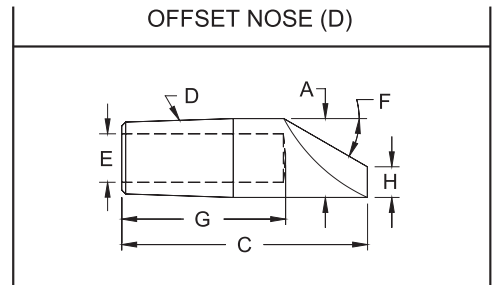
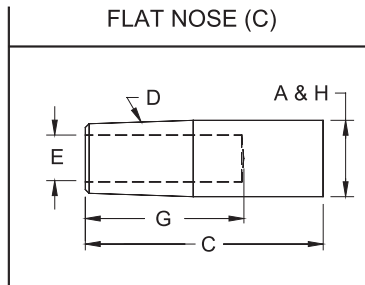


## STRAIGHT ELECTRODES



| 4 RW TAPER (D)         |                       |                         |                   |
|------------------------|-----------------------|-------------------------|-------------------|
| CMW <sup>®</sup><br>28 | CMW <sup>®</sup><br>3 | CMW <sup>®</sup><br>100 | Face<br>Dia.<br>H |
| Class 1                | Class 2               | Class 3                 |                   |
| 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<br>Dia.<br>A | Water<br>Hole Dia.<br>E | Overall<br>Length<br>C | Hole<br>Depth<br>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)         |                       |                         |                    |                   |
|------------------------|-----------------------|-------------------------|--------------------|-------------------|
| CMW <sup>®</sup><br>28 | CMW <sup>®</sup><br>3 | CMW <sup>®</sup><br>100 | Nose<br>Angle<br>F | Face<br>Dia.<br>H |
| Class 1                | Class 2               | Class 3                 |                    |                   |
| 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) |       |       |     |
|----------------|-------|-------|-----|
| 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<br>Dia.<br>A | Water<br>Hole Dia.<br>E | Overall<br>Length<br>C | Hole<br>Depth<br>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)         |                       |                         |                    |                   |
|------------------------|-----------------------|-------------------------|--------------------|-------------------|
| CMW <sup>®</sup><br>28 | CMW <sup>®</sup><br>3 | CMW <sup>®</sup><br>100 | Nose<br>Angle<br>F | Face<br>Dia.<br>H |
| Class 1                | Class 2               | Class 3                 |                    |                   |
| 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                   |                    |                   |

\*Electrodes of other tapers and alloys available upon request.