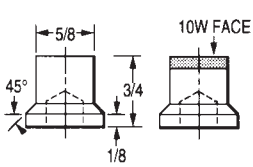


## HIGH PRESSURE TIPS

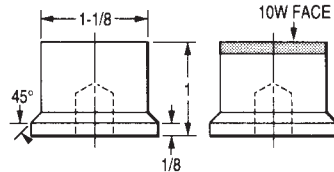
Spot and projection welding operations may utilize pressures over 2000 lbs. TUFFALOY high-pressure tips have flat bottoms which eliminates tip jamming in tapered holders. Assembled tip and holder heights are always the same, as contrasted to tapered tips which can be forced into the sockets varying distances.

TUFFALOY high pressure tips can be used in the two holder styles shown: PM holders for mounting on the platens of press-type welders, and straight holders for spot welder arm mounting. The tips are held to the holders by a threaded coupling. Copper tungsten faced tips are available for high pressure wear and projection welding.

### FLAT FACED

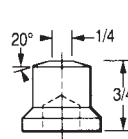


Size 1 PMC-2503  
Part No. 180-2203  
Part No. 180-2203-10W

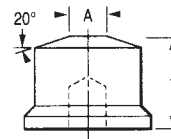


Size 2 PMC-2104  
Part No. 180-1040  
Part No. 180-2104-10W

### TRUNCATED CONE



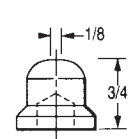
Size 1 PME-2503  
Part No. 180-2303



Size 2

'A'	Description	Part No.
1/4	PME-21041	180-1041
5/16	PME-21042	180-1042
3/8	PME-21043	180-1043
7/16	PME-21044	180-1044
1/2	PME-21045	180-1045

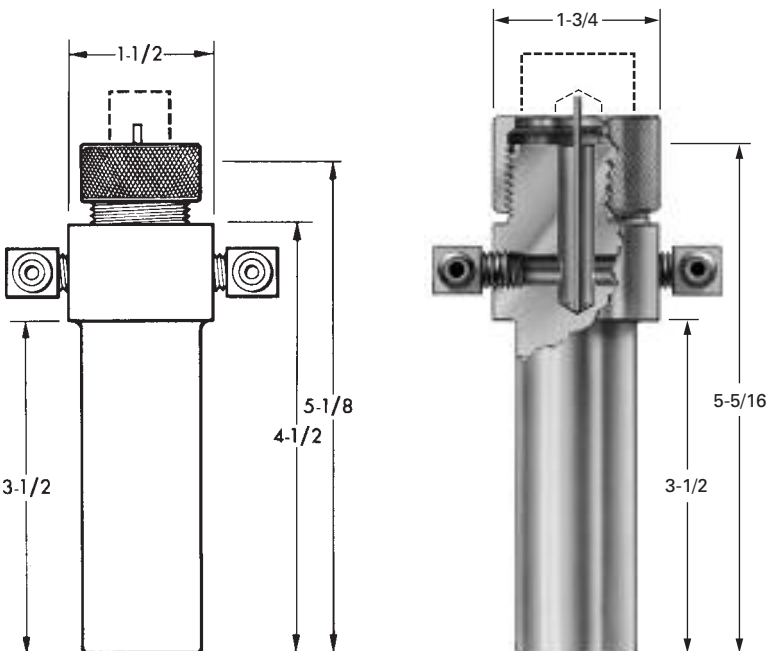
### DOME NOSED



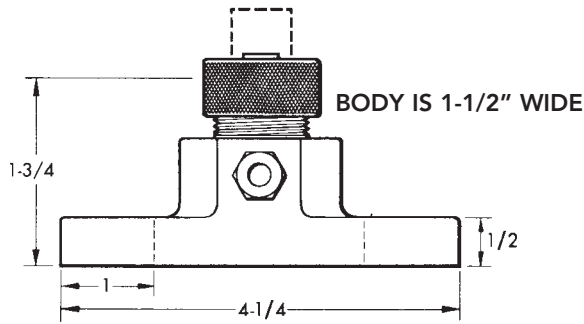
Size 1 PMB-2503  
Part No. 180-2103

## STRAIGHT HOLDERS CLASS 2 ALLOY

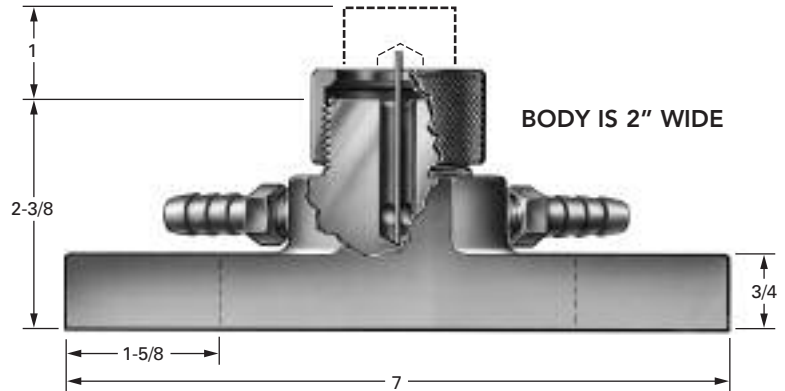
Straight holders are made for carrying TUFFALOY high pressure tips in rocker arm welders or press-type welder horn extensions. They are made in two basic sizes, to accommodate the Size 1 and 2 tips. They are of Class 2 alloy and hold the tips in the same manner as do the PM holders.



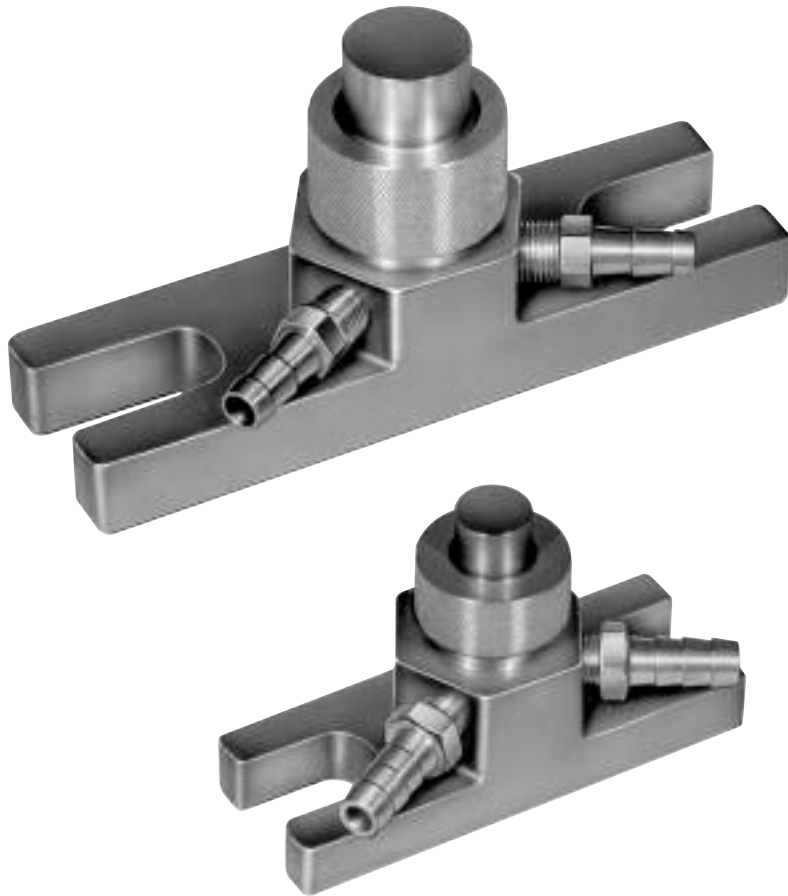
Size	Barrel Dia.	Description	Part No.
1	1	4511	350-4511
1	1-1/4	4512	350-4512
1	1-1/2	4513	350-4513
2	1-1/4	4521	350-4521
2	1-1/2	4522	350-4522



Size 1 PM holder (9/16-in. mounting bolts)  
4510 holder, Part No. 350-4510



Size 2 PM holder (3/4-in. mounting bolts)  
4520 holder, Part No. 350-4520



### PM HOLDERS

TUFFALOY PM holders are mounted directly to press-type welder platens, or are used as components of special weld fixturing.

**Platen Mounting:** PM holders bolt easily to the platen T-slots at any desired location, in a minimum of time (no intermediary device is required). Big half-inch mounting bolts may be used to assure good conductivity. They are the first such standard, stocked holders to be made available. They come in two sizes, to match standard T-slot spacing, and to hold the 2 sizes of tips shown. The small size 1 PM holder is for use on RWMA Size 1 press-type welders (3-1/2 in. spacing) and the large size, 2 PM holder is for Size 2 and 3 welders (5- and 6-in. spacing). The electrodes used do not require any particular radial positioning to obtain proper coolant flow. These are compact holders that may be used one-to-one or in multiples in close proximity to one another.

**Fixture Building:** PM holders make special fixture building easy too. They can be bolted to a fixture or backup base as easily as to a platen. They are compact and have self-contained coolant systems that eliminate making a coolant manifold out of the fixture.

**Hose Connections:** You may specify where you want the hose connectors in the hexagonal base. Select any two of the six possible locations and specify by using the symbols shown on the diagram (connector locations: A-B, or A-D, etc.). Position A-C is standard. (A-F and C-D are not possible.)

