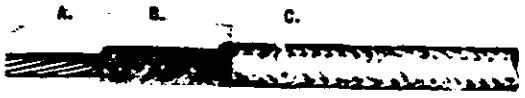
PLAINTIFF'S EXHIBIT
E-188

ROCKBESTOS® PRODUCTS data sheet

FURNACE & MUD GUN CABLES (RSS 5-309)

600 Volt - 400°C (752°F)
*650°C (1200°F)



5-10 11/74

APPLICATION: An industrial, high temperature single or multi-conductor cable for use around furnaces on mud guns, around open hearths and blast furnaces, and where extremely high temperatures and occasional flames may envelop the wires. Its relatively small diameter allows for use in close quarters. Its excellent flame resistance; extremely high radiation resistance; and its retention of flexibility at cryogenic temperatures provide additional performance capabilities to broaden its range of usefulness.

ADVANTAGES: Mica, glass and asbestos are inorganic materials which cannot melt, soften, smoke or burn. Mica, protected by glass, provides the electrical properties. The tough outer covering of impregnated asbestos provides the mechanical protection. Together they provide the high temperature, flame and radiation resistance and electrical properties necessary in extremely abusive environments.

Size	Stranding	Max. Bare O.D. (Inches)	Max. Resist. @ 20°C Ohms/1000 Ft.	Nom. Fin. O.D. (Inches)	Approx. Wt. Lbs/1000 Ft.
14	19/.0142"	0.074	4.32	.160	21
12	19/.0179"	0.093	2.68	.180	30
10	7x7/.0142"	0.128	1.59	.230	54
8	19x7/.0113"	0.176	0.936	.265	77
6	19x7/.0142"	0.218	0.591	.310	114
4	19x7/.0179"	0.272	0.375	.370	169
2	19x35/.010"	0.345	0.241	.470	265
1	19x43/.010"	0.384	0.196	.525	325
1/0	19x55/.010"	0.432	0.153	.580	400
2/0	19x70/.010"	0.490	0.120	.615	535
3/0	19x88/.010"	0.548	0.096	.675	650
4/0	37x57/.010"	0.615	0.077	.740	790
350	19x7x26/.010"	0.809	0.048	.950	1275
500	19x7x38/.010"	0.988	0.033	1.140	1785

A. nickel clad copper B. glass reinforced mica C. asbestos braid impregnated with high temperature finisher

*Will operate with conductor temp. of 650°C without damaging cable for short term emergency overload conditions.

RBB 02848

The ampacities shown are based upon 60 cycle alternating current, sea level conditions.

Ambient Temperature of 200°C (392°F)
Conductor Temperature of 400°C (752°F)

Conductor Size	Ampacity - Single Conductor in Free Air
14	26
12	35
10	50
8	70
6	100
4	130
2	175
1	200
1/0	235
2/0	275
3/0	315
4/0	365
350	535
500	745

Note: To determine ampacity for 3 close cables, multiply single wire ampacities by 0.60.

CORRECTION FACTORS FOR AMBIENT TEMPERATURES ABOVE AND BELOW 200°C (392°F)

Ambient Temperature		Multiplying Factor
°C	°F	
100	212	1.22
150	302	1.12
200	392	1.00
250	482	.87
300	572	.70

BEND RADIUS

The recommended minimum bending radius is ten times the overall diameter of the wire.



RBB 02849