

# SAE Taps and Thread Mills



## Series 676 Taps for SAE J1926-1 and J514 Ports

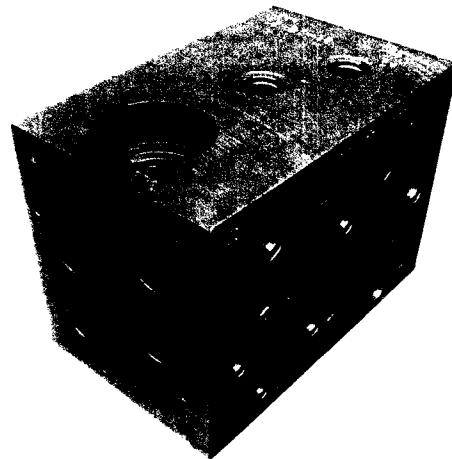
= MS16142 SAME  
✓

inch/metric



| SAE Tube # | Size   | Thread TPI | Tolerance | Pitch Diameter               | Mean Minor Dia. | Pitch Dia. Limit | Chamfer | TiCN Coated EDP Number |
|------------|--------|------------|-----------|------------------------------|-----------------|------------------|---------|------------------------|
| 2          | 5/16   | 24         | UNF-2B    | .2854/.2902<br>7,25/7,37     | 0.272<br>6,91   | H-4              | Bott    | 676-14134N             |
| 3          | 3/8    | 24         | UNF-2B    | .3430/.3528<br>8,71/8,96     | 0.335<br>8,51   | H-4              | Bott    | 676-14202N             |
| 4          | 7/16   | 20         | UNF-2B    | .4050/.4104<br>10,29/10,42   | 0.389<br>9,88   | H-5              | Bott    | 676-14257N             |
| 5          | 1/2    | 20         | UNF-2B    | .4675/.4731<br>11,87/12,02   | 0.452<br>11,48  | H-3              | Bott    | 676-14310N             |
| 6          | 9/16   | 18         | UNF-2B    | .5264/.5323<br>13,37/13,52   | 0.509<br>12,93  | H-3              | Bott    | 676-14358N             |
| 8          | 3/4    | 16         | UNF-2B    | .7094/.7159<br>18,02/18,18   | 0.689<br>17,50  | H-5              | Bott    | 676-14483N             |
| 10         | 7/8    | 14         | UNF-2B    | .8286/.8356<br>21,05/21,22   | 0.806<br>20,47  | H-4              | Bott    | 676-14518N             |
| 12         | 1-1/16 | 12         | UN-2B     | 1.0084/1.0158<br>25,61/25,80 | 0.981<br>24,92  | H-5              | Bott    | 676-26540N             |
| 14         | 1-3/16 | 12         | UN-2B     | 1.1344/1.1409<br>28,81/28,98 | 1.106<br>28,09  | H-5              | Bott    | 676-26600N             |
| 16         | 1-5/16 | 12         | UN-2B     | 1.2584/1.2659<br>31,96/32,15 | 1.231<br>31,27  | H-5              | Bott    | 676-26663N             |
| 20         | 1-5/8  | 12         | UN-2B     | 1.5709/1.5785<br>39,90/40,09 | 1.544<br>39,22  | H-6              | Bott    | 676-26759N             |
| 24         | 1-7/8  | 12         | UN-2B     | 1.8209/1.8287<br>46,25/46,45 | 1.794<br>45,57  | H-6              | Bott    | 676-26798N             |
| 32         | 2-1/2  | 12         | UN-2B     | 2.4459/2.4540<br>62,13/62,33 | 2.419<br>61,44  | H-6              | Bott    | 676-26861N             |

See page PC-8 for recommended speed and feed information.



# SAE Taps and Thread Mills



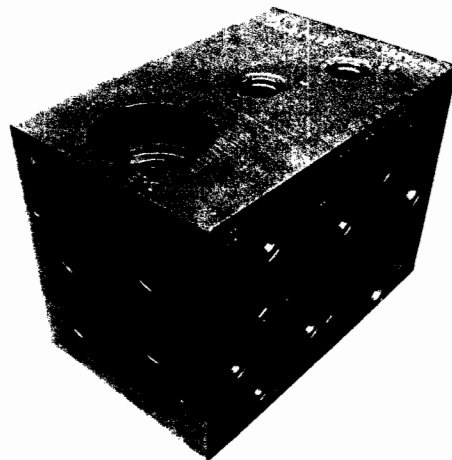
## Series 676 – Taps for SAE J1926-1 and J514 Ports

inch/metric



| SAE<br>Tube # | Size   | Thread<br>TPI | Tolerance | Pitch<br>Diameter            | Mean<br>Minor Dia. | Pitch Dia.<br>Limit | Chamfer | TiCN Coated<br>EDP Number |
|---------------|--------|---------------|-----------|------------------------------|--------------------|---------------------|---------|---------------------------|
| 2             | 5/16   | 24            | UNF-2B    | .2854/.2902<br>7,25/7,37     | 0.272<br>6,91      | H-4                 | Bott    | 676-14134N                |
| 3             | 3/8    | 24            | UNF-2B    | .3430/.3528<br>8,71/8,96     | 0.335<br>8,51      | H-4                 | Bott    | 676-14202N                |
| 4             | 7/16   | 20            | UNF-2B    | .4050/.4104<br>10,29/10,42   | 0.389<br>9,88      | H-5                 | Bott    | 676-14257N                |
| 5             | 1/2    | 20            | UNF-2B    | .4675/.4731<br>11,87/12,02   | 0.452<br>11,48     | H-3                 | Bott    | 676-14310N                |
| 6             | 9/16   | 18            | UNF-2B    | .5264/.5323<br>13,37/13,52   | 0.509<br>12,93     | H-3                 | Bott    | 676-14358N                |
| 8             | 3/4    | 16            | UNF-2B    | .7094/.7159<br>18,02/18,18   | 0.689<br>17,50     | H-5                 | Bott    | 676-14483N                |
| 10            | 7/8    | 14            | UNF-2B    | .8286/.8356<br>21,05/21,22   | 0.806<br>20,47     | H-4                 | Bott    | 676-14518N                |
| 12            | 1-1/16 | 12            | UN-2B     | 1.0084/1.0158<br>25,61/25,80 | 0.981<br>24,92     | H-5                 | Bott    | 676-26540N                |
| 14            | 1-3/16 | 12            | UN-2B     | 1.1344/1.1409<br>28,81/28,98 | 1.106<br>28,09     | H-5                 | Bott    | 676-26600N                |
| 16            | 1-5/16 | 12            | UN-2B     | 1.2584/1.2659<br>31,96/32,15 | 1.231<br>31,27     | H-5                 | Bott    | 676-26663N                |
| 20            | 1-5/8  | 12            | UN-2B     | 1.5709/1.5785<br>39,90/40,09 | 1.544<br>39,22     | H-6                 | Bott    | 676-26759N                |
| 24            | 1-7/8  | 12            | UN-2B     | 1.8209/1.8287<br>46,25/46,45 | 1.794<br>45,57     | H-6                 | Bott    | 676-26798N                |
| 32            | 2-1/2  | 12            | UN-2B     | 2.4459/2.4540<br>62,13/62,33 | 2.419<br>61,44     | H-6                 | Bott    | 676-26861N                |

See page PC-8 for recommended speed and feed information.



# ISO Taps and Thread Mills



## Series 677 - Taps, Straight Internal Thread Specifications

metric/inch



| Thread Size & Pitch<br>PitchMin | TPI   | Tolerance | Nominal Port Bore Diameter |                         |                    | Tap Data   |         |               |
|---------------------------------|-------|-----------|----------------------------|-------------------------|--------------------|------------|---------|---------------|
|                                 |       |           | Part Pitch<br>Dia. Min.    | Part Pitch<br>Dia. Max. | Mean Minor<br>Dia. | D<br>Limit | Chamfer | EDP<br>Number |
| M 8 x 1<br>0.0394               | 25,40 | 6H        | 7,35<br>0.2894             | 7,50<br>0.2953          | 7,04<br>0.277      | 5          | Bott    | 677-26989N    |
| M 10 x 1<br>0.0394              | 25,40 | 6H        | 9,35<br>0.3681             | 9,50<br>0.3740          | 9,04<br>0.356      | 5          | Bott    | 677-27036N    |
| M 12 x 1.5<br>0.0591            | 16,93 | 6H        | 11,03<br>0.4341            | 11,22<br>0.4416         | 10,54<br>0.415     | 6          | Bott    | 677-27061N    |
| M 14 x 1.5<br>0.0591            | 16,93 | 6H        | 13,03<br>0.5128            | 13,22<br>0.5203         | 12,52<br>0.493     | 6          | Bott    | 677-27089N    |
| M 16 x 1.5<br>0.0591            | 16,93 | 6H        | 15,03<br>0.5916            | 15,21<br>0.5990         | 14,53<br>0.572     | 6          | Bott    | 677-27120N    |
| M 18 x 1.5<br>0.0591            | 16,93 | 6H        | 17,03<br>0.6703            | 17,22<br>0.6778         | 16,54<br>0.651     | 6          | Bott    | 677-27137N    |
| M 20 x 1.5<br>0.0591            | 16,93 | 6H        | 19,02<br>0.7490            | 19,22<br>0.7565         | 18,67<br>0.735     | 6          | Bott    | 677-27161N    |
| M 22 x 1.5<br>0.0591            | 16,93 | 6H        | 21,03<br>0.8278            | 21,22<br>0.8353         | 20,52<br>0.808     | 6          | Bott    | 677-27182N    |
| M 27 x 2<br>0.0787              | 12,70 | 6H        | 25,70<br>1.0118            | 25,93<br>1.0207         | 25,02<br>0.985     | 7          | Bott    | 677-27227N    |
| M 33 x 2<br>0.0787              | 12,70 | 6H        | 31,70<br>1.2481            | 31,93<br>1.2569         | 31,01<br>1.221     | 7          | Bott    | 677-27254N    |
| M 42 x 2<br>0.0787              | 12,70 | 6H        | 40,70<br>1.6024            | 40,92<br>1.6112         | 40,03<br>1.576     | 7          | Bott    | 677-64220N    |
| M 48 x 2<br>0.0787              | 12,70 | 6H        | 46,70<br>1.8386            | 46,94<br>1.8479         | 46,02<br>1.812     | 7          | Bott    | 677-64820N    |
| M 60 x 2<br>0.0787              | 12,70 | 6H        | 58,70<br>2.3111            | 58,94<br>2.3204         | 58,01<br>2.284     | 7          | Bott    | 677-66020N    |

See page PC-8 for feed and speed recommendations for taps.