## Diffusion Heating Elements 1350°C

## Are you looking for 1:1 diffusion heater element retrofit?

For more than 40 years Thermcraft supplies high quality semiconductor replacement diffusion heater elements to the semiconductor industry, using knowledge gained from all facets of thermal engineering. We offer custom designed diffusion heating elements and 'plug and heat' solutions for most existing horizontal or vertical diffusion furnace heaters. As 1:1 heater element retrofit or for new applications. Diffusion Duracraft™ series heating elements are heavy gauge APM wire type elements, similar to most standard diffusion heater elements for operating temperatures up to 1350°C (2460°F). Rapid delivery and off-the-shelf pricing make these elements the cost-effective solution for your semiconductor heating needs. We offer diffusion furnaces elements, refurbishing and heater element accessories including standard and custom sized vestibule blocks are available as well as diffusion furnace collars and discs



Rebuilding of a failed heater element can offer great cost-savings when compared to a completely new heating element. Each rebuilt diffusion heating element is carefully reverse engineered. Diffusion heater element components are the same as used by the OEM. We use highest quality Kanthal APM heater wire, interlocking spacers for constant coil spacing and stability. Your refurbished heating elements will be an exact replacement with the dimensional, electrical, and operating characteristics of the original OEM.



## 40 years of installed base of heater elements in Europe

Examples of diffusion furnace heater elements in use since many years by a large installed base of European Semiconductor fabs: OEM Part# TEL Tokyo Electron: VMU-40-007, VMU-40-103, VMM-40-101, VMM-40-102, VMM-40-005, VMU-28-017, VMU-32-001, VOS-40-017, VMU-54-001, VOS-56-003 Hitachi Kokusai: F-330C-88V-4Z, F-330C-93V-4Z, D4EX04882, D4EX03531, D4EX02648 Axcelis: ST-200 SVG: 602783-02, 602783-03 Various Other OEM Models: UL-260-08H-MK3(W), HDS-610A5-C, F-210V-87, FC-200, FC200L.



	DuracraftTM diffusion furnace elements		
	Diffusion furnace elements for cost-effective high temperature operation.	Diffusion furnace elements for high temperature operation improved performance for temperature cycling.	Diffusion furnace elements for highest temperature operation and large temperature swings longest life.
Models	DC-1300	DC-1300Plus	DCHT-500
<b>Operating Temperature</b>	400°C - 1350°C	400°C - 1350°C	400°C - 1350°C
Shell	Stainless steel	Stainless steel	Stainless steel
Insulation	Vacuum formed, 97% Alymina	Vacuum formed, 97% Alymina	Vacuum formed, 97% Alymina
Wire	Heavy gauge FeCrAl	Heavy gauge FeCrAl	Heavy gauge powered metal FeCrAl
Inner coating	Zirconia oxide	Zirconia oxide	Zirconia oxide
Spacers	Standard	Self-locking	Self-locking
Bore size	Please specify	Please specify	Please specify
Applications	Vertical or horizontal, LPCVD and oxidation/diffusion processes, up to 1300°C, with typical lifetimes of 5 years at low to mid-temperature range.	Vertical or horizontal, LPCVD and oxidation/diffusion processes, up to 1300°C, with typical lifetimes of 5 years at low to mid-temperature range.	Vertical or horizontal, LPCVD and oxidation/diffusion processes, up to 1300°C, with typical lifetimes of 5 years at low to mid-temperature range.









