



03 - Unità di misura, tabelle di conversione

- Tabella unità di misura sistema internazionale
- Tabelle di conversione
- Tabelle pesi specifici e temp. di fusione
- Tabelle filettature
- Tabelle pesi materiali

UNITA' DI MISURA SISTEMA INTERNAZIONALE

| Grandezza | Nome | Simbolo |
|----------------------|------------------------------|------------------------|
| Lunghezza | Metro | m |
| Superficie | metro quadro | m ² |
| Volume | metro cubo | m ³ |
| Forza | Newton | N |
| Massa | kilogrammo | Kg |
| Pressione | Pascal | Pa (N/m ²) |
| Lavoro ed energia | Joull | J (Nm) |
| Potenza | Watt | W (J/s) |
| Tempo | Secondo | s |
| Velocità | Metro / secondo | m/s |
| Accelerazione | Metro / secondo ² | m/s ² |
| Portata | Metro ³ / secondo | m ³ /s |
| Temperatura | Kelvin | °K |
| Frequenza | Hertz | Hz (1/s) |
| Corrente elettrica | Ampere | A |
| Tensione elettrica | Volt | V (W/A) |
| Resistenza elettrica | Ohm | Ω (V/A) |
| Potenza elettrica | Volt Ampere | VA (VA) |

TABELLE DI CONVERSIONE

| Lunghezza | centimetro (cm) | metro (m) | pollice (ln) | piede (ft) | larda (yd) |
|----------------|-----------------|-----------------------|--------------|-----------------------|------------|
| 1 metro (m) | 100 | 1 | 39,37 | 3,281 | 1,094 |
| 1 pollice (ln) | 2,54 | 2,54x10 ⁻² | 1 | 8,33x10 ⁻² | 0,028 |
| 1 piede (ft) | 30,48 | 0,3048 | 12 | 1 | 0,333 |
| 1 iarda (yd) | 91,44 | 0,9144 | 36 | 3 | 1 |

| Superficie | centimetro quadro (cm ²) | metro quadro (m ²) | pollice quadro (sq in) | piede quadro (sq ft) | larda quadra (sq yd) |
|--|--------------------------------------|--------------------------------|------------------------|-----------------------|-----------------------|
| 1 centimetro quadro (cm ²) | 1 | 1x10 ⁻⁴ | 0,155 | 1,08x10 ⁻³ | 1,2x10 ⁻⁴ |
| 1 metro quadro (m ²) | 1x10 ⁴ | 1 | 1.550 | 10,764 | 1,2 |
| 1 pollice quadro (sq in) | 6,452 | 6,45x10 ⁻⁴ | 1 | 6,95x10 ⁻³ | 7,72x10 ⁻⁴ |
| 1 piede quadro (sq ft) | 929 | 9,29x10 ⁻² | 144 | 1 | 0,111 |
| 1 iarda quadra (sq yd) | 8.361 | 0,8361 | 1.296 | 9 | 1 |

| Volume | Litro (l=dm ³) | Metro cubo (m ³) | pollice cubo (cu in) | piede cubo (cu ft) | Gallone (gal -USA) | Gallone (gal-GBr) |
|---------------------------------|----------------------------|------------------------------|-----------------------|-----------------------|-----------------------|----------------------|
| 1 litro (l) = 1 dm ³ | 1 | 1x10 ⁻³ | 61,02 | 3,53x10 ⁻² | 0,2642 | 0,22 |
| 1 metro cubo (m ³) | 1.000 | 1 | 6,102x10 ⁴ | 35,31 | 264,2 | 220 |
| 1 pollice cubo (cu in) | 1,64x10 ⁻² | 1,64x10 ⁻⁵ | 1 | 5,8x10 ⁻⁴ | 4,33x10 ⁻³ | 3,6x10 ⁻³ |
| 1 piede cubo (cu ft) | 28,317 | 2,83x10 ⁻² | 1.728 | 1 | 7,48 | 6,23 |
| 1 Gallone (gal -USA) | 3,785 | 3,79x10 ⁻³ | 231 | 0,1337 | 1 | 0,8327 |
| 1 Gallone (gal -GB) | 4,546 | 4,55x10 ⁻³ | 277,4 | 0,1605 | 1,2 | 1 |

| Massa (Peso) | Kilogrammo (Kg) | Libbra (lb) | tonnellata USA | tonnellata GB |
|-------------------|-----------------|-------------|------------------------|------------------------|
| 1 kilogrammo (Kg) | 1 | 2,205 | 1,102x10 ⁻³ | 9,842x10 ⁻⁴ |
| 1 libbra (lb) | 0,4536 | 1 | 5x10 ⁻⁴ | 4,464x10 ⁻⁴ |
| 1 tonnellata USA | 907,2 | 2.000 | 1 | 0,8929 |
| 1 tonnellata GB | 1.016 | 2.240 | 1,12 | 1 |

| Forza | Newton (N) | Kilopound (kgp) | Poundal (pdl) |
|-------------------|------------|-----------------|---------------|
| 1 Newton (N) | 1 | 0,102 | 7,23 |
| 1 Kilopound (kgp) | 9,807 | 1 | 70,93 |
| 1 Poundal (pdl) | 0,1383 | 0,0141 | 1 |

| Pressione | Pascal (Pa) | Bar (bar) | Poundal/pollice ² (psi) | atmosfera tecnica (at=kg/cm ²) | Atmosfera (atm) | colonna di mercurio (mmHg = Torr) | colonna di acqua (mH ₂ O) |
|--|-----------------------|-----------------------|------------------------------------|--|------------------------|-----------------------------------|--------------------------------------|
| 1 Pascal (Pa) | 1 | 1x10 ⁻⁵ | 1,45x10 ⁻⁴ | 1,02x10 ⁻⁵ | 9,87x10 ⁻⁶ | 7,5x10 ⁻³ | 1,02x10 ⁻⁴ |
| 1 Bar (bar) | 1x10 ⁵ | 1 | 14,50 | 1,02 | 0,9869 | 750 | 10,2 |
| 1 Poundal/pollice ² (psi) | 6.895 | 0,069 | 1 | 7,03x10 ⁻² | 0,06805 | 51,72 | 0,703 |
| 1 Atmosfera tecnica (at=kg/cm ²) | 9,807x10 ⁴ | 0,9807 | 14,22 | 1 | 0,9678 | 735,6 | 10 |
| 1 Atmosfera(atm) | 1,013x10 ⁵ | 1,013 | 14,70 | 1,033 | 1 | 760 | 10,33 |
| 1 mm di mercurio (mmHg = Torr) | 133,32 | 1,34x10 ⁻³ | 1,934x10 ⁻² | 1,36x10 ⁻³ | 1,316x10 ⁻³ | 1 | 1,36x10 ⁻² |
| 1 metro di acqua (mH ₂ O) | 9.810 | 9,81x10 ⁻² | 1,423 | 0,1 | 9,682x10 ⁻² | 73,6 | 1 |

| Lavoro ed energia | Kilocalorie (kcal) | Kilogrammetro (kgm) | Kilowatt (kWh) | Cavallo vap./ora (hph)-non metrico | Joule (J) |
|---------------------------------|-----------------------|---------------------|------------------------|------------------------------------|-----------------------|
| 1 Kilocalorie (kcal) | 1 | 427 | 1,163x10 ⁻³ | 1,561x10 ⁻³ | 4.190 |
| 1 Kilogrammetro (kgm) | 2,34x10 ⁻³ | 1 | 2,724x10 ⁻⁶ | 3,653x10 ⁻⁶ | 9,806 |
| 1 kilowatt-hour (kWh) | 860 | 367.122 | 1 | 1,341 | 3,6x10 ⁵ |
| 1 cavallo/ora-non metrico (hph) | 641 | 273.761 | 0,7457 | 1 | 2,685x10 ⁶ |
| 1 Joule (J) | 2,39x10 ⁻⁴ | 0,102 | 2,78x10 ⁻⁷ | 3,725x10 ⁻⁷ | 1 |

| Temperatura | Kelvin (K) | Celsius (°C) | Fahrenheit (°F) |
|-----------------|-----------------------|------------------|------------------|
| Kelvin (K) | / | K-273 = °C | (K-273)x1,8 = °F |
| Celsius (°C) | °C+273 = K | / | (°Cx1,8)+32 = °F |
| Fahrenheit (°F) | 273+[(°F-32):1,8] = K | (°F-32):1,8 = °C | / |

PESI SPECIFICI E TEMPERATURA DI FUSIONE

Sostanze SOLIDE

| Sostanze | Sigla chimica | Peso specifico (Kg/dm ³) | Temperatura di fusione (°C) |
|----------------------|---------------|--------------------------------------|-----------------------------|
| Acciaio non legato | | 7,8 | 1480 |
| Acciaio inossidabile | | 7,8 | 1450 |
| Acciaio al tungsteno | | 8,7 | 1450 |
| Alluminio | Al | 2,7 | 660 |
| Alpaca | | 8,6 | 1050 |
| Antimonio | Sb | 6,67 | 630 |
| Argento | Ag | 10,5 | 960 |
| Bronzo | 94 Cu 6 Sn | 7,4 ÷ 8,9 | 900 |
| Bronzo per getti | | 8,78 | 990 |
| Cadmio | Cd | 8,64 | 321 |
| Calcio | Ca | 1,55 | 851 |
| Cemento | | 1,65 | - |
| Cobalto | | 8,9 | 1490 |
| Corindone | | 3,9 ÷ 4,0 | 2050 |
| Cromo | Cr | 7,1 | 1890 |
| Diamante | C | 3,51 | ~ 3500 |
| Ferro | Fe | 7,86 | 1539 |
| Ghisa | | 7,25 | 1150 ÷ 1250 |
| Gomma | | 1,1 | - |
| Manganese | Mn | 7,3 | 1260 |
| Magnesio | Mg | 1,75 | 650 |
| Metallo bianco | | 7,5 ÷ 10,1 | 300 ... 400 |
| Metallo duro K10 | | 14,7 | > 2000 |
| Metallo duro P10 | | 11,1 | > 2000 |
| Mica | | 2,6 ÷ 3,6 | ~ 1300 |
| Molibdeno | Mo | 10,2 | 2600 |
| Nichel | Ni | 8,85 | 1450 |
| Oro | Au | 19,83 | 1063 |
| Ossido di ferro | | 5,1 | 1565 |
| Ottone 63/37 | | 8,5 | 900 ÷ 1000 |
| Paraffina | | 0,92 | 54 |
| Piombo | Pb | 11,34 | 327 |
| Plastica tecnica | | 1,4 ÷ 1,5 | - |
| Platino | | 21,45 | 1775 |
| Rame | Cu | 8,93 | 1085 |
| Smeriglio | | 4 | 2200 |
| Stagno | Sn | 7,28 | 232 |
| Titanio | Ti | 4,6 | 3380 |
| Tungsteno | W | 19,3 | 3370 |
| Vanadio | V | 6,1 | 1800 |
| Zinco | Zn | 7,15 | 420 |
| Zinco pressofuso | | 6,8 | 390 |

Sostanze LIQUIDE

| Sostanze | Sigla chimica | Peso specifico (Kg/dm ³) | Temperatura di fusione (°C) |
|-------------------|---------------|--------------------------------------|-----------------------------|
| Acqua distilata | | 1 | 0 |
| Alcool etilico | | 0,79 | -117 |
| Benzina | | 0,68 ÷ 0,75 | -30 ÷ -50 |
| Benzolo puro | | 0,88 | 64 |
| Gasolio | | 0,88 ÷ 1 | -5 |
| Mercurio | Hg | 13,59 | -38,9 |
| Olio lubrificante | | 0,91 | -20 |
| Olio per macchine | | 0,91 | -5 |
| Petrolio | | 0,81 | -70 |
| Percloroetilene | | 1,62 | |

Sostanze GASSOSE

| Sostanze | Sigla chimica | Peso specifico (Kg/dm ³) | Temperatura di fusione (°C) |
|---------------------|-------------------------------|--------------------------------------|-----------------------------|
| Acetilene | C ₂ H ₂ | 0,91 | -81 |
| Anidride carbonica | CO ₂ | 1,53 | -57 |
| Aria | | 1 | -220 |
| Nitrogeno | N ₂ | 0,97 | -210 |
| Gas illuminante | | 0,47 | -230 |
| Idrogeno | H ₂ | 0,07 | -257 |
| Neon | Ne | 0,69 | -249 |
| Ossido di carbonio | CO | 0,97 | -205 |
| Ossigeno | O ₂ | 1,1 | -218 |
| Vapore acqueo 100°C | | 0,62 | 0 |

Filettature METRICHE UNI 4535-64

ISO a passo grosso

| Filettatura | Passo (mm) | Ø Foratura (mm) | Ø Punta (mm) |
|-------------|------------|-----------------|--------------|
| M 1,6 | 0,35 | 1,321 | 1,20 |
| M 1,8 | 0,35 | 1,521 | 1,45 |
| M 2 | 0,40 | 1,679 | 1,60 |
| M 2,2 | 0,45 | 1,838 | 1,75 |
| M 2,5 | 0,45 | 2,138 | 2,05 |
| M 3 | 0,50 | 2,599 | 2,5 |
| M 3,5 | 0,60 | 3,010 | 2,9 |
| M 4 | 0,70 | 3,422 | 3,3 |
| M 4,5 | 0,75 | 3,878 | 3,7 |
| M 5 | 0,80 | 4,334 | 4,2 |
| M 6 | 1 | 5,153 | 5 |
| M 7 | 1 | 6,153 | 6 |
| M 8 | 1,25 | 6,912 | 6,8 |
| M 9 | 1,25 | 7,912 | 7,8 |
| M 10 | 1,5 | 8,676 | 8,5 |
| M 11 | 1,5 | 9,676 | 9,5 |
| M 12 | 1,75 | 10,441 | 10,2 |
| M 14 | 2 | 12,210 | 12 |
| M 16 | 2 | 14,210 | 14 |
| M 18 | 2,5 | 15,744 | 15,5 |
| M 20 | 2,5 | 17,744 | 17,5 |
| M 22 | 2,5 | 19,744 | 19,5 |
| M 24 | 3 | 21,252 | 21 |
| M 27 | 3 | 24,252 | 24 |
| M 30 | 3,5 | 26,771 | 26,5 |
| M 33 | 3,5 | 29,771 | 29,5 |
| M 36 | 4 | 32,270 | 32 |
| M 39 | 4 | 35,270 | 35 |
| M 42 | 4,5 | 37,799 | 37,5 |
| M 45 | 4,5 | 40,799 | 40,5 |
| M 48 | 5 | 43,297 | 43 |
| M 52 | 5 | 47,297 | 47 |
| M 56 | 5,5 | 50,796 | 50,5 |
| M 60 | 5,5 | 54,796 | 54,5 |
| M 64 | 6 | 58,305 | 58 |
| M 68 | 6 | 62,305 | 62 |

ISO a passo fine

| Filettatura | Passo (mm) | Ø Foratura (mm) | Ø Punta (mm) |
|-------------|------------|-----------------|--------------|
| M 3 | 0,35 | 2,721 | 2,65 |
| M 4 | 0,50 | 3,599 | 3,5 |
| M 5 | 0,50 | 4,599 | 4,5 |
| M 6 | 0,75 | 5,378 | 5,2 |
| M 7 | 0,75 | 6,378 | 6,2 |
| M 8 | 0,75 | 7,378 | 7,2 |
| M 8 | 1 | 7,153 | 7 |
| M 9 | 1 | 8,153 | 8 |
| M10 | 0,75 | 9,378 | 9,2 |
| M 10 | 1 | 9,153 | 9 |
| M 10 | 1,25 | 8,912 | 8,8 |
| M 11 | 1 | 10,153 | 10 |
| M 12 | 1 | 11,153 | 11 |
| M 12 | 1,25 | 10,912 | 10,8 |
| M 12 | 1,5 | 10,676 | 10,5 |
| M 14 | 1 | 13,153 | 13 |
| M 14 | 1,25 | 12,912 | 12,8 |
| M 14 | 1,5 | 12,676 | 12,5 |
| M 15 | 1 | 14,153 | 14 |
| M 15 | 1,5 | 13,676 | 13,5 |
| M 16 | 1 | 15,153 | 15 |
| M 16 | 1,5 | 14,676 | 14,5 |
| M 18 | 1 | 17,153 | 17 |
| M 18 | 1,5 | 16,676 | 16,5 |
| M 18 | 2 | 16,210 | 16 |
| M 20 | 1 | 19,153 | 19 |
| M 20 | 1,5 | 18,676 | 18,5 |
| M 20 | 2 | 18,210 | 18 |
| M 22 | 1 | 21,153 | 21 |
| M 22 | 1,5 | 20,676 | 20,5 |
| M 21 | 2 | 20,210 | 20 |
| M 24 | 1 | 23,153 | 23 |
| M 24 | 1,5 | 22,676 | 22,5 |
| M 24 | 2 | 22,210 | 22 |
| M 24 | 1 | 24,153 | 24 |
| M 25 | 1,5 | 23,676 | 23,5 |
| M 26 | 1,5 | 24,676 | 24,5 |
| M 27 | 1,5 | 25,676 | 25,5 |
| M 27 | 2 | 25,210 | 25 |
| M 28 | 1,5 | 26,676 | 26,5 |
| M 30 | 1,5 | 28,676 | 28,5 |
| M 30 | 2 | 28,210 | 28 |
| M 32 | 1,5 | 30,676 | 30,5 |
| M 33 | 2 | 31,210 | 31 |
| M 35 | 1,5 | 33,676 | 33,5 |
| M 36 | 1,5 | 34,676 | 34,5 |
| M 36 | 2 | 34,210 | 34 |
| M 36 | 3 | 33,252 | 33 |
| M 38 | 1,5 | 36,676 | 36,5 |
| M 39 | 3 | 36,252 | 36 |
| M 40 | 1,5 | 38,676 | 38,5 |
| M 42 | 1,5 | 40,676 | 40,5 |
| M 45 | 1,5 | 43,676 | 43,5 |
| M 50 | 1,5 | 48,676 | 48,5 |

Filettature WHITWORTH UNI 2709

«W»

| Filettatura | Ø esterno (mm) | Ø foratura (mm) | Ø punta (mm) |
|----------------|----------------|-----------------|--------------|
| W 1/16" - 60 | 1,588 | 1,18 | 1,2 |
| W 3/32" - 48 | 2,381 | 1,87 | 1,9 |
| W 1/8" - 40 | 3,175 | 2,56 | 2,6 |
| W 5/32" - 32 | 3,969 | 3,21 | 3,2 |
| W 3/16" - 24 | 4,762 | 3,74 | 3,8 |
| W 7/32" - 24 | 5,556 | 4,54 | 4,6 |
| W 1/4" - 20 | 6,350 | 5,13 | 5,2 |
| W 5/16" - 18 | 7,938 | 6,58 | 6,6 |
| W 3/8" - 16 | 9,525 | 8,01 | 8,0 |
| W 7/16" - 14 | 11,112 | 9,37 | 9,4 |
| W 1/2" - 12 | 12,700 | 10,66 | 10,5 |
| W 9/16" - 12 | 14,288 | 12,25 | 12,0 |
| W 5/8" - 11 | 15,875 | 13,66 | 13,5 |
| W 3/4" - 10 | 19,050 | 16,61 | 16,5 |
| W 7/8" - 9 | 22,225 | 19,51 | 19,5 |
| W 1" - 8 | 25,400 | 22,35 | 22,5 |
| W 1 1/8" - 7 | 28,575 | 25,09 | 25,0 |
| W 1 1/4" - 7 | 31,750 | 28,26 | 28,0 |
| W 1 3/8" - 6 | 34,925 | 30,86 | 31,0 |
| W 1 1/2" - 6 | 38,100 | 34,03 | 34,0 |
| W 1 5/8" - 5 | 41,275 | 36,39 | 36,5 |
| W 1 3/4" - 5 | 44,450 | 39,56 | 39,5 |
| W 1 7/8" - 4,5 | 47,625 | 42,20 | 42,0 |
| W 2" - 4,5 | 50,800 | 45,37 | 45,5 |
| W 2 1/4" - 4 | 57,150 | 51,04 | 51,0 |
| W 2 1/2" - 4 | 63,500 | 57,39 | 57,5 |
| W 2 3/4" - 3,5 | 69,850 | 62,87 | 63,0 |
| W 3" - 3 | 76,200 | 69,22 | 69,5 |

«BSF»

| Filettatura | Ø esterno (mm) | Ø foratura (mm) | Ø punta (mm) |
|--------------|----------------|-----------------|--------------|
| W 3/16" - 32 | 4,762 | 4,00 | 4,0 |
| W 7/32" - 28 | 5,556 | 4,69 | 4,7 |
| W 1/4" - 26 | 6,350 | 5,41 | 5,4 |
| W 5/16" - 22 | 7,938 | 6,83 | 6,8 |
| W 3/8" - 20 | 9,525 | 8,30 | 8,3 |
| W 7/16" - 18 | 11,113 | 9,76 | 9,8 |
| W 1/2" - 16 | 12,700 | 11,17 | 11,0 |
| W 9/16" - 16 | 14,288 | 12,76 | 12,5 |
| W 5/8" - 14 | 15,875 | 14,13 | 14,0 |
| W 3/4" - 12 | 19,050 | 17,01 | 17,0 |
| W 7/8" - 11 | 22,225 | 20,00 | 20,0 |
| W 1" - 10 | 25,400 | 22,96 | 23,0 |
| W 1 1/8" - 9 | 28,575 | 25,86 | 26,0 |
| W 1 1/4" - 9 | 31,750 | 29,04 | 29,0 |
| W 1 3/8" - 8 | 34,925 | 31,87 | 32,0 |
| W 1 1/2" - 8 | 38,100 | 35,05 | 35,0 |
| W 1 5/8" - 8 | 41,275 | 38,22 | 38,0 |
| W 1 3/4" - 7 | 44,450 | 40,96 | 41,0 |
| W 1 7/8" - 7 | 47,625 | 44,14 | 44,0 |
| W 2" - 7 | 50,800 | 47,31 | 47,5 |
| W 2 1/4" - 6 | 57,150 | 53,08 | 53,0 |
| W 2 1/2" - 6 | 63,500 | 59,43 | 59,5 |
| W 2 3/4" - 6 | 69,850 | 65,78 | 66,0 |
| W 3" - 5 | 76,200 | 71,32 | 71,5 |

Filettature GAS

«G» UNI 338-66

| Filettatura | Ø esterno (mm) | Ø foratura (mm) | Ø punta (mm) |
|---------------|----------------|-----------------|--------------|
| G 1/8" - 28 | 9,73 | 8,68 | 8,70 |
| G 1/4" - 19 | 13,16 | 11,62 | 11,75 |
| G 3/8" - 19 | 16,66 | 15,12 | 15,25 |
| G 1/2" - 14 | 20,95 | 18,86 | 19,00 |
| G 5/8" - 14 | 22,91 | 20,82 | 21,00 |
| G 3/4" - 14 | 26,44 | 24,35 | 24,50 |
| G 7/8" - 14 | 30,20 | 28,11 | 28,25 |
| G 1" - 11 | 33,25 | 30,59 | 30,50 |
| G 1 1/8" - 11 | 37,90 | 35,24 | 35,50 |
| G 1 1/4" - 11 | 41,91 | 39,25 | 39,50 |
| G 1 3/8" - 11 | 44,32 | 41,66 | 41,50 |
| G 1 1/2" - 11 | 47,80 | 45,14 | 45,00 |
| G 1 5/8" - 11 | 51,32 | 48,67 | 48,50 |
| G 1 3/4" - 11 | 53,75 | 51,08 | 51,00 |
| G 2" - 11 | 59,61 | 56,95 | 57,00 |
| G 2 1/4" - 11 | 65,71 | 63,05 | 63,00 |
| G 2 1/2" - 11 | 75,18 | 72,52 | 72,50 |
| G 2 3/4" - 11 | 81,53 | 78,87 | 79,00 |
| G 3" - 11 | 87,88 | 85,22 | 85,50 |
| G 3 1/4" - 11 | 93,98 | 91,32 | 91,50 |
| G 3 1/2" - 11 | 100,33 | 97,67 | 97,50 |
| G 3 3/4" - 11 | 106,68 | 104,02 | 104,00 |
| G 4" - 11 | 113,03 | 110,37 | 110,50 |

«Gc» UNI 339-66

| Filettatura | Ø esterno (mm) | Ø foratura (mm) | Ø punta (mm) |
|--------------|----------------|-----------------|--------------|
| Gc 1/8"-28 | 8,5 | 4,9 | 3,1 |
| Gc 1/4"-19 | 11,5 | 7,3 | 4,7 |
| Gc 3/8"-19 | 15,0 | 7,7 | 5,1 |
| Gc 1/2"-14 | 18,5 | 10,0 | 6,4 |
| Gc 3/4"-14 | 23,5 | 11,3 | 7,7 |
| Gc 1"-11 | 30,0 | 12,7 | 8,1 |
| Gc 1 1/4"-11 | 38,0 | 15,0 | 10,4 |
| Gc 1 3/8"-11 | 41,0 | 15,0 | 10,4 |
| Gc 1 1/2"-11 | 44,5 | 15,0 | 10,4 |
| Gc 2"-11 | 56,0 | 18,2 | 13,6 |
| Gc 2 1/2"-11 | 72,0 | 21,0 | 14,0 |
| Gc 3"-11 | 85,0 | 24,1 | 17,1 |
| | | max | min |

Filettature AMERICANE

normale «NC» y «UNC»

| Filettatura | Ø esterno (mm) | Ø foratura (mm) | Ø punta (mm) |
|---------------|----------------|-----------------|--------------|
| UNC No. 1-64 | 1,854 | 1,425 | 1,582 |
| UNC No. 2-56 | 2,184 | 1,694 | 1,872 |
| UNC No. 3-48 | 2,515 | 1,941 | 2,136 |
| UNC No. 4-40 | 2,845 | 2,156 | 2,383 |
| UNC No. 5-40 | 3,175 | 2,487 | 2,697 |
| UNC No. 6-32 | 3,505 | 2,647 | 2,909 |
| UNC No. 8-32 | 4,166 | 3,307 | 3,515 |
| UNC No. 10-24 | 4,826 | 3,680 | 3,960 |
| UNC No. 12-24 | 5,486 | 4,341 | 4,575 |
| UNC 1/4"-20 | 6,350 | 4,976 | 5,232 |
| UNC 5/16"-18 | 7,938 | 6,411 | 6,680 |
| UNC 3/8"-16 | 9,525 | 7,805 | 8,087 |
| UNC 7/16"-14 | 11,112 | 9,149 | 9,451 |
| UNC 1/2"-13 | 12,700 | 10,584 | 10,896 |
| UNC 9/16"-12 | 14,288 | 11,996 | 12,319 |
| UNC 5/8"-11 | 15,875 | 13,376 | 13,709 |
| UNC 3/4"-10 | 19,050 | 16,299 | 16,644 |
| UNC 7/8"-9 | 22,225 | 19,169 | 19,530 |
| UNC 1"-8 | 25,400 | 21,963 | 22,339 |
| UNC 1 1/8"-7 | 28,575 | 24,648 | 25,039 |
| UNC 1 1/4"-7 | 31,750 | 27,823 | 28,214 |
| UNC 1 3/8"-6 | 34,925 | 30,343 | 30,800 |
| UNC 1 1/2"-6 | 38,100 | 33,518 | 33,975 |

fine «NF» y «UNF»

| Filettatura | Ø esterno (mm) | Ø foratura (mm) | | Ø punta (mm) |
|---------------|----------------|-----------------|--------|--------------|
| UNF No. 0-80 | 1,524 | 1,181 | 1,306 | 1,3 |
| UNF No. 1-72 | 1,854 | 1,473 | 1,613 | 1,6 |
| UNF No. 2-64 | 2,184 | 1,755 | 1,913 | 1,9 |
| UNF No. 3-56 | 2,515 | 2,024 | 2,174 | 2,1 |
| UNF No. 4-48 | 2,845 | 2,271 | 2,438 | 2,35 |
| UNF No. 5-44 | 3,175 | 2,550 | 2,713 | 2,65 |
| UNF No. 6-40 | 3,505 | 2,817 | 2,995 | 2,9 |
| UNF No. 8-36 | 4,166 | 3,401 | 3,561 | 3,5 |
| UNF No. 10-32 | 4,826 | 3,967 | 4,125 | 4 |
| UNF No. 12-28 | 5,486 | 4,503 | 4,466 | 4,6 |
| UNF 1/4"-28 | 6,350 | 5,367 | 5,519 | 5,4 |
| UNF 5/16"-24 | 7,938 | 6,792 | 6,957 | 6,7 |
| UNF 3/8"-24 | 9,525 | 8,379 | 8,545 | 8,4 |
| UNF 7/16"-20 | 11,112 | 9,738 | 9,921 | 9,8 |
| UNF 1/2"-20 | 12,700 | 11,326 | 11,509 | 11,4 |
| UNF 9/16"-18 | 14,288 | 12,761 | 12,954 | 12,8 |
| UNF 5/8"-18 | 15,875 | 14,348 | 14,542 | 14,4 |
| UNF 3/4"-16 | 19,050 | 17,330 | 17,534 | 17,4 |
| UNF 7/8"-14 | 22,225 | 20,261 | 20,477 | 20,3 |
| UNF 1"-12 | 25,400 | 23,109 | 23,338 | 23,2 |
| UNF 1 1/8"-12 | 28,570 | 26,284 | 26,513 | 26,4 |
| UNF 1 1/4"-12 | 31,750 | 29,459 | 29,688 | 29,6 |
| UNF 1 3/8"-12 | 34,920 | 32,634 | 32,863 | 32,7 |
| UNF 1 1/2"-12 | 38,100 | 35,809 | 36,038 | 35,9 |
| | | max | min | |

gas cilindrica «NPS»

| Filettatura | Ø esterno (mm) | Ø foratura (mm) | Ø punta (mm) |
|-------------|----------------|-----------------|--------------|
| NPS 1/8"-27 | 10,27 | 8,92 | 8,9 |
| NPS 1/4"-18 | 13,57 | 11,54 | 11,5 |
| NPS 3/8"-18 | 17,05 | 15,03 | 15,0 |
| NPS 1/2"-14 | 21,22 | 18,61 | 18,5 |
| NPS 3/4"-14 | 26,56 | 23,95 | 24,0 |
| NPS 1"-11½ | 33,22 | 30,05 | 30,0 |
| NPS 1¼"-11½ | 41,98 | 38,80 | 39,0 |
| NPS 1½"-11½ | 48,05 | 44,87 | 45,0 |
| NPS 2"-11½ | 60,09 | 56,91 | 57,0 |
| NPS 2½"-8 | 72,70 | 68,13 | 68,0 |
| NPS 3"-8 | 88,60 | 84,04 | 84,0 |

conica «NPT»

| Filettatura | Ø foratura (mm) |
|--------------|-----------------|
| NPT 1/8"-27 | 8,5 |
| NPT 1/4"-18 | 11,0 |
| NPT 3/8"-18 | 14,5 |
| NPT 1/2"-14 | 18,0 |
| NPT 3/4"-14 | 23,0 |
| NPT 1"-11½ | 29,0 |
| NPT 1¼"-11½ | 38,0 |
| NPT 1½"-11½ | 44,0 |
| NPT 2"-11½ | 56,0 |
| NPT 2 1/2"-8 | 67,0 |
| NPT 3"-8 | 83,0 |

PESO MATERIALI in Kg al metro

ACCIAIO (peso specifico 7,85 Kg/dm³)

| Dimensione (mm) | ● | ◑ | ■ | Dimensione (mm) | ● | ◑ | ■ | Dimensione (mm) | ● | ◑ | ■ | Dimensione (mm) | ● | ◑ | ■ |
|-----------------|-------|-------|-------|-----------------|-------|-------|-------|-----------------|-------|-------|-------|-----------------|-------|-------|-------|
| 2 | 0.024 | 0.027 | 0.031 | 22 | 2.98 | 3.29 | 3.80 | 46 | 12.93 | 14.40 | 16.60 | 100 | 61.62 | 67.98 | 78.50 |
| 2,5 | 0.038 | 0.042 | 0.049 | 23 | 3.26 | 3.57 | 4.12 | 48 | 14.20 | 15.67 | 18.09 | 110 | 74.60 | 82.26 | 94.99 |
| 3 | 0.055 | 0.061 | 0.070 | 24 | 3.55 | 3.92 | 4.52 | 50 | 15.40 | 17.00 | 19.60 | 120 | 88.80 | 97.90 | 113 |
| 3,5 | 0.075 | 0.083 | 0.096 | 25 | 3.85 | 4.21 | 4.91 | 52 | 16.70 | 18.51 | 21.22 | 130 | 104 | 114.9 | 132.7 |
| 4 | 0.098 | 0.109 | 0.126 | 26 | 4.17 | 4.60 | 5.26 | 53 | 17.30 | 19.10 | 22.05 | 140 | 121 | 133.3 | 153.9 |
| 4,5 | 0.125 | 0.138 | 0.159 | 27 | 4.49 | 4.96 | 5.72 | 54 | 17.96 | 19.81 | 22.89 | 150 | 139 | 153 | 176.6 |
| 5 | 0.154 | 0.170 | 0.196 | 28 | 4.83 | 5.29 | 6.10 | 55 | 18.70 | 20.60 | 23.70 | 160 | 158 | 174 | 201 |
| 6 | 0.222 | 0.245 | 0.283 | 29 | 5.14 | 5.67 | 6.54 | 56 | 19.30 | 21.31 | 24.62 | 170 | 178 | 196.5 | 226.9 |
| 7 | 0.302 | 0.333 | 0.385 | 30 | 5.55 | 6.12 | 7.06 | 58 | 20.70 | 22.87 | 26.41 | 180 | 200 | 220.3 | 254.3 |
| 8 | 0.395 | 0.435 | 0.502 | 31 | 5.87 | 6.46 | 7.54 | 60 | 22.20 | 24.47 | 28.30 | 190 | 223 | 245.4 | 283.4 |
| 9 | 0.499 | 0.551 | 0.636 | 32 | 6.31 | 6.96 | 8.04 | 62 | 23.69 | 26.13 | 30.17 | 200 | 247 | 271.9 | 314 |
| 10 | 0.617 | 0.680 | 0.785 | 33 | 6.71 | 7.32 | 8.55 | 64 | 25.24 | 27.84 | 32.15 | 210 | 272 | 299.8 | 346.2 |
| 11 | 0.746 | 0.823 | 0.950 | 34 | 7.06 | 7.86 | 9.07 | 65 | 26.00 | 28.72 | 33.20 | 220 | 298 | 329 | 379.9 |
| 12 | 0.888 | 0.979 | 1.130 | 35 | 7.55 | 8.33 | 9.62 | 66 | 26.84 | 29.61 | 34.19 | 230 | 326 | 359.6 | 415.3 |
| 13 | 1.04 | 1.140 | 1.33 | 36 | 7.99 | 8.81 | 10.20 | 68 | 28.50 | 31.43 | 36.30 | 240 | 355 | 391.6 | 452.2 |
| 14 | 1.21 | 1.33 | 1.54 | 37 | 8.37 | 9.30 | 10.75 | 70 | 30.20 | 33.30 | 38.50 | 250 | 385 | 424.9 | 490.6 |
| 15 | 1.39 | 1.52 | 1.77 | 38 | 8.90 | 9.81 | 11.34 | 72 | 31.84 | 35.24 | 40.69 | 260 | 417 | 459.6 | 530.7 |
| 16 | 1.58 | 1.73 | 2.01 | 39 | 9.38 | 10.34 | 11.94 | 74 | 33.74 | 37.23 | 42.98 | 270 | 449 | 495.6 | 572.3 |
| 17 | 1.78 | 1.96 | 2.27 | 40 | 9.86 | 10.88 | 12.60 | 75 | 34.70 | 38.20 | 44.20 | 280 | 483 | 533 | 615.4 |
| 18 | 2.00 | 2.18 | 2.54 | 41 | 10.28 | 11.40 | 13.20 | 76 | 35.60 | 39.26 | 45.34 | 300 | 554.8 | 611.8 | 706.5 |
| 19 | 2.23 | 2.45 | 2.83 | 42 | 10.91 | 12.00 | 13.85 | 78 | 37.50 | 41.36 | 47.75 | | | | |
| 20 | 2.47 | 2.70 | 3.14 | 44 | 11.83 | 13.16 | 15.20 | 80 | 39.50 | 43.50 | 50.20 | | | | |
| 21 | 2.72 | 3.00 | 3.44 | 45 | 12.50 | 13.77 | 15.90 | 90 | 49.90 | 55.07 | 63.58 | | | | |

ALLUMINIO (peso specifico 2,7 Kg/dm³)

| Dimensione (mm) | ● | ◑ | ■ | Dimensione (mm) | ● | ◑ | ■ | Dimensione (mm) | ● | ◑ | ■ | Dimensione (mm) | ● | ◑ | ■ |
|-----------------|-------|-------|-------|-----------------|-------|-------|-------|-----------------|--------|--------|--------|-----------------|---------|---------|---------|
| 2 | 0.008 | 0.009 | 0.011 | 22 | 1.026 | 1.131 | 1.307 | 46 | 4.487 | 4.947 | 5.715 | 100 | 21.206 | 23.384 | 27.000 |
| 2,5 | 0.013 | 0.014 | 0.016 | 23 | 1.122 | 1.237 | 1.429 | 48 | 4.886 | 5.387 | 6.224 | 110 | 25.659 | 28.294 | 32.670 |
| 3 | 0.019 | 0.021 | 0.024 | 24 | 1.223 | 1.347 | 1.555 | 50 | 5.302 | 5.845 | 6.570 | 120 | 30.536 | 33.672 | 38.900 |
| 3,5 | 0.025 | 0.028 | 0.031 | 25 | 1.326 | 1.462 | 1.689 | 52 | 5.734 | 6.322 | 7.304 | 130 | 35.810 | 39.488 | 45.617 |
| 4 | 0.034 | 0.037 | 0.043 | 26 | 1.434 | 1.581 | 1.826 | 53 | 5.957 | 6.568 | 7.588 | 140 | 41.564 | 45.833 | 52.947 |
| 4,5 | 0.043 | 0.047 | 0.054 | 27 | 1.546 | 1.704 | 1.968 | 54 | 6.184 | 6.819 | 7.877 | 150 | 47.712 | 52.612 | 60.800 |
| 5 | 0.053 | 0.058 | 0.068 | 28 | 1.663 | 1.833 | 2.118 | 55 | 6.415 | 7.069 | 8.168 | 160 | 54.300 | 59.877 | 69.171 |
| 6 | 0.077 | 0.084 | 0.097 | 29 | 1.783 | 1.966 | 2.271 | 56 | 6.650 | 7.333 | 8.471 | 170 | 61.300 | 67.596 | 78.089 |
| 7 | 0.104 | 0.115 | 0.132 | 30 | 1.909 | 2.104 | 2.430 | 58 | 7.134 | 7.866 | 9.087 | 180 | 68.700 | 75.756 | 87.480 |
| 8 | 0.136 | 0.150 | 0.173 | 31 | 2.038 | 2.247 | 2.596 | 60 | 7.634 | 8.420 | 9.720 | 190 | 76.600 | 84.468 | 97.579 |
| 9 | 0.172 | 0.189 | 0.219 | 32 | 2.171 | 2.394 | 2.765 | 62 | 8.152 | 8.989 | 10.384 | 200 | 84.800 | 93.510 | 108.000 |
| 10 | 0.212 | 0.234 | 0.270 | 33 | 2.309 | 2.546 | 2.941 | 64 | 8.686 | 9.578 | 11.064 | 210 | 93.500 | 103.104 | 119.108 |
| 11 | 0.257 | 0.283 | 0.327 | 34 | 2.451 | 2.702 | 3.122 | 65 | 8.960 | 9.880 | 11.414 | 220 | 102.600 | 113.138 | 130.700 |
| 12 | 0.306 | 0.337 | 0.389 | 35 | 2.598 | 2.864 | 3.308 | 66 | 9.237 | 10.185 | 11.766 | 230 | 112.200 | 123.724 | 142.929 |
| 13 | 0.358 | 0.395 | 0.456 | 36 | 2.748 | 3.029 | 3.500 | 68 | 9.806 | 10.813 | 12.491 | 240 | 122.150 | 134.696 | 155.605 |
| 14 | 0.416 | 0.458 | 0.529 | 37 | 2.903 | 3.201 | 3.698 | 70 | 10.391 | 11.458 | 13.230 | 250 | 132.600 | 146.220 | 168.917 |
| 15 | 0.477 | 0.526 | 0.608 | 38 | 3.062 | 3.376 | 3.900 | 72 | 10.933 | 12.056 | 13.927 | 260 | 143.350 | 158.074 | 182.611 |
| 16 | 0.543 | 0.599 | 0.691 | 39 | 3.226 | 3.557 | 4.109 | 74 | 11.612 | 12.804 | 14.792 | 270 | 154.600 | 170.480 | 196.942 |
| 17 | 0.613 | 0.675 | 0.780 | 40 | 3.393 | 3.736 | 4.320 | 75 | 11.928 | 13.153 | 15.194 | 280 | 166.250 | 183.326 | 211.783 |
| 18 | 0.687 | 0.757 | 0.865 | 41 | 3.565 | 3.930 | 4.541 | 76 | 12.249 | 13.507 | 15.603 | 300 | 190.900 | 210.508 | 243.184 |
| 19 | 0.766 | 0.844 | 0.975 | 42 | 3.741 | 4.125 | 4.765 | 78 | 12.902 | 14.227 | 16.435 | | | | |
| 20 | 0.848 | 0.935 | 1.080 | 44 | 4.105 | 4.526 | 5.229 | 80 | 13.572 | 14.966 | 17.280 | | | | |
| 21 | 0.935 | 1.031 | 1.191 | 45 | 4.294 | 4.735 | 5.468 | 90 | 17.177 | 18.941 | 21.870 | | | | |

OTTONE (peso specifico 8,5 Kg/dm³)

| Dimensione (mm) | ● | ◑ | ■ | Dimensione (mm) | ● | ◑ | ■ | Dimensione (mm) | ● | ◑ | ■ | Dimensione (mm) | ● | ◑ | ■ |
|-----------------|-------|-------|-------|-----------------|--------|--------|--------|-----------------|--------|--------|--------|-----------------|---------|---------|---------|
| 2 | 0.026 | 0.028 | 0.034 | 22 | 3.231 | 3.564 | 4.114 | 46 | 14.126 | 15.585 | 17.988 | 100 | 66.759 | 73.658 | 85.011 |
| 2,5 | 0.041 | 0.045 | 0.052 | 23 | 3.532 | 3.897 | 4.497 | 48 | 15.385 | 16.974 | 19.591 | 110 | 80.829 | 88.587 | 102.928 |
| 3 | 0.060 | 0.066 | 0.076 | 24 | 3.845 | 4.242 | 4.896 | 50 | 16.690 | 18.414 | 21.253 | 120 | 96.135 | 106.070 | 122.419 |
| 3,5 | 0.081 | 0.089 | 0.103 | 25 | 4.173 | 4.604 | 5.313 | 52 | 18.051 | 19.916 | 22.986 | 130 | 112.820 | 124.479 | 143.665 |
| 4 | 0.106 | 0.116 | 0.134 | 26 | 4.513 | 4.979 | 5.746 | 53 | 18.752 | 20.689 | 23.878 | 140 | 130.849 | 144.371 | 166.165 |
| 4,5 | 0.135 | 0.148 | 0.159 | 27 | 4.867 | 5.369 | 6.197 | 54 | 19.466 | 21.455 | 24.788 | 150 | 150.203 | 165.725 | 191.269 |
| 5 | 0.167 | 0.184 | 0.212 | 28 | 5.234 | 5.774 | 6.665 | 55 | 20.196 | 22.283 | 25.717 | 160 | 170.901 | 188.562 | 217.626 |
| 6 | 0.240 | 0.264 | 0.305 | 29 | 5.614 | 6.194 | 7.148 | 56 | 20.935 | 23.098 | 26.658 | 170 | 192.933 | 212.871 | 245.682 |
| 7 | 0.327 | 0.360 | 0.416 | 30 | 6.009 | 6.629 | 7.651 | 58 | 22.457 | 24.777 | 28.596 | 180 | 216.299 | 238.652 | 275.436 |
| 8 | 0.428 | 0.472 | 0.545 | 31 | 6.416 | 7.079 | 8.170 | 60 | 24.033 | 26.516 | 30.603 | 190 | 241.000 | 265.906 | 306.891 |
| 9 | 0.542 | 0.598 | 0.690 | 32 | 6.835 | 7.541 | 8.703 | 62 | 25.662 | 28.314 | 32.627 | 200 | 273.036 | 294.632 | 340.045 |
| 10 | 0.667 | 0.735 | 0.849 | 33 | 7.270 | 8.021 | 9.257 | 64 | 27.344 | 30.169 | 34.820 | 210 | 294.406 | 324.831 | 374.899 |
| 11 | 0.809 | 0.892 | 1.030 | 34 | 7.717 | 8.514 | 9.826 | 65 | 28.205 | 31.119 | 35.916 | 220 | 323.110 | 356.501 | 411.450 |
| 12 | 0.963 | 1.062 | 1.226 | 35 | 8.178 | 9.023 | 10.413 | 66 | 29.080 | 32.085 | 37.030 | 230 | 353.464 | 389.992 | 450.103 |
| 13 | 1.128 | 1.244 | 1.436 | 36 | 8.652 | 9.546 | 11.017 | 68 | 30.869 | 34.059 | 39.308 | 240 | 384.561 | 424.270 | 489.664 |
| 14 | 1.308 | 1.443 | 1.665 | 37 | 9.139 | 10.083 | 11.637 | 70 | 32.716 | 36.097 | 41.660 | 250 | 417.239 | 460.358 | 531.315 |
| 15 | 1.502 | 1.657 | 1.912 | 38 | 9.639 | 10.635 | 12.274 | 72 | 34.607 | 38.183 | 44.068 | 260 | 451.290 | 497.928 | 574.676 |
| 16 | 1.709 | 1.885 | 2.176 | 39 | 10.154 | 11.203 | 12.930 | 74 | 36.556 | 40.333 | 46.550 | 270 | 486.676 | 536.971 | 619.737 |
| 17 | 1.929 | 2.128 | 2.456 | 40 | 10.684 | 11.788 | 13.605 | 75 | 37.553 | 41.433 | 47.820 | 280 | 523.387 | 577.476 | 665.992 |
| 18 | 2.163 | 2.386 | 2.754 | 41 | 11.222 | 12.381 | 14.290 | 76 | 38.560 | 42.544 | 49.102 | 300 | 600.831 | 662.923 | 765.103 |
| 19 | 2.410 | 2.659 | 3.068 | 42 | 11.776 | 12.992 | 14.995 | 78 | 40.616 | 44.813 | 51.708 | | | | |
| 20 | 2.670 | 2.946 | 3.400 | 44 | 12.924 | 14.259 | 16.457 | 80 | 42.725 | 47.140 | 54.406 | | | | |
| 21 | 2.944 | 3.248 | 3.748 | 45 | 13.518 | 14.915 | 17.213 | 90 | 54.074 | 59.662 | 68.858 | | | | |