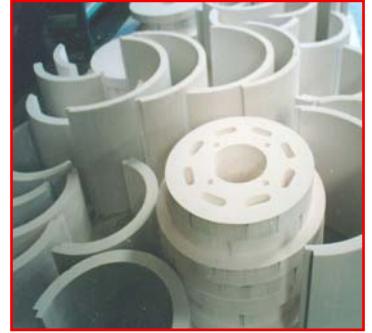


ALTRA[®] KVS

High Temperature Vacuum Formed Cylinders

ALTRA[®] KVS high temperature vacuum formed cylinders are available in formulations for service temperatures up to 1800°C. **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 1000°C resulting in an organic free, smoke free composition or with organic binder (dried only, no pre-firing) for increased room temperature strength.



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