

TOLERANCES ISO ARBRES

| Extraits de tolérances ISO pour arbres (en microns : 1 µm = 0,001 mm) | | | | | | | | | | | | | |
|---|--------|--------|---------|----------|----------|----------|----------|-----------|------------|------------|------------|------------|------------|
| dimensions nominales (en mm) | | | | | | | | | | | | | |
| au-delà de à (inclus) | 1 3 | 3 6 | 6 10 | 10 18 | 18 30 | 30 50 | 50 80 | 80 120 | 120 180 | 180 250 | 250 315 | 315 400 | 400 500 |
| d9 es | -20 | -30 | -40 | -50 | -65 | -80 | -100 | -120 | -145 | -170 | -190 | -210 | -230 |
| ei | -45 | -60 | -76 | -93 | -117 | -142 | -174 | -207 | -245 | -285 | -320 | -350 | -385 |
| d10 es | -20 | -30 | -40 | -50 | -65 | -80 | -100 | -120 | -145 | -170 | -190 | -210 | -230 |
| ei | -60 | -78 | -98 | -120 | -149 | -180 | -220 | -260 | -305 | -355 | -400 | -440 | -480 |
| d11 es | -20 | -30 | -40 | -50 | -65 | -80 | -100 | -120 | -145 | -170 | -190 | -210 | -230 |
| ei | -80 | -105 | -130 | -160 | -195 | -240 | -290 | -340 | -395 | -460 | -510 | -570 | -630 |
| e7 es | -14 | -20 | -25 | -32 | -40 | -50 | -60 | -72 | -85 | -100 | -110 | -125 | -135 |
| ei | -24 | -32 | -40 | -50 | -61 | -75 | -90 | -107 | -125 | -146 | -162 | -182 | -198 |
| e8 es | -14 | -20 | -25 | -32 | -40 | -50 | -60 | -72 | -85 | -100 | -110 | -125 | -135 |
| ei | -28 | -38 | -47 | -59 | -73 | -89 | -106 | -126 | -148 | -172 | -191 | -214 | -232 |
| e9 es | -14 | -20 | -25 | -32 | -40 | -50 | -60 | -72 | -85 | -100 | -110 | -125 | -135 |
| ei | -39 | -50 | -61 | -75 | -92 | -112 | -134 | -159 | -185 | -215 | -240 | -265 | -290 |
| f6 es | -6 | -10 | -13 | -16 | -20 | -25 | -30 | -36 | -43 | -50 | -56 | -62 | -68 |
| ei | -12 | -18 | -22 | -27 | -33 | -41 | -49 | -58 | -68 | -79 | -88 | -98 | -108 |
| f7 es | -6 | -10 | -13 | -16 | -20 | -25 | -30 | -36 | -43 | -50 | -56 | -62 | -68 |
| ei | -16 | -22 | -28 | -34 | -41 | -50 | -60 | -71 | -83 | -96 | -108 | -119 | -131 |
| f8 es | -6 | -10 | -13 | -16 | -20 | -25 | -30 | -36 | -43 | -50 | -56 | -62 | -68 |
| ei | -20 | -28 | -35 | -43 | -53 | -64 | -76 | -90 | -106 | -122 | -137 | -151 | -165 |
| g5 es | -2 | -4 | -5 | -6 | -7 | -9 | -10 | -12 | -14 | -15 | -17 | -18 | -20 |
| ei | -6 | -9 | -11 | -14 | -16 | -20 | -23 | -27 | -32 | -35 | -40 | -43 | -47 |
| g6 es | -2 | -4 | -5 | -6 | -7 | -9 | -10 | -12 | -14 | -15 | -17 | -18 | -20 |
| ei | -8 | -12 | -14 | -17 | -20 | -25 | -29 | -34 | -39 | -44 | -49 | -54 | -60 |
| h5 es | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ei | -4 | -5 | -6 | -8 | -9 | -11 | -13 | -15 | -18 | -20 | -23 | -25 | -27 |
| h6 es | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ei | -6 | -8 | -9 | -11 | -13 | -16 | -19 | -22 | -25 | -29 | -32 | -36 | -40 |
| h7 es | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ei | -10 | -12 | -15 | -18 | -21 | -25 | -30 | -35 | -40 | -46 | -52 | -57 | -63 |
| h8 es | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ei | -14 | -18 | -22 | -27 | -33 | -39 | -46 | -54 | -63 | -72 | -81 | -89 | -97 |
| h9 es | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ei | -25 | -30 | -36 | -43 | -52 | -62 | -74 | -87 | -100 | -115 | -130 | -140 | -155 |
| h10 es | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ei | -40 | -48 | -58 | -70 | -84 | -100 | -120 | -160 | -185 | -210 | -230 | -250 | -250 |
| h11 es | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ei | -60 | -75 | -90 | -110 | -130 | -160 | -190 | -220 | -250 | -290 | -320 | -360 | -400 |
| h13 es | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ei | -140 | -180 | -220 | -270 | -330 | -390 | -460 | -540 | -630 | -720 | -810 | -890 | -970 |
| j6 es | +4 | +6 | +7 | +8 | +9 | +11 | +12 | +13 | +14 | +16 | +16 | +18 | +20 |
| ei | -2 | -2 | -2 | -3 | -4 | -5 | -7 | -9 | -11 | -13 | -16 | -18 | -20 |
| j7 es | +6 | +8 | +10 | +12 | +13 | +15 | +18 | +20 | +22 | +25 | +26 | +29 | +31 |
| ei | -4 | -4 | -5 | -6 | -8 | -10 | -12 | -15 | -18 | -21 | -26 | -28 | -32 |
| js5 | ±2 | ±2,5 | ±3 | ±4 | ±4,5 | ±5,5 | ±6,5 | ±7,5 | ±9 | ±10 | 11,5 | ±12,5 | ±13,5 |
| js6 | ±3 | ±4 | ±4,5 | ±5,5 | ±6,5 | ±8 | ±9,5 | ±11 | 12,5 | ±14,5 | ±16 | ±18 | ±20 |
| js7 | ±5 | ±6 | ±7,5 | ±9 | ±10,5 | ±12,5 | ±15 | ±17,5 | ±20 | ±23 | ±26 | ±28,5 | ±31,5 |
| js9 | ±12 | ±15 | ±18 | ±21 | ±26 | ±31 | ±37 | ±43 | ±50 | ±57 | ±65 | ±70 | ±77 |
| js11 | ±30 | ±37 | ±45 | ±55 | ±65 | ±80 | ±95 | ±110 | ±125 | ±145 | ±160 | ±180 | ±200 |
| js13 | ±70 | ±90 | ±110 | ±135 | ±165 | ±195 | ±230 | ±270 | ±315 | ±360 | ±405 | ±445 | ±485 |
| k5 es | +4 | +6 | +7 | +9 | +11 | +13 | +15 | +18 | +21 | +24 | +27 | +29 | +32 |
| ei | 0 | +1 | +1 | +1 | +2 | +2 | +2 | +3 | +3 | +4 | +4 | +4 | +5 |
| k6 es | +6 | +9 | +10 | +12 | +15 | +18 | +21 | +25 | +28 | +33 | +36 | +40 | +45 |
| ei | 0 | +1 | +1 | +1 | +2 | +2 | +2 | +3 | +3 | +4 | +4 | +4 | +5 |
| m6 es | +8 | +12 | +15 | +18 | +21 | +25 | +30 | +35 | +40 | +46 | +52 | +57 | +63 |
| ei | +2 | +4 | +6 | +7 | +9 | +9 | +11 | +13 | +15 | +17 | +20 | +21 | +23 |
| m7 es | — | +16 | +21 | +25 | +29 | +34 | +41 | +48 | +55 | +63 | +72 | +78 | +86 |
| ei | — | +4 | +6 | +7 | +8 | +9 | +11 | +13 | +15 | +17 | +20 | +21 | +23 |
| n5 es | +8 | +13 | +16 | +20 | +24 | +28 | +33 | +38 | +45 | +51 | +57 | +62 | +67 |
| ei | +4 | +8 | +10 | +12 | +15 | +17 | +20 | +23 | +27 | +31 | +34 | +37 | +40 |
| n6 es | 10 | +16 | +19 | +23 | +28 | +33 | +39 | +45 | +52 | +60 | +66 | +73 | +80 |
| ei | +4 | +8 | +10 | +12 | +15 | +17 | +20 | +23 | +27 | +31 | +34 | +37 | +40 |
| p6 es | +12 | +20 | +24 | +29 | +35 | +42 | +51 | +59 | +68 | +79 | +88 | +98 | +108 |
| ei | +6 | +12 | +15 | +18 | +22 | +26 | +32 | +37 | +43 | +50 | +56 | +62 | +68 |