



## Protective High Temperature Resistant Jacket

### PROBLEM:

An industrial machine metalworking customer needed to protect machine power and signal circuitry from hot metal shavings and grinding debris over moderate-length cable runs. Although the metal particulates were not molten, they typically had a temperature range of 250-400°F for a few seconds to a minute. The customer's internal requirements dictated that the protective jacket must be capable of withstanding their temperatures, must not melt so as to retain the metal particles on the jacket surface, must be soft and pliable yet very rugged, and could not have a reflective metallic surface typical of heat barrier products. The protective jacket also had to be very easy to install and remove.

### MATERIAL:

SRFG-32 (32-mil Silicone-impregnated fiberglass) material and utilizing a high temperature, brass-toothed, Aramid-spine zipper as a closure mechanism.

### SOLUTION:

Zippertubing's solution was a jacket fabricated from our SRFG-32 (32-mil Silicone impregnated fiberglass) material and utilized a high-temperature, brass-toothed, Aramid-spine zipper as a closure mechanism. An optical outside overlap flap was designed and incorporated to protect the closed zipper from the raining particulate debris.

### CONCLUSION:

The result was a design that met the customer's requirements, eliminated the need to rewire the in-place machining systems, and eliminated the machine down-time which had tremendous cost implications.

