

HAND AND PORTABLE POWER TOOLS

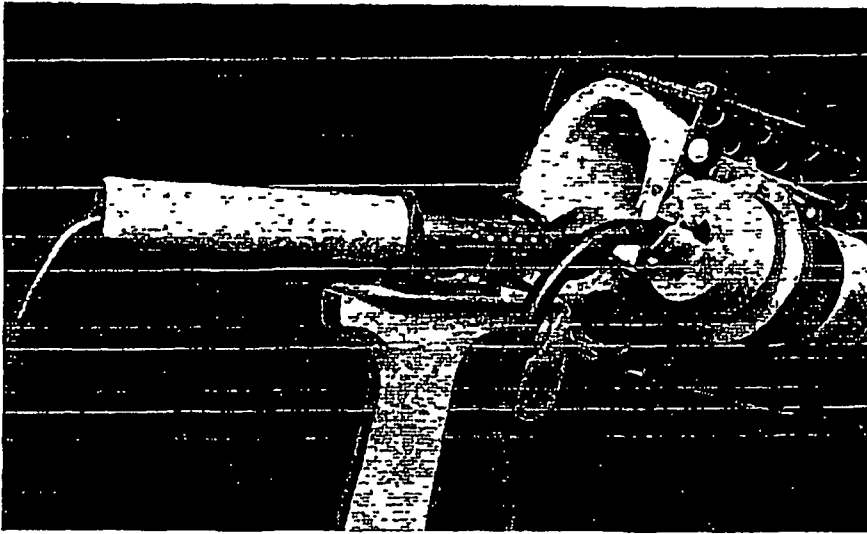


Fig 30-22. An excellent holder for a soldering iron. Note the iron's pistol grip that makes for ease of handling.

Courtesy Western Electric Company

be dismantled periodically, as well as thoroughly cleaned every day by being blown out with low-pressure air. If compressed air is used, the operator should wear goggles or work with a transparent shield between his body and the air blast.

The fire and explosion hazard of wood sanding is considerable, and precautions should be taken to keep the dust to a minimum through adequate ventilation or, if the machine is so designed, with a dust collector or vacuum bag.

If much wood sanding must be done, electrical equipment designed for this exposure should be used to minimize the explosion hazard. Fire extinguishers approved for electrical or Class C fires should be available, and employees should be told what to do in case of fire.

Soldering irons are the source of burns and of illness from inhalation of fumes. Insulated, noncombustible holders will practically eliminate the fire hazard and the danger of burns from accidental contact. Ordinary metal covering on wood tables is not sufficient because the metal conducts heat and may ignite the wood below.

Holders should be designed so that employees cannot accidentally touch the hot irons if they reach for them without looking. The best holder completely encloses the heated surface and is inclined so that the weight of the iron prevents it from falling out (Fig 30-22).

Harmful quantities of fumes from lead soldering should not be allowed to accumulate. Local regulations may require exhaust facilities if much lead soldering is done. Even if lead fumes are not present in harmful quantities, it may be desirable to exhaust the nuisance fumes and smoke. Air samples should be taken to verify that the amount of lead in the air is not harmful.

Lead solder particles should not be allowed to accumulate on the floor and on work tables. If the operation is such that the solder or flux may spatter, employees should wear face shields or do the work under a transparent shield.

Air power tools

Air hose. An air hose presents the same tripping or stumbling hazard as do cords on electric tools. Persons or material acci-