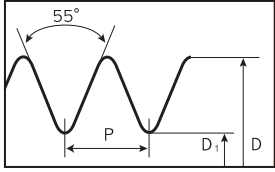


나사산 예비 가공 홀 직경 - 탭가공 / 스레드 밀링



PF(G), PS(Rp), BSW

PF(G) DIN EN ISO 228에 따른 관용 나사산

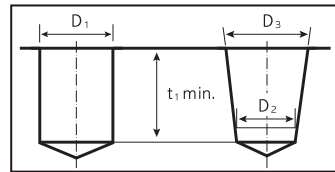
| D 직경 Diameter | D ₁ | | |
|---------------------|----------------|----------|--------------------------|
| | min (mm) | max (mm) | 드릴 직경 Drill Dia. (mm) |
| PF(G) 1/16-28 | 6.561 | 6.843 | 6.80 |
| PF(G) 1/8-28 | 8.566 | 8.848 | 8.80 |
| PF(G) 1/4-19 | 11.445 | 11.890 | 11.80 |
| PF(G) 3/8-19 | 14.950 | 15.395 | 15.25 |
| PF(G) 1/2-14 | 18.632 | 19.173 | 19.00 |
| PF(G) 5/8-14 | 20.588 | 21.129 | 21.00 |
| PF(G) 3/4-14 | 24.118 | 24.659 | 24.50 |
| PF(G) 7/8-14 | 27.878 | 28.419 | 28.25 |
| PF(G) 1-11 | 30.292 | 30.932 | 30.75 |
| PF(G) 1 1/8-11 | 34.940 | 35.580 | 35.50 |
| PF(G) 1 1/4-11 | 38.953 | 39.593 | 39.50 |
| PF(G) 1 3/8-11 | 41.366 | 42.006 | 41.90 |
| PF(G) 1 1/2-11 | 44.846 | 45.486 | 45.25 |
| PF(G) 1 3/4-11 | 50.789 | 51.429 | 51.00 |
| PF(G) 2-11 | 56.657 | 57.297 | 57.00 |
| PF(G) 2 1/4-11 | 62.753 | 63.393 | 63.00 |
| PF(G) 2 1/2-11 | 72.227 | 72.867 | 72.60 |
| PF(G) 3-11 | 84.927 | 85.567 | 85.00 |

BSW BS 84에 따른 Whitworth 나사산

| D 직경 Diameter | D ₁ | | |
|---------------------|----------------|----------|--------------------------|
| | min (mm) | max (mm) | 드릴 직경 Drill Dia. (mm) |
| 1/16-60 | 1.045 | 1.231 | 1.2 |
| 3/32-48 | 1.703 | 1.911 | 1.9 |
| 1/8-40 | 2.362 | 2.59 | 2.5 |
| 5/32-32 | 2.952 | 3.213 | 3.1 |
| 3/16-24 | 3.407 | 3.745 | 3.6 |
| 7/32-24 | 4.201 | 4.539 | 4.5 |
| 1/4-20 | 4.724 | 5.155 | 5 |
| 5/16-18 | 6.131 | 6.591 | 6.5 |
| 3/8-16 | 7.493 | 7.988 | 7.9 |
| 7/16-14 | 8.79 | 9.33 | 9.2 |
| 1/2-12 | 9.989 | 10.59 | 10.5 |
| 9/16-12 | 11.577 | 12.178 | 12 |
| 5/8-11 | 12.919 | 13.558 | 13.4 |
| 3/4-10 | 15.798 | 16.484 | 16.4 |
| 7/8-9 | 18.612 | 19.354 | 19.25 |
| 1-8 | 21.335 | 22.148 | 22 |
| 1 1/8-7 | 23.929 | 24.833 | 24.75 |
| 1 1/4-7 | 27.104 | 28.008 | 27.5 |
| 1 3/8-6 | 29.505 | 30.529 | 30 |
| 1 1/2-6 | 32.68 | 33.704 | 33.5 |
| 1 5/8-5 | 34.771 | 35.965 | 35.5 |
| 1 3/4-5 | 37.946 | 39.14 | 39 |
| 1 7/8-4.5 | 40.398 | 41.705 | 41.5 |
| 2-4 1/2 | 43.573 | 44.88 | 44.5 |
| 2 1/4-4 | 49.02 | 50.468 | 50 |
| 2 1/2-4 | 55.37 | 56.818 | 56 |

PS(Rp) DIN EN10226-1에 따른 Whitworth 관용 나사산

| 직경 Diameter | D ₁ | | |
|-----------------|----------------|----------|--------------------------|
| | min (mm) | max (mm) | 드릴 직경 Drill Dia. (mm) |
| PS(Rp) 1/16-28 | 6.490 | 6.632 | 6.55 |
| PS(Rp) 1/8-28 | 8.495 | 8.637 | 8.60 |
| PS(Rp) 1/4-19 | 11.341 | 11.549 | 11.50 |
| PS(Rp) 3/8-19 | 14.846 | 15.054 | 15.00 |
| PS(Rp) 1/2-14 | 18.490 | 18.774 | 18.50 |
| PS(Rp) 5/8-14 | 20.446 | 20.73 | 20.50 |
| PS(Rp) 3/4-14 | 23.976 | 24.26 | 24.00 |
| PS(Rp) 1-11 | 30.112 | 30.472 | 30.25 |
| PS(Rp) 1 1/4-11 | 38.773 | 39.133 | 39.00 |
| PS(Rp) 1 1/2-11 | 44.629 | 45.063 | 45.00 |
| PS(Rp) 2-11 | 56.440 | 56.874 | 56.50 |
| PS(Rp) 2 1/2-11 | 72.010 | 72.444 | 72.20 |
| PS(Rp) 3-11 | 84.710 | 85.144 | 85.00 |



NPT, NPTF 도면

NPT ASME B1.20.1에 따른 관용 표준 나사산, 테이퍼 1:16

| 직경 Diameter | D | | | |
|------------------|----------------|----------------|----------------|----------------|
| | D ₁ | D ₂ | D ₃ | T ₁ |
| 1/16-27 NPT | 6.150 | 5.950 | 6.39 | 10.7 |
| 1/8-27 NPT | 8.400 | 8.310 | 8.74 | 10.8 |
| 1/4-18 NPT | 11.100 | 10.730 | 11.36 | 15.6 |
| 3/8-18 NPT | 14.300 | 14.150 | 14.80 | 16.0 |
| 1/2-14 NPT | 17.900 | 17.470 | 18.32 | 20.8 |
| 3/4-14 NPT | 23.300 | 22.790 | 23.67 | 21.3 |
| 1-11 1/2 NPT | 29.000 | 28.640 | 29.69 | 25.6 |
| 1 1/4-11 1/2 NPT | 37.700 | 3.370 | 38.45 | 26.1 |
| 1 1/2-11 1/2 NPT | 43.700 | 43.440 | 44.52 | 26.1 |
| 2-11 1/2 NPT | 55.600 | 55.450 | 56.56 | 26.5 |
| 2 1/2-8 NPT | 66.300 | 66.140 | 67.62 | 36.3 |
| 3-8 NPT | 82.300 | 81.900 | 83.52 | 38.5 |

NPTF ASME B1.20.3에 따른 미국 관용 표준 나사산, 테이퍼 1:16

| 직경 Diameter | D | | | |
|-------------------|----------------|----------------|----------------|----------------|
| | D ₁ | D ₂ | D ₃ | T ₁ |
| 1/16-27 NPTF | 6.1 | 5.97 | 6.41 | 10.3 |
| 1/8-27 NPTF | 8.4 | 8.33 | 8.77 | 10.3 |
| 1/4-18 NPTF | 11.0 | 10.77 | 11.40 | 15.0 |
| 3/8-18 NPTF | 14.5 | 14.19 | 14.84 | 15.3 |
| 1/2-14 NPTF | 17.5 | 17.48 | 18.33 | 19.9 |
| 3/4-14 NPTF | 23.0 | 22.84 | 23.72 | 20.4 |
| 1-11 1/2 NPTF | 29.0 | 28.62 | 29.76 | 24.5 |
| 1 1/4-11 1/2 NPTF | 37.5 | 37.44 | 38.52 | 25.0 |
| 1 1/2-11 1/2 NPTF | 43.5 | 43.50 | 44.59 | 25.0 |
| 2-11 1/2 NPTF | 56.0 | 55.51 | 56.62 | 25.4 |
| 2 1/2-8 NPTF | 66.0 | 66.03 | 67.71 | 38.0 |
| 3-8 NPTF | 82.0 | 81.80 | 83.62 | 40.0 |