

KINTEK SOLUTION

# Thin Film Deposition Parts Catalog

Contact us for more catalogs of Sample Preparation, Thermal Equipment, Lab Consumables & Materials, Bio-Chem Equipment, etc.



### KINTEK SOLUTION

### **COMPANY PROFILE**

### >>> About Us

#### **Company Profile**

Kintek Solution Ltd is one technology orientated organization, team members are devoted to probing the most efficient and reliable technology and innovations in the scienticfic researching equipment, fields like biochemical reacting, new materials researching, heat treatment, vaccum creating, refrigerating, as while as pharmaceutical and petroleum extracting equipment.

#### **Products & Services**

Kintek Solution Ltd is headquartered in Zhengzhou, the capital city of Henan Province, China, and its core business includes the manufacture, distribution and sale of all types of scientific research equipment and laboratory consumables. The wide range of products and services covers the following main areas:

- Sample Preparation Equipment: We provide high-performance sample
  preparation equipment such as tablet presses, ball mills, vibrating sieves and
  tablet punching machines, which are capable of meeting a wide range of sample
  preparation needs and ensuring high quality experimental data and research
  results.
- Thermal Equipment: Our thermal equipment includes tube furnaces, sintering furnaces, vacuum furnaces, atmosphere furnaces, graphite furnaces, dental furnaces, rotary furnaces, and high-temperature furnaces (e.g., MPCVD, CVD, PECVD, electric rotary kilns). These facilities excel in high-temperature processing and materials synthesis, meeting a wide range of needs from basic research to industrial production.
- Biochemical equipment: We offer a wide range of biochemical laboratory equipment, including rotary evaporators, vacuum pumps, cold trap chillers,



heating circulators, reactors, short-range distillation equipment, sterilization equipment, and homogenizers. These equipments are widely used in the fields of chemical reaction, biological processing and pharmaceutical manufacturing.

Laboratory Consumables: We supply a wide range of laboratory consumables
such as fine ceramic products, electrochemical consumables, PTFE material
products, high purity materials, battery materials, chemical vapor deposition
materials, optical materials, thin film deposition components and glass materials.
These consumables provide the necessary support for laboratories to ensure the
smooth running of experimental processes.

#### **Technological Advantages**

Kintek Solution Ltd has significant technological strengths in the field of scientific research equipment and technical solutions, which enable us to stand out in a competitive marketplace and support our customers with cutting-edge technology. The following are our key technological strengths:

#### Advanced R&D capabilities

- Technological Innovation: Our R&D team is committed to exploring and developing the latest technologies to keep our equipment at the forefront of the industry through continuous technological innovation.
- Customized solutions: Based on the specific needs of our customers, we are able
  to develop and provide customized equipment to meet specific research
  requirements and application scenarios.
- Cooperative R&D: We cooperate with leading research institutes and higher education institutions around the world to carry out R&D projects on cutting-edge technologies to ensure that our technologies are always at the forefront of the industry.

#### **High-performance equipment**

- Precision design: Our equipment adopts advanced design concepts to ensure high precision, reliability and performance to meet the stringent requirements of scientific research and industrial applications.
- Advanced materials: We use high-quality materials and components to improve the durability and stability of our equipment, extend its service life and reduce maintenance costs.



#### Strict quality control

- Standardized production: All equipment is manufactured in accordance with international quality standards, and each production step is strictly controlled to ensure product consistency and reliability.
- Comprehensive testing: Comprehensive performance testing and quality inspection are carried out before the equipment is delivered to ensure that it meets the customer's technical specifications and operational requirements.

#### **Comprehensive technical support**

- Technical Service: Provide comprehensive technical support and after-sales service, including equipment installation, commissioning, training and maintenance, to ensure that customers can use our products efficiently.
- Rapid Response: We have established a rapid response mechanism, which can promptly solve the problems encountered by customers in the process of use and reduce equipment downtime.

#### Innovative technology integration

• System Integration: We integrate advanced control systems and automation technologies into our equipment to improve operational efficiency and data accuracy, and streamline operational processes.

Through these technological advantages, Kintek Solution Ltd is able to continue to provide our customers with innovative, efficient and reliable scientific research equipment and solutions to promote the continuous progress of scientific research and industrial applications.

#### Market position and customers

Kintek Solution Ltd is positioned in the market as a leading global provider of high-tech research equipment and solutions, specializing in biochemical reactions, new materials research, heat treatment, vacuum manufacturing, refrigeration, as well as pharmaceuticals and oil extraction. We are committed to brand leadership in research equipment by providing innovative technology and high quality equipment to meet the needs of research organizations and industrial companies in complex research and production processes.



#### **Core Market Positioning:**

- Specialization: We focus on high technology and scientific research, providing advanced equipment and solutions for specialized research institutes, laboratories and industrial applications.
- · High-end customers: Our main customers include world-renowned universities, research institutes and various industrial enterprises, which usually have high requirements for equipment performance and technology.
- Technological Innovation: We are committed to technological innovation and customized solutions to ensure that our customers receive cutting-edge technical support to meet the ever-changing needs and challenges in the market.

#### **Market Customer Groups:**

- Research Institutes and Universities: including the world's leading research institutes and institutions of higher learning, who require high-performance research equipment and technical support for basic research, applied research and technology development.
- Industrial companies: covering a wide range of industries such as pharmaceuticals, oil extraction, new materials manufacturing and electronic materials production, these companies rely on reliable equipment and solutions to ensure product quality and productivity during production.
- · Laboratories and test centers: organizations that provide laboratory services and quality testing, requiring accurate laboratory equipment and instruments for sample analysis and testing.
- Technology Development Companies: Companies that specialize in the development and application of new technologies and have a high demand for innovative equipment and technical solutions to support their R&D projects and technology validation.

Through clear market positioning and customer groups, we are committed to promoting scientific and technological progress, supporting the innovation and development of our global customers, and continuing to provide high-quality products and services to the market

#### **Team Introduction**



The team at Kintek Solution Ltd is at the heart of the company's success. In order to realize our vision and maintain our leadership position in the field of high-tech research equipment, we are committed to building an exceptional team with the following attributes:

#### 1. Professionalism

- Technical Expertise: Our team consists of technical experts and engineers in the field with deep expertise and technical backgrounds to meet complex technical challenges and innovation needs.
- Industry experience: We bring together professionals with extensive experience in the fields of research equipment, material science and engineering technology to ensure a precise grasp of market needs and technological trends.

#### 2. Innovative Spirit

- R&D-driven: The team encourages innovative thinking and technological exploration, supports employees to participate in R&D projects on cutting-edge technologies, and continuously pushes forward the technological advancement of products and solutions.
- Flexible Adaptation: In the face of changing market environment, we have the ability to adapt quickly and flexibly to meet the changing needs of our customers.

#### 3. Collaboration and Communication

- · Cross-sectoral collaboration: The team maintains close collaboration between various departments, including R&D, production, sales and customer service, to ensure the smooth progress of projects and timely response to customer needs.
- Efficient Communication: Emphasize internal communication and information sharing, through efficient communication mechanisms and tools to ensure that all team members are consistent with the project goals and progress.

#### 4. Customer Orientation

 Customer Service: Team members are customer-focused and committed to providing quality service and support to ensure that our customers have the best experience in using our products and solutions.



• Customized solutions: the ability to deeply understand the specific needs of customers and provide customized solutions to meet the special requirements of different customers.

#### 5. Professional Training and Development

- Continuous Learning: We provide continuous training and learning opportunities for our team members to ensure that they are always up-to-date with the latest technology and industry knowledge.
- Career Development: We value the career development and growth of our employees, provide clear career paths and promotion opportunities, and motivate our employees to realize their personal goals and career aspirations within the company.

#### **6. Corporate Culture**

- Integrity and Responsibility: The team upholds integrity and responsibility, treats work and customers with honesty and fairness, and builds trust and long-term cooperative relationships.
- Unity and Collaboration: Focusing on the spirit of teamwork, the team emphasizes mutual support and joint efforts to achieve the company's goals and promote the overall success of the team.

By building such a highly qualified, innovation-driven and customer-oriented team, we ensure that Kintek Solution Ltd continues to lead in the field of scientific research equipment and provide excellent products and services to our customers worldwide.

At KINTEK, technology fuels our corporate spirit. This dynamic energy awaits you upon joining our team. Expect a distinctive cultural environment where our global business focus opens doors to diverse customs and traditions worldwide. Here, challenging roles promise to propel your career to new heights.

Our exceptional corporate culture sparks innovation, fosters care, and drives continuous progress among individuals and teams. Our team embodies youthfulness, positivity, enthusiasm, and a bold attitude toward challenges. Passionate about our business, our employees ardently contribute to the company's growth.

We seek individuals brave enough to embrace challenges, harbor grand ambitions, and thirst for knowledge. If you're driven by dreams and passion, and aspire to start your



entrepreneurial journey, KINTEK is the platform to actualize your career plans. We don't just offer opportunities; we pave the way for your future.

Join us at KINTEK, where innovation meets opportunity. Let's create a future that's as promising as your aspirations.

#### **Future Plans**

Kintek Solution Ltd's future plans are aimed at further strengthening our leadership position in the research equipment sector and driving the company forward in terms of technological innovation, market expansion and customer service. The following are our key future directions:

#### 1. Technology Innovation and R&D

- Cutting-edge technology development: Continue to invest resources in the
  research and development of cutting-edge technologies, such as artificial
  intelligence, the Internet of Things and nanotechnology, in order to promote
  equipment intelligence and automation.
- New Product Lines: Expand existing product lines and develop equipment to meet emerging market needs, especially in the areas of biochemistry, biomedicine and high-performance materials.
- Cooperative R&D: Strengthen cooperation with international research institutes and institutions of higher learning to carry out joint R&D projects to ensure that the technology remains at the global leading level.

#### 2. Market Expansion

- Global Market Expansion: Further expand the global market, especially in emerging markets and developing regions, establish more sales and service networks, and enhance the brand's international influence.
- Industry application: Explore and expand the application fields in other industries, such as new energy, environmental protection technology and intelligent manufacturing, to open up new business growth points.

#### 3. Customer Service Enhancement

• Enhancement of customer support: Establish a more complete customer support system, provide 24/7 technical support and maintenance services, and ensure



the efficient experience of customers in the use of equipment.

• Customized services: Provide more customized services and solutions according to customers' individual needs to enhance customer satisfaction and loyalty.

#### 4. Sustainable Development

- · Environmentally friendly technology: Develop and adopt environmentally friendly materials and processes to reduce the environmental impact during the production and use of equipment and promote sustainable development.
- Energy saving and consumption reduction: Optimize the energy efficiency of equipment, reduce energy consumption, improve resource utilization efficiency, and support the development of green technology.

#### 5. Internal optimization

- · Intelligent management: Implement intelligent management systems and data analysis tools to improve productivity and management and reduce operating costs.
- Employee Training: Enhance employee training and skills upgrading to build a high-quality team to meet changing market demands and technological challenges.

#### 6. Innovation ecosystem

- Establishment of innovation platform: Create innovation platforms and laboratories to support employees and partners in technological innovation and product development.
- Industry Chain Cooperation: Deepen cooperation with the upstream and downstream of the industry chain, integrate resources, and promote the development and implementation of industry technical standards and market norms

Through these future plans, Kintek Solution Ltd will continue to lead the forefront of science and technology, provide customers with more advanced and reliable products and services, and at the same time, promote the sustainable development of the enterprise and the progress of the industry.







### **Tungsten Evaporation Boat**

**Item Number: LMF-TEB** 



#### Introduction

Learn about tungsten boats, also known as evaporated or coated tungsten boats. With a high tungsten content of 99.95%, these boats are ideal for high-temperature environments and widely used in various industries. Discover their properties and applications here.

Models	Thickness (mm)	Width (mm)	Length (mm)	Shape
#207	0.2	7	100	
#215	0.2	15	100	
#308	0.3	8	100	
#310	0.3	10	100	Round bottom / Flat bottom / Butterfly / Customizable
#315	0.3	15	100	
#413	0.4	13	50	
#525	0.5	25	78	



### **Molybdenum / Tungsten / Tantalum Evaporation Boat**

**Item Number: KME01** 



#### Introduction

Evaporation boat sources are used in thermal evaporation systems and are suitable for depositing various metals, alloys and materials. Evaporation boat sources are available in different thicknesses of tungsten, tantalum and molybdenum to ensure compatibility with a variety of power sources. As a container, it is used for vacuum evaporation of materials. They can be used for thin film deposition of various materials, or designed to be compatible with techniques such as electron beam fabrication.

Learn More

Length 100 width 8 thickness 0.2/0.3mm

Length 100 width 15 thickness 0.2/0.3/0.5mm

Length 100 width 20 thickness 0.2/0.3/0.5mm Groove size: length 50 deep 2.6



### **Hemispherical Bottom Tungsten / Molybdenum Evaporation Boat**

**Item Number: KME-YD** 



#### Introduction

Used for gold plating, silver plating, platinum, palladium, suitable for a small amount of thin film materials. Reduce the waste of film materials and reduce heat dissipation.



### Folding Molybdenum Boat / Tantalum Boat With Or Without Cover

**Item Number: KME-ZDZ** 



#### Introduction

Molybdenum boat is an important carrier for preparing molybdenum powder and other metal powders, with high density, melting point, strength and temperature resistance.



### **Evaporation Boat For Organic Matter**

**Item Number: KME-YJ** 



#### Introduction

The evaporation boat for organic matter is an important tool for precise and uniform heating during the deposition of organic materials.



# **Evaporation Crucible For Organic Matter**

**Item Number: KME-YJG** 



#### Introduction

An evaporation crucible for organic matter, referred to as an evaporation crucible, is a container for evaporating organic solvents in a laboratory environment.

Learn More

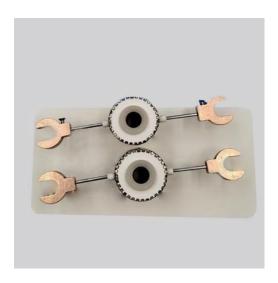
crucible size

13\*13mm / 18\*20mm / 25.4\*30mm / 25.4\*30mm / 10\*25mm



### **Aluminized Ceramic Evaporation Boat**

**Item Number: KME-DL** 



#### Introduction

Vessel for depositing thin films; has an aluminum-coated ceramic body for improved thermal efficiency and chemical resistance. making it suitable for various applications.



### **Graphite Evaporation Crucible**

**Item Number: KME07** 



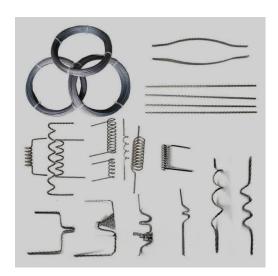
#### Introduction

Vessels for high temperature applications, where materials are kept at extremely high temperatures to evaporate, allowing thin films to be deposited on substrates.



### **Thermally Evaporated Tungsten Wire**

**Item Number: KME08** 



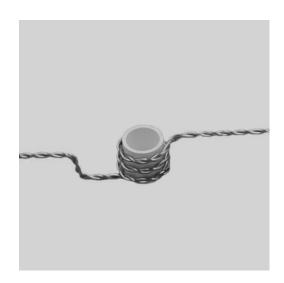
#### Introduction

It has a high melting point, thermal and electrical conductivity, and corrosion resistance. It is a valuable material for high temperature, vacuum and other industries.



### **Ceramic Evaporation Boat Set**

**Item Number: KME09** 



#### Introduction

It can be used for vapor deposition of various metals and alloys. Most metals can be evaporated completely without loss. Evaporation baskets are reusable.1

Material	ceramic crucible / tungsten wire
Ceramic Crucible Size	0.25ml / 0.5ml / 1.0ml / 2.0ml / 3.0ml
Tungsten Wire Size	3*0.8 wire / 3*1.0 wire / 3*0.8 wire



### **Electron Gun Beam Crucible**

**Item Number: KES01** 



#### Introduction

In the context of electron gun beam evaporation, a crucible is a container or source holder used to contain and evaporate the material to be deposited onto a substrate.

product	Molybdenum/Tungsten Crucible	Boron Nitride Crucible/Conductive Boron Nitride Crucible	Graphite Crucible/Coated Graphite Crucible	Pyrolytic Graphite Coated Crucibles	Nickel crucible	Titanium crucible	copper crucible	Alumina crucible
Specification	4CC / 7CC / 15CC / 25CC / 40CC	4CC / 7CC / 15CC / 25CC / 40CC	4CC / 7CC / 15CC / 25CC / 40CC	4CC / 7CC	4CC	4CC	4CC / 2CC / 40CC	4CC



### **Electron Beam Evaporation Graphite Crucible**

**Item Number: KMS02** 



#### Introduction

A technology mainly used in the field of power electronics. It is a graphite film made of carbon source material by material deposition using electron beam technology.

Learn More

Graphite Crucible Dimensions 35\*17mm 35\*22mm 40\*20mm 42.5\*19.5mm 45\*22.5mm 50\*25mm 65\*30mm



# **Electron Beam Evaporation Coating Conductive Boron Nitride Crucible (Bn Crucible)**

**Item Number: KES03** 



#### Introduction

High-purity and smooth conductive boron nitride crucible for electron beam evaporation coating, with high temperature and thermal cycling performance.

Outer diameter	35mm	40mm	45mm	50mm	64.5mm
High	17mm	20mm	22.5mm	25mm	35mm



# **Electron Beam Evaporation Coating Tungsten Crucible / Molybdenum Crucible**

**Item Number: KMS04** 



#### Introduction

Tungsten and molybdenum crucibles are commonly used in electron beam evaporation processes due to their excellent thermal and mechanical properties.

Outer diameter & High	30*15mm	34*20mm	35*17mm	40*17mm	42*19mm	45*22mm	50mm*22	



# **Electron Beam Evaporation Coating / Gold Plating / Tungsten Crucible / Molybdenum Crucible**

**Item Number: KMS05** 



#### Introduction

These crucibles act as containers for the gold material evaporated by the electron evaporation beam while precisely directing the electron beam for precise deposition.

Molybdenum outer diameter & High	28*13.2mm	35*17mm	40*20mm	42*20mm	45*22mm	50*25mm
Tungsten outer diameter & High	28*13mm	35*17mm	40*19mm	42*20mm	45*22mm	50*25mm



### **Electron Beam Evaporation Coating Oxygen-Free Copper Crucible**

**Item Number: KMS06** 



#### Introduction

Electron Beam Evaporation Coating Oxygen-Free Copper Crucible enables precise codeposition of various materials. Its controlled temperature and water-cooled design ensure pure and efficient thin film deposition.

Learn More

40\*17mm 45\*22mm 50\*25mm Outer diameter & High 35\*17mm



### **Boron Nitride (Bn) Crucible - Phosphorous Powder Sintered**

**Item Number: KM-D01** 



#### Introduction

Phosphorus powder sintered boron nitride (BN) crucible has a smooth surface, dense, pollutionfree and long service life.

Learn More

Capacity and size (inner and outer diameter and height)

- 2ml(16\*12\*20mm)
- 3ml(20\*16\*18mm)
- 5ml(24\*20\*22mm)
- 10ml(28\*24\*30mm)
- 20ml(32\*26\*32mm) • 50ml(47\*41\*45mm)
- 100ml(58\*50\*58mm)



### **Hexagonal Boron Nitride(Hbn) Thermocouple Protection Tube**

**Item Number: KM-D02** 



#### Introduction

Hexagonal boron nitride ceramics is an emerging industrial material. Because of its similar structure to graphite and many similarities in performance, it is also called "white graphite".



# Hexagonal Boron Nitride (Hbn) Spacer - Cam Profile And **Various Spacer Types**

**Item Number: KE-D3** 



#### Introduction

Hexagonal boron nitride (HBN) gaskets are made from hot-pressed boron nitride blanks. Mechanical properties similar to graphite, but with excellent electrical resistance.



### **Boron Nitride (Bn) Ceramic Rod**

**Item Number: KM-D4** 



#### Introduction

Boron nitride (BN) rod is the strongest boron nitride crystal form like graphite, which has excellent electrical insulation, chemical stability and dielectric properties.

Learn More

diameter and length

10-100mm\*100-300mm



### **Boron Nitride (Bn) Ceramic Tube**

**Item Number: KM-D5** 



#### Introduction

Boron nitride (BN) is known for its high thermal stability, excellent electrical insulating properties and lubricating properties.



### **Hexagonal Boron Nitride (Hbn) Ceramic Ring**

**Item Number: KM-D6** 



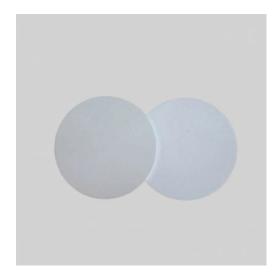
#### Introduction

Boron nitride ceramic (BN) rings are commonly used in high temperature applications such as furnace fixtures, heat exchangers and semiconductor processing.



### **Boron Nitride (Bn) Ceramic Plate**

**Item Number: KM-D7** 



#### Introduction

Boron nitride (BN) ceramic plates do not use aluminum water to wet, and can provide comprehensive protection for the surface of materials that directly contact molten aluminum, magnesium, zinc alloys and their slag.



### **Boron Nitride (Bn) Ceramic Custom Parts**

**Item Number: KM-D8** 



#### Introduction

Boron nitride (BN) ceramics can have different shapes, so they can be manufactured to generate high temperature, high pressure, insulation and heat dissipation to avoid neutron radiation.



### **Boron Nitride (Bn) Ceramics-Conductive Composite**

**Item Number: KM-D9** 



#### Introduction

Due to the characteristics of boron nitride itself, the dielectric constant and dielectric loss are very small, so it is an ideal electrical insulating material.



### **Carbon Graphite Boat -Laboratory Tube Furnace With Cover**

**Item Number: KM-D10** 



#### Introduction

Covered Carbon Graphite Boat Laboratory Tube Furnaces are specialized vessels or vessels made of graphite material designed to withstand extreme high temperatures and chemically aggressive environments.

Learn More

diameter / height / length / thickness

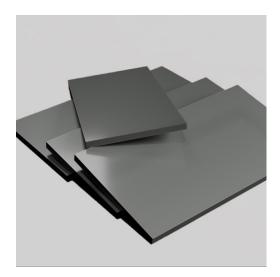
35\*18\*100\*3.5mm

45\*150\*23\*5mm



### **Carbon Graphite Plate - Isostatic**

**Item Number: KM-D11** 



Introduction

Learn More

thickness / width / length

1-50\*100\*100mm



# Molybdenum/Tungsten/Tantalum Evaporation Boat - Special **Shape**

Item Number: KME01-2



#### Introduction

Tungsten Evaporation Boat is ideal for vacuum coating industry and sintering furnace or vacuum annealing. we offers tungsten evaporation boats that are designed to be durable and robust, with long operating lifetimes and to ensure consistent smooth and even spreading of the molten metals.





### **Kintek Solution**

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