• Aluminized cloth and aluminum foil-cloth laminates are commercially available They can be used as curtains, for example, hung by rings from a bar, like a shower curtain These can be quickly pushed aside to work on controls or machinery A variety of inexpensive paper-backed foil packaging and house insulating products are available Some of these are wonderfully effective as heat reflectors, and can be made into expendable coverings for screens, frames, and the like

• A reflective *booth*, similar to a phone booth, is useful when there is a multitude of radiant heat sources, and is of benefit if a man can spend a fairly large proportion of his time back from the machine It must be provided with adequate ventilation, preferably using outside air Small windows permit the operator to see out The booth should be covered with aluminum foil, or made of sheet aluminum

Reflective clothing is available for men who work in extraordinarily hot environments, where the globe temperature is high Coats (Fig 30-5), pants, coveralls, and helmets are made of aluminized fabric They are highly reflective, although care is needed to keep them from wearing out or getting dirty or creased As a rule, they are not porous, and hence water vapor from the body cannot "breathe" through them This deficiency, however, becomes minor compared with the benefit that comes from reflecting a radiant heat load that would otherwise be overwhelming A full suit of this material is amazingly light in weight, as compared with the more conventional asbestos garments, but it could not be worn continuously because of its lack of porosity

Extreme conditions of high ambient air temperature plus large sources of radiated heat have been met by a suit of quilted material faced with aluminized cloth, a helmet with an infrared-reflective glass faceplate, and a self-contained air supply of compressed gas With such an outfit, men have made emergency repairs in kilns, remaining for a considerable period under temperatures up to 1000 F For brief periods, they can work in temperatures of 1500 F, and momentary exposures to environments of 2000 F

Relief to employees performing routine maintenance or inspection work in areas of high ambient temperature has been obtained with refrigerated suits One type carries a supply of dry ice in the top of the helmet Another gets refrigerated air from a portable refrigeration unit, this air being distributed about the wearer's body through air channels Tests in 150 F to 200 F ambient air temperature have been reported in which the air inside the suits was maintained at 90 F to 100 F for extended periods Other methods include use of liquid air, portable heat ex-



FIG 30-5 —Infrared-reflective hood and jacket
Courtesy Fyrepel Products