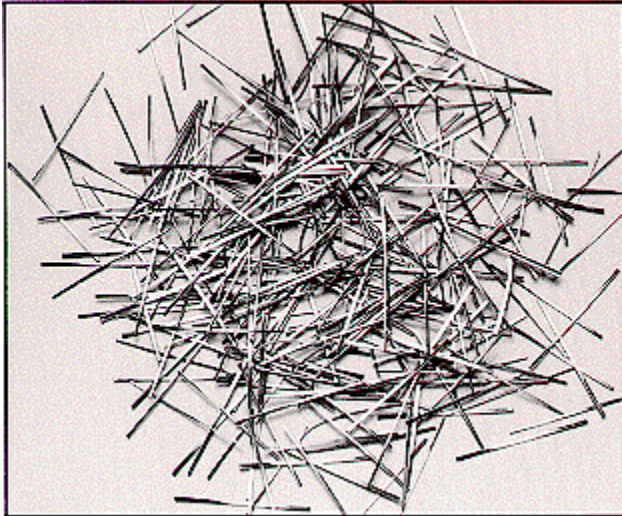


INCREASE REFRACTORY LIFE 2 or 3 TIMES with

RIBTEC™ stainless steel fibers



Field tests have proven that refractory life is increased two or three times when Ribtec stainless steel fibers are added to the refractory mix. They give you increased resistance to thermal cycling, steep thermal gradients and thermal/mechanical shock . . . for reduced maintenance and/or significant energy savings . . . resulting in MUCH LOWER OPERATING COSTS! Ribtec fibers are widely used in ceramic processing, primary metals, power, cement, and lime and petrochemical industries.

Send for complete data today



P.O. Box 30758
Gahanna, OH 43230
Call toll free 800/848-0477
In Ohio 614/964-5444

TECHNICAL PROPERTIES AND PERFORMANCE DATA ON RIBTEC STAINLESS STEEL FIBERS

ALLOY*	RIBTEC-HT	RIBTEC-LR (430)	RIBTEC-GR (304)	RIBTEC-OS (446)	RIBTEC-310 (310)	RIBTEC-OC (330)
Melt temperature Range, °F	2700/2790	2700/2790	2550/2650	2600/2750	2550/2650	2450/2600
Thermal conductivity @ 1000°F, BTU/hr/ft ² /°F/ft	15.3	15.3	11.6	14.3	10.4	12.4
Modulus of elasticity x 10 ⁻⁶ @ 600°F – PSI	12.0	12.0	18.0	14.0	18.0	19.5
Fiber tensile strength @ 1600° F – PSI	8380	6800	18000	7650	22000	28000
Coef. of thermal expansion x 10 ⁻⁶ @ 1600°F per °F	7.6	7.6	11.2	7.3	10.3	9.8
Critical Oxidation Temperature	2000°F	1500°F	1900°F	2200°F	2000°F	2250°F
Stocked fiber sizes**	1 3/8" x .020" 1" x .020" 3/4" x .015" 5/8" x .008"	1 3/8" x .020" 1" x .020" 3/4" x .015" 5/8" x .008"	1 3/8" x .020" 1" x .020" 3/4" x .015" 5/8" x .008"	1 3/8" x .020" 1" x .020" 3/4" x .015" 5/8" x .008"	1 3/8" x .020" 1" x .020" 3/4" x .015" 5/8" x .008"	1 3/8" x .020" 1" x .020" 3/4" x .015" 5/8" x .008"
Increased flexural strength Of 60% alumina Refractory Fired at 1600° F for 8 hrs 1.3% volume fiber	1.15	1.15	1.15	1.15	1.15	1.15
Increased Energy Absorption**** 60% alumina Ref. Fired at 1600°F for 8 Hrs***	10-12	10-12	10-12	10-12	10-12	10-12
Carburization increase in Carbon content % in 25 hrs @ 1800°F	1.03	1.03	1.4	.07	.02	.08
Corrosion rate in coke oven Gas at 1800°F (mils/yr)	24	236	225	14	25	75
Corrosion rate Nitriding (mils/yr)	900	900	590	1120	230	60
Oxidation cyclic conditions 1000 hr % wt loss @ 1800°F	4%	70% @ 100 hrs	70% @ 100 hrs	4%	13%	18%

*Other alloys can be produced on request.

**Fibers have been produced with effective diameters of .005" to .060" and lengths 3/16" to 3".

***Data available also at higher temperatures on request.

****Ratio of area under the stress strain curve of a reinforced refractory to an unreinforced refractory.

HOT CORROSION ALLOY SELECTION UNIT CORROSION RATES

Numbers 1-2-3 indicates the quality of the alloy for the environment shown

RIBTEC ALLOYS	OXIDATION	CARBURIZATION	CARBURIZATION	SULFUR	SULFUR	SULFUR + CARBURIZATION	SULFUR + CARBURIZATION	NITRIDING	CHLORINE	REDUCING	HYDROGEN	HYDROGEN	HYDROGEN SULFIDE	VANADIUM PENTOXIDE
		1800°F	2000°F	2000°F	1500°F	1500°F	1800°F				1000°F	1400°F	1000°F	1000°F
430	1600°F	3	2	3	1	2	3	3	3	1	2	1	1	3
304	1900°F	3	3	3	2	2	3	2	3	1	1	1	1	3
446	2200°F	2	1	1	1	1	1	3	3	1	3	1	1	1
310	2100°F	1	1	1	1	1	1	3	3	1	1	1	1	3
330	2200°F	2	1	3	3	3	3	1	1	3	3	3	3	3

KEY: 1) Best 2) Acceptable 3) Not Recommended