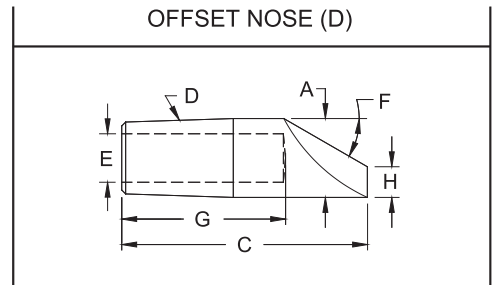
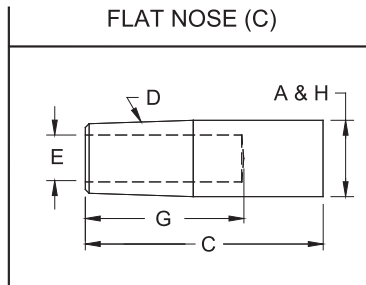


STRAIGHT ELECTRODES



| 4 RW TAPER (D) | | | |
|----------------|--------------|--------------|-------------|
| RWMA Class 1 | RWMA Class 2 | RWMA Class 3 | Face Dia. H |
| 1311 | 3311 | 5311 | .482 |
| 1312 | 3312 | 5312 | |
| 1313 | 3313 | 5313 | |
| 1314 | 3314 | 5314 | |
| 1315 | 3315 | 5315 | |
| 1316 | 3316 | 5316 | |
| 1317 | 3317 | 5317 | |
| 1318 | 3318 | 5318 | |
| 1319 | 3319 | 5319 | |
| 13112 | 33112 | 53112 | |
| 13114 | 33114 | 53114 | |
| 13116 | 33116 | 53116 | |
| 13118 | 33118 | 53118 | |

| COMMON DIMENSIONS | | | |
|-------------------|-------------------|------------------|--------------|
| Major Dia. A | Water Hole Dia. E | Overall Length C | Hole Depth G |
| .482 | 9/32 | 1 | 5/8 |
| | | 1-1/4 | 3/4 |
| | | 1-1/2 | 1 |
| | | 1-3/4 | 1-1/4 |
| | | 2 | 1-1/2 |
| | | 2-1/4 | 1-3/4 |
| | | 2-1/2 | 2 |
| | | 2-3/4 | 2-1/4 |
| | | 3 | 2-1/2 |
| | | 3-1/4 | 2-3/4 |
| | | 3-1/2 | 3 |
| | | 3-3/4 | 3-1/4 |
| 4 | 3-1/2 | | |

| 4 RW TAPER (D) | | | | |
|----------------|--------------|--------------|--------------|-------------|
| RWMA Class 1 | RWMA Class 2 | RWMA Class 3 | Nose Angle F | Face Dia. H |
| 1411 | 3411 | 5411 | 45° | 3/16 |
| 1412 | 3412 | 5412 | 40° | |
| 1413 | 3413 | 5413 | 30° | |
| 1414 | 3414 | 5414 | 30° | |
| 1415 | 3415 | 5415 | | |
| 1416 | 3416 | 5416 | | |
| 1417 | 3417 | 5417 | 30° | |
| 1418 | 3418 | 5418 | | |
| 1419 | 3419 | 5419 | | |
| 14112 | 34112 | 54112 | 30° | |
| 14114 | 34114 | 54114 | | |
| 14116 | 34116 | 54116 | | |
| 14118 | 34118 | 54118 | | |

| 5 RW TAPER (D) | | | |
|----------------|--------------|--------------|-------------|
| RWMA Class 1 | RWMA Class 2 | RWMA Class 3 | Face Dia. H |
| 1322 | 3322 | 5322 | 5/8 |
| 1323 | 3323 | 5323 | |
| 1324 | 3324 | 5324 | |
| 1325 | 3325 | 5325 | |
| 1326 | 3326 | 5326 | |
| 1327 | 3327 | 5327 | |
| 1328 | 3328 | 5328 | |
| 1329 | 3329 | 5329 | |
| 13212 | 33212 | 53212 | |
| 13214 | 33214 | 53214 | |
| 13216 | 33216 | 53216 | |
| 13218 | 33218 | 53218 | |
| 13220 | 33220 | 53220 | |
| 13222 | 33222 | 53222 | |

| COMMON DIMENSIONS | | | |
|-------------------|-------------------|------------------|--------------|
| Major Dia. A | Water Hole Dia. E | Overall Length C | Hole Depth G |
| .625 | 3/8 | 1-1/4 | 3/4 |
| | | 1-1/2 | 3/4 |
| | | 1-3/4 | 1 |
| | | 2 | 1-1/4 |
| | | 2-1/4 | 1-1/2 |
| | | 2-1/2 | 1-3/4 |
| | | 2-3/4 | 2 |
| | | 3 | 2-1/4 |
| | | 3-1/4 | 2-1/2 |
| | | 3-1/2 | 2-3/4 |
| | | 3-3/4 | 3 |
| | | 4 | 3-1/4 |
| 4-1/4 | 3-1/2 | | |
| 4-1/2 | 3-3/4 | | |

| 5 RW TAPER (D) | | | | |
|----------------|--------------|--------------|--------------|-------------|
| RWMA Class 1 | RWMA Class 2 | RWMA Class 3 | Nose Angle F | Face Dia. H |
| 1422 | 3422 | 5422 | 40° | 1/4 |
| 1423 | 3423 | 5423 | 40° | |
| 1424 | 3424 | 5424 | 30° | |
| 1425 | 3425 | 5425 | 30° | |
| 1426 | 3426 | 5426 | | |
| 1427 | 3427 | 5427 | | |
| 1428 | 3428 | 5428 | 30° | |
| 1429 | 3429 | 5429 | | |
| 14212 | 34212 | 54212 | | |
| 14214 | 34214 | 54214 | 30° | |
| 14216 | 34216 | 54216 | | |
| 14218 | 34218 | 54218 | | |
| 14220 | 34220 | 54220 | | |
| 14222 | 34222 | 54222 | 30° | |

*Electrodes of other tapers and alloys available upon request.