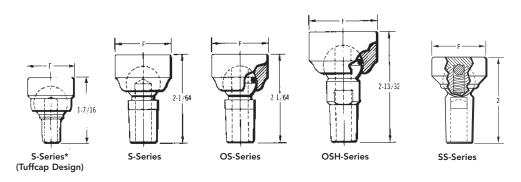
TUFFALOY

SWIVEL TIPS

Swivel tips have ball-jointed swivel heads to compensate for minor misalignment, and to eliminate marking of the work surface. They are all machined from Class 2 alloy bar stock. The S-and SS-Series tip water hole does not reach the head. In the OS and OSH models, the water does contact the head, and O-rings are used to seal it. In the SS Series a spring is used to keep pressure on head for better positioning. Class 1 and class 3 heads are also available.

Note: Standard swivel tilt is approximately 18', a 25' swivel is available on request. Add suffix "HS" to above part number.



| Taper No. | Face Dia. 'F' | S-Series | | OS-Series | | OSH-Series | | SS-Series | |
|--------------|---------------------------------|-------------------------|----------------------------------|----------------------------|----------------------------------|--|--|------------------|----------------------|
| | | Descrip- tion | Part No. | Descrip. tion | Part No. | Descrip- tion | Part No. | Descrip- tion | Part No. |
| 5-CT* | 7/8 1 1-1/4 | S-248 S-249 S-250 | 182-0248 182-0249 182-0250 | | | | | | |
| 4RW | 7/8 1 1-1/4 | S-348 S-350 S-351 | 182-0348 182-0350 182-0351 | OS-348 OS-350 OS-351 | 182-1348 182-1350 182-1351 | | | | |
| 5RW | 7/8 1 1-1/4 1-1/2 2 | S-349 S-353 S-354 | 182-0349 182-0353 182-0354 | OS-349 OS-353 OS-354 | 182-1349 182-1353 182-1354 | OSH-353 OSH-354 OSH-356 OSH-358 | 182-2353 182-2354 182-2356 182-2358 | SS-353 SS-354 | 182-3353 182-3354 |
| 7RW | 2-1/2 | | | | | 3360 | 182-3360 | | |

*Will fit Tuffcap adapter shanks having No. 5 RW tapers, as shown on page 6.

TUFFALOY

REFRACTORY METAL-FACED TIPS

| Nose | Taper | Facing Alloy | Dime | nsions | Descrip- | Part | |
|---------|-------|--------------|------|--------|-------------|----------|--|
| Туре | No. | Class | A | В | tion | No. | |
| | 4RW | 14 | 3/16 | 3/8 | A-2408-100M | 185-0120 | |
| | 4RW | 13 | 3/16 | 3/8 | A-2408-100W | 185-0130 | |
| Pointed | 5RW | 11 | 1/4 | 3/8 | A-2508-10W | 185-0150 | |
| | 5RW | 14 | 1/4 | 3/8 | A-2508-100M | 185-0160 | |
| | 5RW | 13 | 1/4 | 3/8 | A-2508-100W | 185-0170 | |
| | 4RW | 11 | 1/2 | 1/4 | B-2408-10W | 185-1110 | |
| Dome | 5RW | 11 | 5/8 | 1/4 | B-2508-10W | 185-1120 | |
| | 5RW | 13 | 5/8 | 1/4 | B-2508-100W | 185-1170 | |
| | 4RW | 11 | 1/2 | 1/4 | C-2408-10W | 185-1210 | |
| | 4RW | 14 | 1/2 | 1/4 | C-2408-100M | 185-1220 | |
| Flat | 4RW | 13 | 1/2 | 1/4 | C-2408-100W | 185-1230 | |
| | 5RW | 11 | 5/8 | 1/4 | C-2508-10W | 185-1250 | |
| | 5RW | 14 | 5/8 | 1/4 | C-2508-100M | 185-1260 | |
| | 5RW | 13 | 5/8 | 1/4 | C-2508-100W | 185-1270 | |

The **TUFFALOY** copper-tungsten, tungsten and molybdenum-faced tips listed here withstand greater heat and pressure, at the expense of some conductivity. Besides being used for spot welding high resistance base metals, they are useful in achieving "heat balance" when welding dissimilar metals. (The higher resistance electrode is used against the lower resistance, or thinner, member, to help contain the heat generated.) They have the same diameters and tapers as the standard straight tips in this catalog. Bodies are of Class 2 alloy. Lengths other than those shown can be ordered.

