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## **At King Precision, our mission is to manufacture and supply precision components with unsurpassed quality and world class customer service with a focus on perfection.**



With over 15 years of experience we are a leader in the field of semiconductor heater and magnet refurbish and repairs along with manufacturing new heaters and magnets. Knowing the importance of supplying our customers a quality product all our assemblies are supplied with OEM comparable warranty.

Founded in 1995, King Precision has supplied hundreds of heaters and magnets to leaders in the industry. Over the years we have developed high quality heater and magnet parts.

King Precision offers a variety of services from precision machine, full service welding, assembly, comprehensive testing, full engineering support and prototype development and much more. We play a fundamental role by refurbishing more Semiconductor heater and magnet components around the world than any other company.

Our mission of customer satisfaction is done through on-time deliveries and quality products that meet your specifications. We continue to produce a product that is affordable and allows our customers to be competitive in today's economic market.

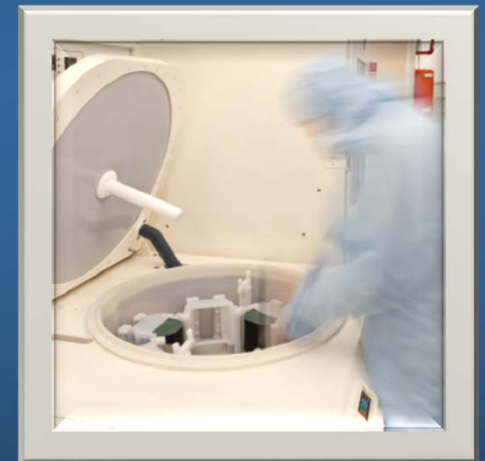
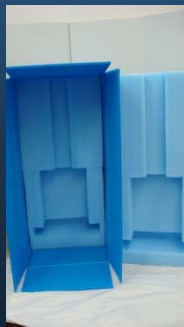
King Precision gives chipmakers the option to refurbish an existing heater or magnets which will be a material savings from purchasing a new heater or magnets without compromising quality or performance.

# Why Choose King Precision?

- Over 15 years of experience in the heater and magnet business
- A time tested manufacturing process that provides quality heaters and magnets
- A team of people that are problem solvers and take tough problems and find solutions
- Over 40 years of expertise by the owner in the semiconductor and manufacturing business
- A commitment to customer service and on-time deliveries

## **King Precision offers top-of-the-line, cleanroom grade packing for all parts**

Double thick corrugated plastic boxes, cleanroom grade packing foam and anti-static pink bags ensure absolute safe and clean delivery.



King Precision is located in Northern California and our shipping department can deliver our product anywhere in the world with any carrier.

# Refurbished Heaters

## A full rebuild for heaters includes:

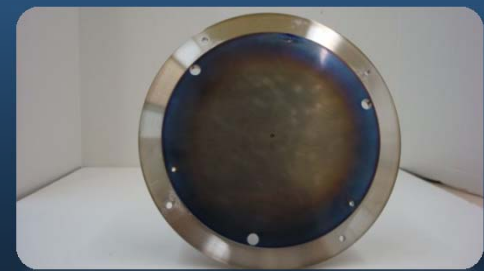
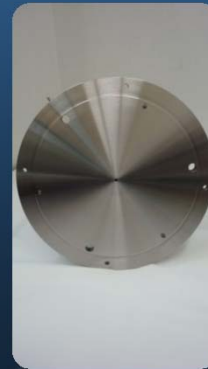
- full inspection of entire heater
- replacement of bellows, element, wires, thermocouples, bearings, o-rings
- complete re-polish and cleaning
- continuity and resistance testing
- Polish, clean and vacuum test
- full certifications

## A partial rebuild includes:

- replacement of bellows
- continuity and resistance testing
- Polish, clean and vacuum test
- full certifications

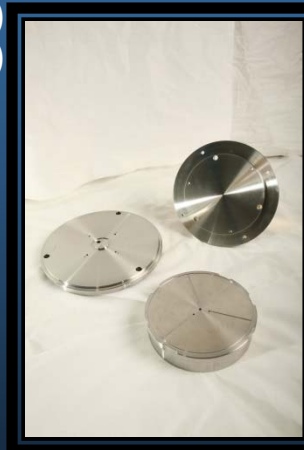
## Partial List of Refurbished Heater Parts:

0010-04450 - E-Chuck Heater  
0010-12516 - E-Chuck Heater  
0010-22411 - 8" E-Chuck Heater  
0010-76152 - 8" HTHU  
0010-76149 - 6" HTHU  
0010-13626 - 8" Advanced B101  
0010-25735 - 8" Advanced B101  
0010-13625 - 6" Advanced B101  
0010-21530 - 6" Advanced A101  
0010-21246 - 8" Advanced A101  
0010-21146 - 8" Special Pre-Heater Heater  
0010-70252 - 6" VCR with 2 T/C's (4 finger)  
0010-70254 - 8" VCR with 2 T/C's (4 Finger)  
0010-22012 - 8" Hi Temp w/ welded lugs (6 Finger)  
0010-22260 - 6" Hi Temp w/ welded lugs (6 Finger)  
0010-20391 - 6" Hi Temp PVD Degas (6 Finger)  
0010-21356 - 8" VCR w/ shielded bellows  
0010-20159 - 5" 4 Finger VCR  
0040-20068 - Bellows Lifter PVD  
0040-20155 - Bellows Preclean  
0040-20194 - Bellows  
0010-27432 - 300mm A101  
0010-15418 - 300mm B101



# New Heaters

0010-32587 - TxZ Heater  
0010-36180 - TxZ Heater  
0010-76152 - 8" HTHU  
0010-76149 - 6" HTHU  
0010-13626 - 8" Advanced B101  
0010-25735 - 8" Advanced B101  
0010-13625 - 6" Advanced B101  
0010-21530 - 6" Advanced A101  
0010-21246 - 8" Advanced A101  
0010-21146 - 8" Special Pre-Heater Heater  
0010-70252 - 6" VCR with 2 T/C's (4 finger)  
0010-70254 - 8" VCR with 2 T/C's (4 Finger)  
0010-22012 - 8" Hi Temp w/ welded lugs (6 Finger)  
0010-22260 - 6" Hi Temp w/ welded lugs (6 Finger)  
0010-20391 - 6" Hi Temp PVD Degas (6 Finger)  
0010-21356 - 8" VCR w/ shielded bellows  
0010-20159 - 5" 4 Finger VCR



This is a partial list, please enquire about additional assemblies.



# Semiconductor Magnet Refurbishments

## PROBLEM:

- Pole Orientation Reversed
- Uneven deposition uniformity
- Non-energized sensor magnet

## PROCESS TO REPAIR

- Re-map
- Evaluate
- Disassemble
- Measure Individual Magnets
- Replace Weak Magnets (encapsulated magnet, sensor magnet)
- Re-assemble
- Re-map



## Partial List of Refurbished Magnets:

### B Type Magnet Assemblies:

- 0010-20221 Magnet, REM 11.3" Ti
- 0010-20222 Magnet, REM 11.3 TiW
- 0010-20223 Magnet, REM 11.3 TiN

### A Type Magnet Assemblies:

- 0010-20328 Magnet Assembly Dura Source 13"
- 0010-26441 Magnet Assembly Dura Source 13"
- 0010-29630 Magnet Assy Ti Durasource 11.3"
- 0010-26450 Magnet Assy Ti Durasource 11.3"
- 0010-21127 Magnet Assy Ti Durasource 11.3"
- 0010-26451 Magnet Assy Dura Source 13" JMWI
- 0010-21206 Magnet Assy Dura Source 13" JMWI
- 0010-20389 Magnet Assy Dura Source 11.3" Al
- 0010-26442 Magnet Assy Dura Source 11.3" Al
- 0010-29627 Magnet Assy Dura Source 11.3" Al
- 0010-20224 Magnet Assy 11.3" Al
- 0010-26438 Magnet Assy 11.3" Al
- 0010-20225 Magnet Assy 13" Al
- 0010-26439 Magnet Assy 13" Al
- 0010-26440 Magnet Assy 13" Ti
- 0010-20258 Magnet Assy 13" Ti
- 0010-29628 Magnet Assy Mod Durasource 11.3" TiW
- 0010-26448 Magnet Assy Mod Durasource 11.3" TiW
- 0010-21020 Magnet Assy Mod Durasource 11.3" TiW

### G Type Magnet Assemblies:

- 0010-21810 Magnet Assy G-12 Encapsulated,
- 0010-20768 Magnet Assy G-12 Encapsulated,
- 0010-33888 Magnet Assy G-12 Encapsulated,
- 0010-21844 Magnet Assy Durasource Encap
- 0010-33889 Magnet Assy Durasource Encap
- 0010-21403 Magnet Assy Durasource Encap
- 0010-33890 Magnet Assy G-3 Encapsulated
- 0010-76693 Magnet Assy G-3 Encapsulated
- 0010-21940 Magnet Assy G-3 Encapsulated
- 0010-21676 Magnet Assy RH-2 Vectra IMP
- 0010-04065 Magnet Assy SIP Rev2
- 0010-14875 Magnet Assy SIP Encore TA GST



This is a partial list, please enquire about additional assemblies.

# New Semiconductor Magnets

## ■ B Type Magnet Assemblies:

- 0010-20221 Magnet, REM 11.3" Ti
- 0010-20222 Magnet, REM 11.3 TiW
- 0010-20223 Magnet, REM 11.3 TiN

## ■ A Type Magnet Assemblies:

- 0010-20328 Magnet Assembly Dura Source 13"
- 0010-26441 Magnet Assembly Dura Source 13"
- 0010-29630 Magnet Assy Ti Durasource 11.3"
- 0010-26450 Magnet Assy Ti Durasource 11.3"
- 0010-21127 Magnet Assy Ti Durasource 11.3"
- 0010-26451 Magnet Assy Dura Source 13" JMWI
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- 0010-20225 Magnet Assy 13" Al
- 0010-26439 Magnet Assy 13" Al
- 0010-26440 Magnet Assy 13" Ti
- 0010-20258 Magnet Assy 13" Ti
- 0010-29628 Magnet Assy Mod Durasource 11.3" TiW
- 0010-26448 Magnet Assy Mod Durasource 11.3" TiW
- 0010-21020 Magnet Assy Mod Durasource 11.3" TiW



## ■ G Type Magnet Assemblies:

- 0010-21810 Magnet Assy G-12 Encapsulated, V-Clamp
- 0010-20768 Magnet Assy G-12 Encapsulated, V-Clamp
- 0010-33888 Magnet Assy G-12 Encapsulated, V-Clamp
- 0010-21844 Magnet Assy Durasource TTN Encapsulated
- 0010-33889 Magnet Assy Durasource TTN Encapsulated
- 0010-21403 Magnet Assy Durasource TTN Encapsulated
- 0010-33890 Magnet Assy G-3 Encapsulated
- 0010-76693 Magnet Assy G-3 Encapsulated
- 0010-21940 Magnet Assy G-3 Encapsulated
- 0010-21676 Magnet Assy RH-2 Vectra IMP
- 0010-04065 Magnet Assy SIP Rev 2
- 0010-14875 Magnet Assy SIP Encore Ta GST



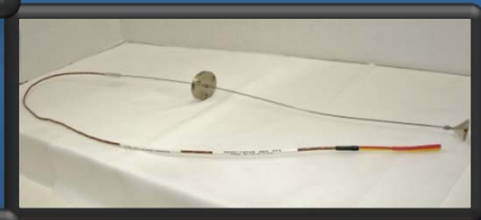
This is a partial list, please enquire about additional assemblies

# Additional Components

- KPTxZ Thermocouple OEM  
Part# 0190-35511
- Hi Temp; Dual circuit  
Part# 0190-01167
- HPTxZ Heater Power Cable HP+  
Part# 0150-05412
- KPTC Thermocouple OEM  
Part# 0190-13257
- KPTC Thermocouple OEM  
Part# 0190-35413
- KPTC Thermocouple OEM  
Part# 0150-76028
- KPTC Thermocouple OEM CXZ  
Part # 0190-35525

## Bellows:

- 0015-09055
- 0015-09056





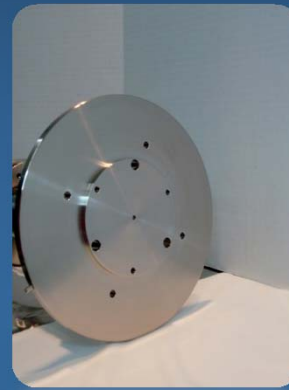
# Custom Heater Assemblies

As your production requirements change King Precision can supply custom retro-fitted heaters to meet our Customer needs.

## 4" 100MM A101 & B101

- KP4A101-2863 4" A101 Heater
- KP4B101-2863 4" B101 Heater

In addition, King Precision Inc. also has the capabilities of designing and manufacturing custom lift hoop assemblies to fit our 100mm heaters.



**0010-21146 8" Special Heater**

# Facilities

## ■ Facilities List

6000 sq.ft Manufacturing Building  
1200 sq.ft class 10000 Clean Room  
2500 sq.ft office

## CNC milling:

2005 Haas HS-1 RP Horizontal Milling center  
2006 Haas VF-3 Vertical Milling Center  
2000 Hyundai Hi-Mac Vertical machining Center

## CNC turning

2000 Morriseki SL-3H Turning Center  
2001 Cincinnati Milacron 200MT  
Avenger Lathe with Live tooling  
2008 Haas SL-30 Turning Center  
2000 Mazak Quick Turn 8N



## ■ Manual Machining

2010 Jet 1640 ZX Manual Lathe  
1990 Royal 1430 Manual Lathe  
2012 Kent 1460 Manual Lathe  
Bridgeport manual Mills  
Hardinge Manual Chucker

## Welding and leak detection

Varian MD30 VS Leak Detector  
Leybold UL500 Leak detector  
Miller SYNCROWAVE 351 welder  
Clean room welding  
Full welding capabilities

## Inspection equipment

Brown and Sharpe Validator  
Mituyoyo B710 Coordinate Measuring Machine  
All supporting inspection equipment



# Testimonials

- “All of us here would like to thank you all at King Precision, for the tremendous support that you provide to us generally and specifically with regard to this heater. You have truly gone above and beyond.”
- “Concerning Richards involvement with this heater. We knew that he had taken a personal interest in this unit. It illustrates once more his business ethic and personal commitment to his customers. Every time we have a problematic situation with heaters, magnets etc, we will go to King Precision, Richard specifically and make our request. We ALWAYS come away from those conversations knowing that we have a great plan in place and he'll do whatever it takes to make us successful. We are very fortunate to have King Precision as a vendor.”
- “Thank You for excellent support , resulted in getting our system up and running in <36 hours with positive results.”
- “Just wanted to let you know, that the HTHU Heater that you replaced the Bellows worked with No issue, and your turn around time was Fantastic- Thanks.”
- “The A101 was recieved and installed with no problems. It reached our base pressure spec. within 24 hours.”



# CONTACT US

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information

