum Silicon (Mo/Si), and various more.

4.3. Oxide Sputtering Targets:

Aluminum Oxide (Al_2O_3), Antimony Oxide (Sb_2O_3), Barium Titanate ($BaTiO_3$), Bismuth Oxide (Bi_2O_3), Cerium Oxide (CeO_2), Copper Oxide (CuO), Chromium Oxide (Cr_2O_3), Dysprosium Oxide (Dy_2O_3), Erbium Oxide (Er_2O_3), Europium Oxide (Eu_2O_3), Gadolinium Oxide (Gd_2O_3), Gallium Oxide (Ga_2O_3), Hafnium Oxide (HfO_2), Indium Oxide (In_2O_3), Indium Tin Oxide (ITO- In2O3/SnO2), Iron Oxide (Fe_2O_3), Iron Oxide (Fe_3O_4), Lead Titanate ($PbTiO_3$), Lead Zirconate ($PbZrO_3$), Lutetium Oxide (Lu_2O_3), Magnesium Oxide (MgO), Molybdenum Oxide (MoO_3), Neodymium Oxide (Nd_2O_3), Silicon Dioxide (SiO_2), Silicon Monoxide (SiO), Strontium Titanate ($SrTiO_3$), Tantalum Pentoxide (Ta_2O_5), Titanium Dioxide (TiO_2), Titanium Monoxide (TiO), Titanium Oxide (Ti_3O_5), Tin Oxide (SnO_2) and Tungsten Oxide (WO_3).

4.4. Other Sputtering Targets:

Metal boride Sputtering Target, Metal Carbide Sputtering Target, Fluoride Sputtering Target, Fluoride Sputtering Target, Nitride Sputtering Target, Selenide Sputtering Target, Silicide Sputtering Target, Sulfide Sputtering Target & Telluride Sputtering Target.

5. Evaporation Materials

5.1 Metal Evaporation Materials:

Aluminum (Al), Silver (Ag), Titanium (Ti), Nickel (Ni), Zinc (Zn), Copper (Cu), Chromium (Cr), Iron (Fe), Niobium (Nb), Platinum (Pt), Palladium (Pd) and various more

5.2 Oxide Evaporation Materials:

Zinc Oxide (ZnO), Silicon Dioxide (SiO_2), Aluminum Oxide (Al_2O_3), Silicon Oxide (SiO), Magnesium Oxide (MgO), Indium Tin Oxide (ITO), Zirconium Oxide (ZrO_2)-White, Zirconium Oxide (ZrO_2)-Black, Titanium dioxide (TiO_2)-white, HfO2, CeO2 and various more.

5.3 Compound Evaporation Material:

Boron Carbide (B4C), Magnesium Fluoride (MgF_2), Calcium Fluoride (CaF2), SnS2, Cadmium Telluride (CdTe), Cadmium Sulfide (CdS), CuZnSnS and various more

5.4 Alloy Evaporation Materials:

Aluminum Copper (Al/Cu), Aluminum Chromium (Al/Cr), Aluminum Magnesium (Al/Mg), Aluminum Silicon (AlSi), Aluminum Silicon Copper (Al/Si/Cu), Aluminum Silver (Al/Ag), Aluminum Vanadium (AlV), Calcium Nickel Chromium Iron (Ca/Ni/Cr/Fe), Cerium Gadolinium (Ce/Gd), Chromium Silicon (Cr/Si), Cobalt Chromium (Co/Cr), Cobalt Iron (Co/Fe), Cobalt Iron Boron (Co/Fe/B), Cobalt Nickel (Co/Ni), Cobalt Nickel Chromium (Co/Ni/Cr), Chromium Copper (Cr/Cu), Copper cobalt (Cu/Co), Copper Nickel (Cu/Ni), Iridium Manganese (Ir/Mn), Iridium Rhenium (Ir/Re), Molybdenum Silicon (Mo/Si), and various more.

5.5 Metal wires: We stock many evaporation wires such as Aluminum (Al), Silver (Ag), Titanium and Gold (Au).

Specification of Gold & silver wire

- Material: Silver (Ag) wire & Gold wire
- Purity: 99.99%
- Diameter: 0.5 mm

6. Evaporation Sources

6.1. Tungsten (W) Evaporation Boats-50mm

Specifications of W Boats

- Length: 50 mm
- Width: 13 mm
- Thickness: 0.3 mm

6.2. Tungsten (W) Evaporation Boats-100mm

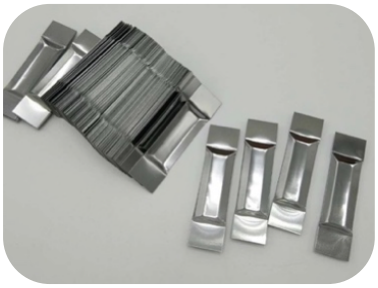
Specifications of W Boats

- Length: 100 mm
- Width: 10 mm
- Thickness: 0.3 mm

6.3. Molybdenum (Mo) Evaporation Boats

Specifications of Boats

- Length: 50 mm
- Width: 13 mm
- Thickness: 0.2-0.3 mm



6.4. Tungsten (W) Evaporation Baskets

3-Strand Tungsten Wire Basket

- Size: 3 x 0.635mm, wire diameter
- Length: 90mm
- 9 coils

6.5. Tungsten (W) Crucible for E-Beam Liners

Specifications of W crucibles

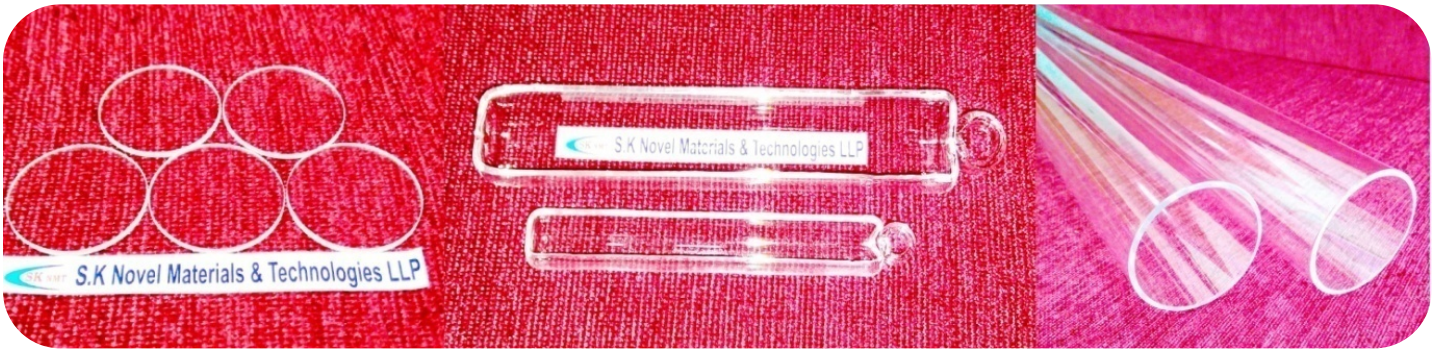
- Purity: 99.95%
- Capacity: 1-200ml
- Melting Point: 3407 °C
- Density: 19.4 g/cm^3

6.6. Carbon (C) Crucible for E-Beam Liners

Specifications of C crucibles

- Purity: 99.99%
- Capacity: 1-200ml
- Maximum temperature: 400 °C

7. Quartz Labware



7.1 Quartz Boats [L x W x H (mm)]: 50x 12x8/75x12x8/100x20x15 and many more

7.2 Quartz Disc: Diameter: 25mm/50mm/75mm/100mm and thickness x 1mm/2mm/3mm/4mm/5mm

7.3 Quartz Plate: 10mm x 10mm /25x25/50x50/100x100mm and thickness: 1mm/2mm/3mm/4mm/5 mm

7.4 Quartz Tubes: Outer Diameter-OD:25/33/40/45/50/60/75 & length: 1000mm & 1240mm

8. Alumina Labware

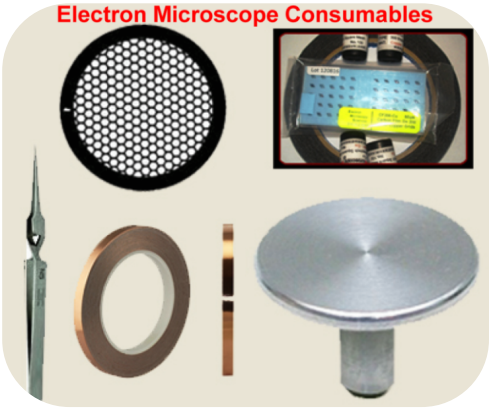
If you are looking for alumina labware, please reach us via sales@sknovelmaterials.com & sknmtllp@gmail.com or **+91-9015852036.**

9. Grey Agate Pestle-Mortar

S.N.	Size ID Inch (mm)	**Price (INR)
1	2 (50)	**3,554**
2	2.5 (63)	**4,099**
3	3 (75)	**5,460**
4	3.5 (88)	**8,122**
5	4 (100)	**9,832**
6	4.5 (113)	**14,596**
7	5 (138)	**23,444**
8	5.5 (138)	**31,052**
9	6 (150)	**42,350**

****Note: GST and Shipping charges-EXTRA**

10. Electron Microscopy (EM) Consumables



- **Copper Grids:** 300 mesh - 100 grids/vial
- **Nickel Grids:** 200 mesh - 100 grids/vial
- **Molybdenum Grids**: - 300 mesh - 25 grids/vial
- **Formvar & Carbon Coated Copper Grids**:- 200 mesh - 50 grids/box
- **Carbon Coated Copper Grids**: - 200 mesh & 300 mesh - 50 grids/box
- **Carbon Coated Nickel Grids**: - 200 mesh - 50 grids/box
- **Holey Carbon Coated Copper Grids**: - 200 mesh - 25 grids/box
- **Carbon Conductive Tape-Double Side Adhesive**
  Carbon Tape: Dimensions: Width (W) = 8mm /12mm /20mm /25mm /50mm & Length (L) = 20 meter
- **Copper Conductive Adhesive Tape**
  Copper Conductive Tape: Dimensions: Width (W) = 1/4'' (6.3mm) /12.7mm (1/2") & Length (L) = 16.46m L

If you are unable to find the EM consumables you want, please reach us via sales@sknovelmaterials.com & sknmtllp@gmail.com

11. Two Dimensional (2D) Materials & Nanomaterials

11.1 . Single Bulk Crystals

- **Elemental semiconductors**: Tellurene, black phosphorus and selenine,
- **Monochalcogenides**: Available compositions of MX; M=Cu, Ga, Ge, In, Sb, Sn, and Tl; X=S, Se, and Te
- **Dichalcogenides**: Available compositions of MX2; M=Co, Mo, Pt, Re, Ti, Ta, Hf, Sn, W, and Zr; X=S, Se, and Te
- **Trichalcogenides**: Available compositions of MX3; M=Nb, Ti, Ta, Zr; X=S, Se, and Te
- **2D phosphides**; BPs, FePS3, FePSe3, MnPSe3, and GeP
- **2D Arsenides**: As2S3, As2Se3, As2Te3, and GeAs
- **2D Oxides**: MnO2 and MnO3
- **2D Iodides**: PbI2, CdI2, and SbSI

11.2 . 2D-Monolayer Films

We offer monolayers of Graphene, MoS2, MoSe2, WSe2, WS2, SnS2, SnSe2, ReS2, and ReSe2 on a variety different kind of substrates including sapphire, quartz, SiO2/Si, PET, and designed substrates (by customers) at rather affordable prices.

For price and details specification of 2D single crystals & monolayer, please reach us via sales@sknovelmaterials.com & sknmtllp@gmail.com or **+91-9015852036**

SCIENTIFIC EQUIPMENT

1) Pellet Pressing Die Sets

We supply hardened stainless steel (SS) Pellet Press Dies set to prepare pressed pellets for laboratory analysis, commonly KBr for FTIR and samples for XRF analysis as well as other applications.

Specifications of pellet press die sets

- Brand: SKNMT
- Cavity Diameter (ID): 5/10/13 mm (circular)
- Rectangular cavity Size (L x W): 5x5/5x10x10x15mm
- Core Height: 40-45 mm
- Die sleeve
- Plunger rod
- 2 x spacers
- Base plate
- Aluminium release ring with cut out for viewing pellet during release
- ****Note: All images shown are for illustration purposes only. Actual product may vary**

2) Hydrothermal Autoclave

SKNMT is leading manufacturer and supplier of the best quality Hydrothermal Autoclave Reactor. The Hydrothermal Autoclave Reactor is used to carry hydrothermal reaction at high pressure and high temperature. Hydrothermal reactor is made of two parts; outer high-quality stainless steel jacket and inner Teflon liner or Teflon chamber.

Technical Specifications of Hydrothermal Autoclave

Model: SKNMT-50/SKNMT-100/SKNMT-150/SKNMT-200/SKNMT-250/**

Make: SKNMT

- Design Volume : 25/50/100/150/200/250 ML
- Safe Temperature : 250 °C
- Max Operating Temperature : 260 °C
- Heating and Cooling Rate : ≤5°C/min
- Material : Shell made of high-quality stainless steel-304
- Inner Shell : Teflon or PTFE liner

****Note: All images shown are for illustration purposes only. Actual product may vary**

3) Digital Ultrasonic Cleaners

Digital ultrasonic cleaners are specialized cleaning devices that utilize ultrasonic waves and a liquid cleaning solution to clean delicate and hard-to-reach surfaces. They are commonly used in various industries, including healthcare, electronics and laboratory settings.

Salient Features:

- Inner Tank & Outer body made of Stainless Steel (SS-304)
- Digital RED LED display
- Temperature with timer function
- Ceramic heaters provide improved heating effect
- Drainage and cool fan available in 6L to 25L
- Overheat protector, cooling fan
- Moisture-proof PCB
- User friendly
- High-performance transducers

Technical Specifications of Digital Ultrasonic Cleaner

- **Tank Volume [L]** : 2 /3 /6/9/12/20/25
- Inner Tank Material : Stainless Steel (SS)
- Outer Housing Material : Stainless Steel (SS)
- Ultrasonic Frequency : 40 KHz
- Heating : Ambient to 80°C (digital controlled)
- Timer : 5-60 minutes
- Power supply : AC 220V / 50 Hz/ Single Phase

****Note: All images shown are for illustration purposes only. Actual product may vary**

4) Electronic Balance

An electronic weighing balance, also known as an electronic scale, is a device used to measure the weight or mass of an object with high accuracy. It utilizes electronic components and sensors to provide precise weight measurements. Here are some key features and specifications of electronic weighing balances:

Salient Features:

- Low Battery Indication
- Auto Calibration with External Weight
- Multifunction Weighing Units
- Auto Zero tracking
- Overload Protection Design
- S.S. Weighing Pan, Level indicator, Adjustable Fit
- High Resolution, Quick Weighing, Accurate Result
- In built rechargeable battery for continues use.

Technical Specifications of Weighing Balance

- Readability (d) : 10 mg/1 mg/0.1 mg
- Dimension : 360 x 260 x 355 mm [PGB-220]
- Maximum capacity : 200 gram/ other capacity with other models
- Weight : 3.5 Kg [PGB-220]

****Note:** Any other model and company weighing balances are also available.

****Note: All images shown are for illustration purposes only. Actual product may vary**

5) Probe Sonicator

Technical Specifications of Probe Sonicator

- Probe Sonicator (Touch Screen) with Sound Proof Enclosure
- Processing Capacity: 500ML
- Probe Diameter: 6mm
- Frequency: 20 KHz,
- Ultrasonic Power: 250W,
- Temperature Range: 0-99 oC
- Display: 4.3 Inches TFT
- Approximate Weight: 10Kg + 5 Kg (Sound Proof Enclosure)

****Note: All images shown are for illustration purposes only. Actual product may vary**

6) Hotplate Magnetic Stirrer

Technical Specifications of Hotplate Magnetic Stirrer

- Top Plate Material : Steel/Ceramic
- Dimensions (W x H x D) [mm] : 230 x 180 x 120/300 x 190 x 126
- Plate Size [mm] : 135 x 135 /190 x 190
- Temperature (Plate Surface) : 300°C
- Speed [RPM] : 1250 /1600
- Timer : 999 minutes
- Volume : 2 Liter/5 Liter
- Power supply : AC 220V & 50 Hz
- Weight : 2.3Kg/5 Kg

****Note: All images shown are for illustration purposes only. Actual product may vary**

7) Spin Coating Unit (Programmable)

Here are some key features and specifications of a spin coating unit:

- MODEL: SKNMT-SC-9999P
- Polypropylene Working Chamber (removable), size 6-inch diameter with transparent photo resist lid with interlock safety switch.
- Speed: 500 – 9999 RPM
- Accuracy <±0.5% of Full Speed
- Microprocessor Programmable Speed control with respect to time
- Pre-set editable programs of 1 program 64 segments.
- Real time display of RPM, time and program stamps
- Input & control through soft touch key pad
- Vacuum release switch
- Holders of Dia: 0.5",1",1.5",2.0" inch
- Microprocessor control A C brush less motor
- Acceleration 2000 rpm/sec (Maximum) use settable
- Gas Purging Attachment for Nitrogen.
- To operate on 230V ± 10%, 1 phase 50 Hz AC only.
- Maximum Power 190W, Current 1.0 Amp.

****Note: All images shown are for illustration purposes only. Actual product may vary**

8) Laboratory Muffle Furnace

Here are some key features and specifications of Muffle Furnace

- **Model: SKNMT-MF-1200P/1400P/1700P**
- **Maximum Temperature:** 1200/1400/1700°C
- **Working Temperature:** 1150/1350/1600°C
- **Temperature controller** : Microprocessor based PID controller
- **Display** : LED/LCD display
- **Dimensions (H x W x D)** : 100 mm x 100 mm x 225 mm
  : 125 mm x 125 mm x 250 mm
  : 150 mm x 150 mm x 300 mm
  : 200 mm x 200 mm x 300 mm

****Note:** Any other dimensions and capacity of muffle furnaces are also available.

****Note: All images shown are for illustration purposes only. Actual product may vary**

9) Hot Air Oven (Programmable)

Here are some key features and Technical specifications of Hot Air Oven

- **Model: SKNMT-HAO**
- **Temperature Range:** Ambient +5°C to 250°C
- **Temperature Stability:** ±1°C
- **Temperature sensor:** RTD PT100
- **Temperature controller:** PID Programmable Controller (1 Prog. X 16 Segment).
- Dual display of Set & Actual Temp. with soft touch keys. Display of SV & PV
- **Construction:** Double walled
- **Inner chamber:** Stainless steel 304
- **Exterior:** Powder coated GI sheet
- **Insulation:** Ceramic Wool
- **Shelves:** Chrome plated wire mesh cable trays (removable)
- **Door:** Insulated solid door with spring latch
- **Door gasket:** Silicone Gasket
- **Air circulation:** Motor driven blower assembly
- **Safety:** Over temperature thermostat
- **Power supply:** 220 Volts / 50 Hz
- **Dimensions (H x W x D)** : 300 mm x 300 mm x 300 mm
  : 350 mm x 350 mm x 350 mm
  : 450 mm x 450 mm x 450 mm
  : 450 mm x 600 mm x 450 mm

****Note:** Any other dimensions and capacity of Hot Air Oven are also available.

****Note: All images shown are for illustration purposes only. Actual product may vary**

10) Vacuum Oven (Programmable)

Here are some key features and Technical specifications of Vacuum Oven

- **Chamber Design:** Round
- **Temperature range:** Ambient +5°C to 200°C
- **Temperature accuracy:** ±1°C
- **Temperature sensor:** PT100
- **Temperature controller:** Digital PID controller Display of SV & PV
- **Inner chamber:** Hermetically welded stainless steel 316 sheet
- **External cabinet:** Powder coated GI sheet
- **Construction:** Double walled
- **Exterior:** Powder coated GI sheet Powder coated GI sheet
- **Shelves:** Removable SS shelves
- **Door:** Solid door with clamp & toughened glass window
- **Door gasket:** High temperature silicon gasket
- **Vacuum fittings:** Vacuum valve / exhaust valves (Rubber hose)
- **Standard fittings:** Mains on/off switch, Vacuum pump on/off switch, Electric socket for vacuum pump
- **Power supply:** 220 Volts / 50 Hz

****Note:** Any other dimensions and capacity of Vacuum Oven are also available.
****Note: All images shown are for illustration purposes only. Actual product may vary**

11) Split Tube Furnace (Single/Two/Three Zone)

Here are some key features and specifications of Split Tube Furnace

- **Model: SKNMT-STF-1200P/1400P/1700P**
- **Maximum Temperature:** 1200/1400/1700°C
- **Working Temperature:** 1150/1350/1600°C
- **Temperature accuracy:** ±1°C
- **Heating Elements:** Kanthal-A1 wire/Silicon carbide (SiC)/ Molybdenum Disilicide (MoSi2)

****Note: All images shown are for illustration purposes only. Actual product may vary**

12) CVD system (Single/Two/Three Zone)

SKNMT is manufacturer and supplier of CVD system which consists of many parts as following

- **Heating Chamber:** Split Tube Furnace (Single/Two/Three Zone)
- **Vacuum Flanges:** Aluminum Flanges with Silicon O–Ring & Vacuum Gauge for Vacuum or Gas purging application
- **Gas Flow Controller:** Digital Mass Flow Controller with Multi-Gas Functionality
- **Vacuum Pump:** Direct Drive Rotary High Vacuum Pump with Non-Return Valve:

****Note: All images shown are for illustration purposes only. Actual product may vary**

For price and details specification of Split Tube Furnace & CVD system, please reach us via sales@sknovelmaterials.com & sknmtllp@gmail.com or **+91-9015852036**

ABOUT US:

S.K Novel Materials & Technologies (SKNMT) LLP is young and dynamic company. It was established in 2017 as a reliable supplier of advance materials & research laboratory equipment. It is also providing consultancy of research materials and research instruments. SKNMT has experienced researcher team.

Dr. Sudheer Kumar (CEO), Ph.D (Physics), Indian Institute of Technology Delhi, India, M.Tech M.Sc from IIT Roorkee: Before starting SKNMT, Sudheer Kumar worked as a postdoctoral fellow at Institute of Semiconductors (IOS)-CAS, Beijing, China. Previously he was a research associate and research fellow at IIT Delhi with Prof. Rajendra Singh. He has experience of growth of Nanomaterials as well as 2D materials and expertise in chemical vapor deposition technique, thermal evaporation, plasma cleaner, ozone cleaner, Raman spectroscopy, SEM and also experience to set up CVD laboratory.

ADVISOR:

Prof. Rajendra Singh, Professor, Department of Physics, Indian Institute of Technology (IIT) Delhi. Prof. Rajendra Singh is not only an advisor but a constant source of inspiration for our company.

CONTACT US:

S.K NOVEL MATERIALS & TECHNOLOGIES LLP

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