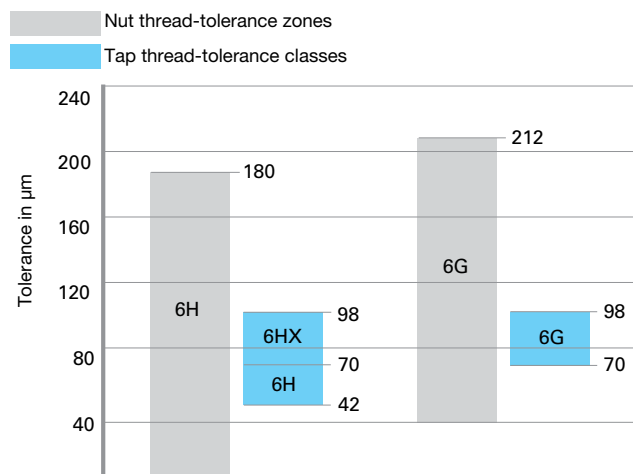


|  | Hardness    |       | Cutting speed SFM |               |
|--|-------------|-------|-------------------|---------------|
|  | Rc          | BRN   | Steam Oxide       | Hard Coatings |
| Structural steels                      | –           | < 250 | 30 - 45           | 30 - 60       |
| Free-cutting steels                    | –           | < 250 | 30 - 60           | 30 - 70       |
| Unalloyed case hardened steels         | < 20        | < 230 | 30 - 45           | 30 - 65       |
| Unalloyed heat-treatable steels        | < 24        | < 250 | 30 - 45           | 30 - 65       |
| Alloyed case hardened steels           | < 30        | < 285 | 25 - 35           | 25 - 30       |
| Alloyed heat-treatable steels          | < 30        | < 285 | 20 - 30           | 20 - 45       |
| Alloyed tool steels                    | < 30        | < 285 | 20 - 30           | 20 - 45       |
| High speed tool steels                 | < 30        | < 290 | 20 - 30           | 20 - 45       |
| Stainl./acid-resist. steels, sulphured | < 24        | < 250 | 20 - 35           | 30 - 40       |
|  | austenitic  | < 24  | < 250             | 20 - 35       |
|  | martensitic | < 24  | < 250             | 20 - 35       |
| Aluminum and Al-alloys                 | –           | < 120 | 45 - 60           | 45 - 85       |
| Al wrought alloys                      | –           | < 120 | 45 - 60           | 45 - 85       |
| Al cast alloys                         | ≤ 10 % Si   | < 180 | 45 - 60           | 45 - 85       |
|  | > 10 % Si   | < 180 | 45 - 60           | 45 - 85       |
| Cast iron                              | –           | < 240 | 45 - 60           | 45 - 85       |
| Spheroidal graphite iron               | –           | < 240 | 45 - 60           | 45 - 85       |
| Malleable cast iron                    | –           | < 300 | 30 - 50           | 45 - 85       |

Tolerance zone / tolerance class allocation



| DIN EN 22857                                |               |
|---|---------------|
| Application class of tap                    |               |
| Class 2 ISO 2                               | Class 3 ISO 3 |
| Tolerance zone of internal thread to be cut |               |
| 6H  | 6G            |
| DIN 802 part 1 (withdrawn)                  |               |
| Tolerance class of tap                      |               |
| 6H  | 6G            |

**6H:** The tolerance zone 6H corresponds with the standard tolerance for taps to DIN EN 22857.

**6HX:** The additional letter "X" (6HX) indicates taps produced with deviating tolerance to standard. These deviations are based upon the company standard. Taps produced to tolerance 6HX are, for example, selected for abrasive or tough materials.

**6G:** The tolerance zone 6G corresponds with an over-size condition tolerance for taps to DIN EN 22857 and is applied for components that are, for example, surface treated.

