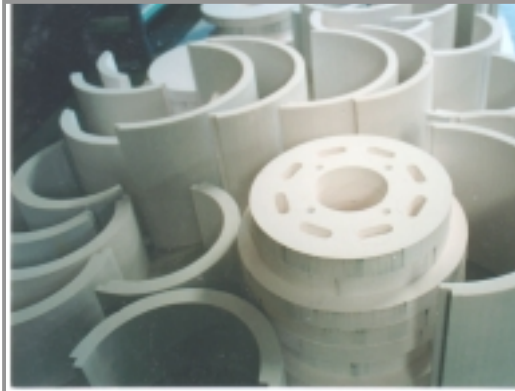


ALTRA® KVS

High Temperature Vacuum Formed Cylinders



ALTRA® KVS high temperature vacuum formed cylinders are available in formulations for service temperatures up to 1800⁰C. ALTRA® KVS cylinders feature low thermal conductivity, excellent thermal shock resistance, high purity and good density uniformity. ALTRA® KVS is formed from alumina and/or alumino-silicate fibers with appropriate inorganic and organic binders. ALTRA® KVS products are available in two forms: pre-fired to 1000⁰C resulting in an organic free, smoke free composition or with organic binder (dried only, no pre-firing) for increased room temperature strength.

Properties	Units	ALTRA® GRADE						
		KVS 124	KVS 144	KVS 164	KVS 164/302	KVS 174/400	KVS 184/400	
Classification Temperature	⁰ F	2300	2600	3000	3000	3092	3272	
	⁰ C	1260	1430	1650	1650	1700	1800	
Service Temperature	⁰ F	2012	2372	2732	2912	3092	3272	
	⁰ C	1100	1300	1500	1600	1700	1800	
Density	lbs/ft ³	18	18	18	18	25	25	
	(kg/m ³)	(300)	(300)	(300)	(300)	(400)	(400)	
Linear Shrinkage 24 hrs @ Temperature “+” indicates growth	%	2% @ 1100 ⁰ C	2% @ 1250 ⁰ C	1% @ 1500 ⁰ C	+1% @ 1600 ⁰ C	+0.2 @ 1600 ⁰ C	0.1% @ 1700 ⁰ C	
				2% at 1600 ⁰ C		0.3% @ 1700 ⁰ C	0.8% @ 1800 ⁰ C	
Chemical Composition	%							
		Al ₂ O ₃	50	55	65	78	81	80
		SiO ₂	49	44	34	22	19	20

- Applications include insulation for semiconductor wafer processing furnaces, dental furnaces, fiber optic drawing furnaces, ceramic sintering furnaces and other high temperature processing
- Sizes are available from ½” ID to 30” ID with wall thicknesses up to 3”
- Available as a solid tube or with any combination of vertical and horizontal z-joints or butt joints
- All ALTRA® grades are also available in boards and other vacuum formed shapes