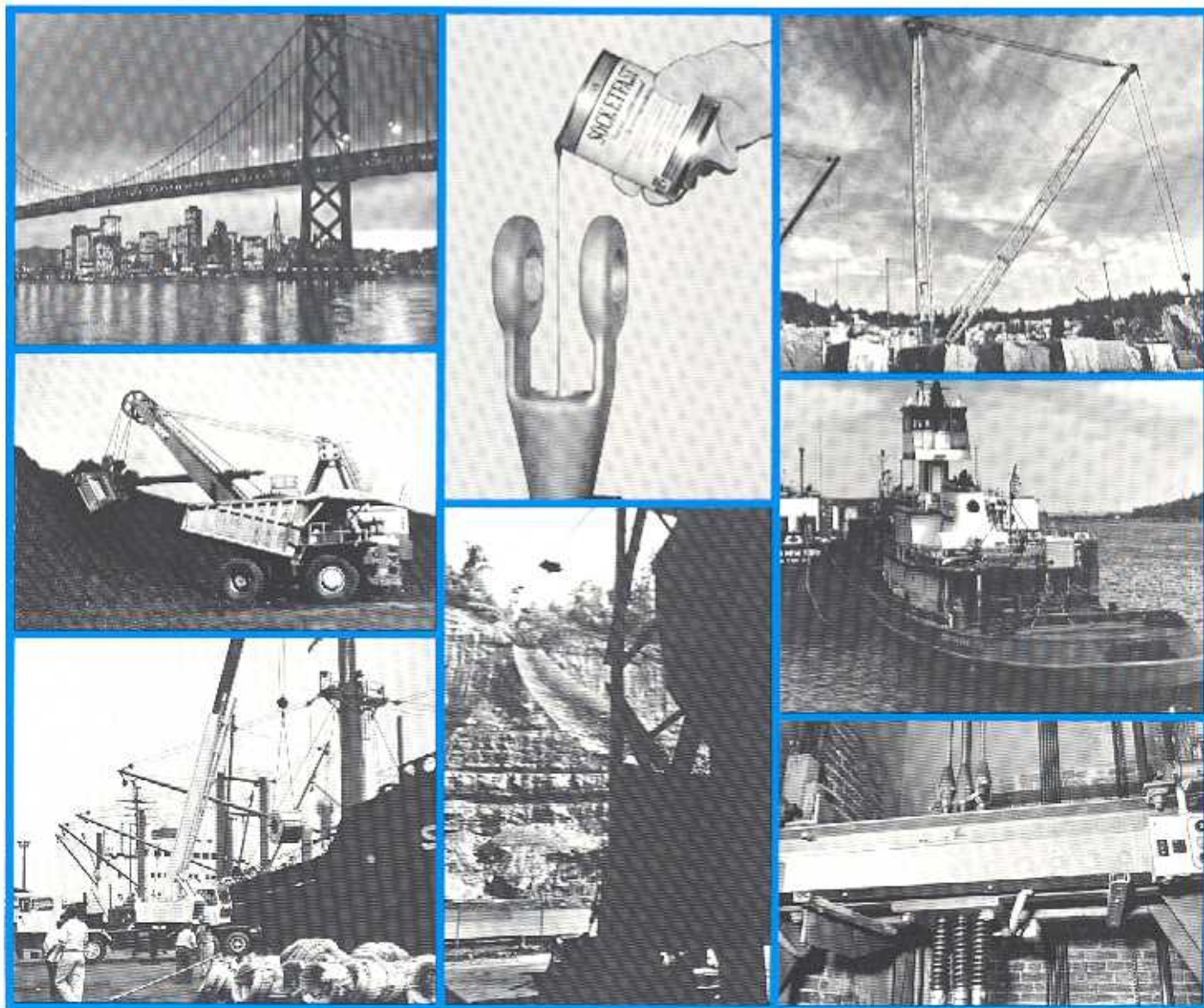


*for stronger, more reliable
wire rope assemblies*

Socketfast®

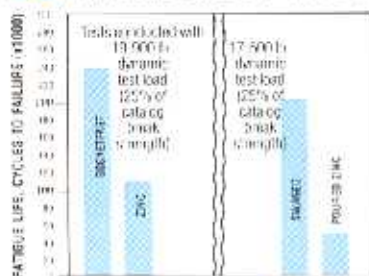


TW Philadelphia Resins Corporation

Socketfast®

provides 100% of rated break strength and maximum resistance to shock and fatigue.

1. SOCKETFAST SUBSTANTIALLY INCREASES THE FATIGUE LIFE OF WIRE ROPE ASSEMBLIES.



Test results show how Socketfast wire rope assemblies withstand repeated shock loads due to elasticity at the termination transition points. For direct correlation of results, all tests were conducted on bright wire rope.

2. SOCKETFAST WITHSTANDS SEVERE ENVIRONMENTS.

Socketfast is extremely reliable over a wide range of temperatures—from 95°C to -55°C (200°F to -65°F). This resin socketing system is not affected by electrolysis or by immersion in most corrosive fluids.

3. SOCKETFAST IS EASY TO USE—ANYWHERE.

All installations, including field installations, are made quickly and efficiently with standard cable sockets and standard cable-end preparation. Uniform dispersion of filler throughout each fitting makes Socketfast the only socketing system that may be poured horizontally for large sockets (page 4).

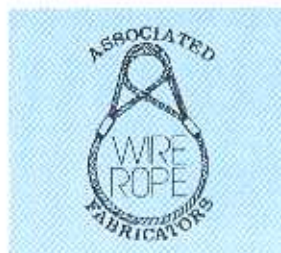
4. SOCKETFAST ELIMINATES INSTALLATION HAZARDS.

Socketfast is a convenient two-part liquid system. There are no dry powders which can become airborne to create health hazards or affect product consistency. No need for dangerous acid etching, open flames, or handling of hazardous molten metals.

5. SOCKETFAST CURES QUICKLY TO PROVIDE 100% OF RATED BREAK STRENGTH.

With Socketfast, wire rope assemblies develop full catalog break strength in less than one hour at 21°C (70°F); or they are ready for service in only 5 minutes after a 120°C (250°F) cure. With either ambient or elevated temperature cures, there is 30% less "bedding in" on initial loading than with zinc or babbitt.

6. SOCKETFAST IS THE MOST ECONOMICAL, PERFORMANCE PROVEN, COLD-SOCKETING SYSTEM AVAILABLE.



In addition to superior performance in a wide range of industrial, marine and commercial applications, Socketfast allows spelter-type end fittings to be used over and over again, without annealing.

Special Features for ELEVATOR INSTALLATIONS



SOCKETFAST IS THE SAFEST, THE MOST ECONOMICAL, AND THE EASIEST TO USE SOCKETING SYSTEM FOR ELEVATOR CABLES.

GREATER PROTECTION FROM HIGH TEMPERATURE PULLOUTS

Utilizing standard elevator fittings, this convenient resin socketing system will withstand fire 50% longer than babbitt.

Socketfast equals or exceeds other performance characteristics of babbitt, and combines superior performance with a material cost only one-fifth that of babbitt.

EASY TO USE, EVEN IN CRAMPED QUARTERS

In cramped locations, the two liquid components may be readily mixed, then poured into prepared sockets. After curing for one hour at ambient temperatures or for only 5 to 10 minutes with a wrap-around electric heater (illustrated on right), the resin socketed assemblies will provide 100% of the cable's rated break strength—with unsurpassed resistance to shock and fatigue loads.

For elevator installations, follow preparation procedure as outlined in ANSI Code A17.1, Rule 212.9e, page 82. No melting pots, torches or other dangerous open flames are required. This means there are no problems with accidental activation of smoke alarms.



...eliminates installation hazards
while providing improved physical properties.

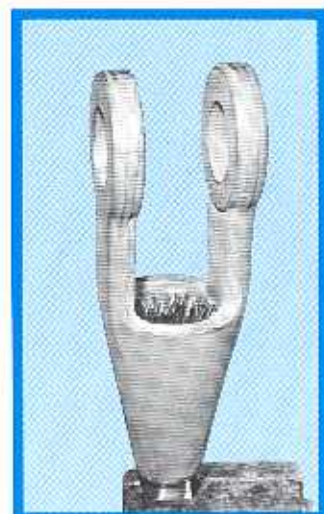
Six Easy Installation Steps



1. Place a wire seizing on the rope at the point where it will emerge from the base of the socket. For elevator applications, allow for turned-back strand.



2. Open the rope and broom individual wires. Clean the broom with a solvent such as trichloroethane or other effective degreaser. Air or blow dry.



3. Position the broom in the socket, mount the assembly securely, and align the axis of the rope and fitting. Most sockets will be poured vertically, as shown, but larger ones may be filled horizontally (page 4). Seal the socket neck with putty, duct tape or a similar material to prevent leakage. ■ Make sure the socket temperature is at least 18°C (65°F) and preferably 25° to 30°C (75° to 85°F). Caution: Socket temperatures above 38°C (100°F) may cause premature hardening.

4. Select appropriate Socketfast kit size, and make certain the temperature of both liquid components is between 18° and 32°C (65° to 90°F). If necessary, warm both sealed components by immersion in hot, not boiling, water. With a stick or mixing blade, mix resin for a minute or two, being careful to scrape the sides and bottom of the container, to assure a uniform consistency with all filler in suspension. Next, add all of the catalyst to the container of resin and mix thoroughly. ■ The large 4000-gram unit should be power mixed, using an electric drill and Jiffy mixing blade.



5. Immediately pour the mix carefully into one side of the fitting, allowing the catalyzed liquid resin to displace the air. Fill to the top of the cone. Take a stiff wire strand and slowly work it up and down between the strands at several points to eliminate entrapped air.



6. At 25°C (75°F), Socketfast will harden in 15 minutes to the point where the socket may be removed to a more convenient area to cure completely. One hour after initial gelation, Socketfast will develop the full listed catalog break strength of the wire rope or strand. ■ If a faster cure is required, heating the socket to 120°C (250°F), while using a Tempilstik to monitor the temperature, will cure the resin completely in 5 minutes. Heat the socket only; Never aim an open flame at the Socketfast. In hazardous locations, hot-water heating or low-pressure steam may be used.

RESIN SOCKET REMOVAL

Cut off the rope or strand as close to the base of the fitting as possible. Push out the Socketfast with a press or drift pin. If necessary, heat the socket to 175°-200°C (350°-400°F), and the resin cone can then be pushed out.



The safe, convenient, pourable resin socketing system for wire rope



HORIZONTAL SOCKETING

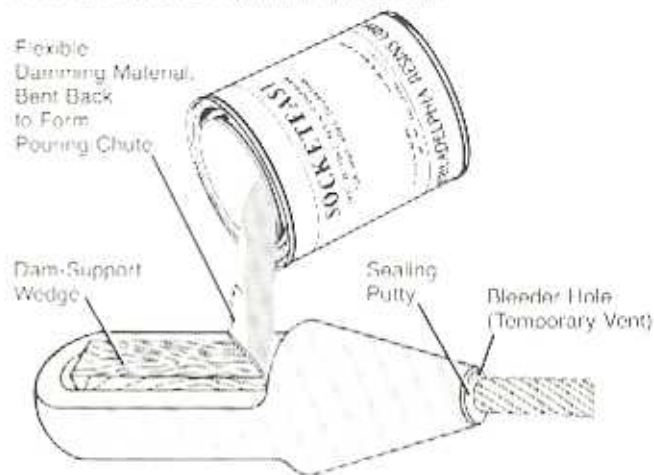
In shops or storage areas where reels of large-diameter wire rope are stored, on-site socketing can save thousands of dollars in handling costs. This is also true in remote operations such as offshore drilling rigs and platforms and in mining areas. No need for transportation to a special socketing area! No need for elevated pouring towers!

After the wire rope is prepared and cleaned as described, and after the fitting is installed, the assembled termination is placed in a horizontal position and blocked up to align the axes of the rope and the fitting. (If a number of sockets are to be installed on a routine basis, a suitable cradle can be fabricated to simplify this alignment procedure.)

After checking the broom for uniform wire distribution, the annular space between the rope and the base of the fitting should be sealed with putty, leaving a small *bleeder hole* at the 12 o'clock position. This temporary vent, which later will be sealed with putty, allows air to escape during pouring of the Socketfast, thus assuring complete resin saturation of the apex of the broom.

Insert a piece of damming material, such as cardboard or other flexible gasketing material, and a wooden wedge at the larger end of the basket, as illustrated. Place the cut-to-size dam over the

opening, bending back the upper portion to form a chute, and wedge it tightly in place. (For open spelter sockets, insert a pin or dowel through the ears to serve as a pressure point for the block.)



FILL THE BASKET COMPLETELY: Continue pouring until the resin begins to come out of the bleeder hole at the base of the fitting. Then, seal that hole with putty and continue pouring until the basket is filled completely — and the level of the Socketfast in the chute remains constant. Excess material may be trimmed off after hardening, if desired.

Quantities of Socketfast® Required for Sockets of Various Sizes

Rope or Strand Size (in.)	Rope Fittings			Elevator Shackles			Rope or Strand Size (in.)	Rope Fittings		
	grams	cc	in. ³	grams	cc	in. ³		grams	cc	in. ³
3/4	15	9	0.5				1 1/8	860	495	30
7/16	30	17	1.1				1 1/4	1220	700	43
3/8	30	17	1.1	32	19	1.1	1 1/2	1220	700	43
7/16	60	35	2.1				2	2200	1265	78
1/2	60	35	2.1	60	35	2.1	2 1/8	2200	1265	78
1 1/16	90	52	3.2	60	35	2.1	2 1/4	2450	1410	86
3/8	90	52	3.2	100	58	3.5	2 3/8	2450	1410	86
1 1/16				130	75	4.6	2 1/2	3180	1830	112
3/4	150	86	5.3	145	84	5.1	2 3/4	3180	1830	112
7/8	215	125	7.5				2 3/4	3910	2250	137
1	275	160	9.7				3	5500	3160	193
1 1/8	365	210	13				3 1/4	6600	3795	232
1 1/4	610	350	21.5				3 1/2	8560	4920	300
1 3/8	610	350	21.5				3 3/4	10400	5980	365
1 1/2	735	420	26				4	13450	7730	472

Socketfast® is Packaged In Three Pre-Measured Kit Sizes

300 grams (173 cc - 10.5 cubic in.)
 1000 grams (575 cc - 35.1 cubic in.)
 4000 grams (2,299 cc - 140.3 cubic in.)

For detailed engineering and performance data, refer to Socketfast® Bulletin No. 622.

TW Philadelphia Resins Corporation

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