

| Materiál  | Pevnost |         |                   | Jakost destičky | GEN3SYS <sup>®</sup> XT AM300 <sup>®</sup> m/min | GEN3SYS <sup>®</sup> AM200 <sup>®</sup> m/min | Posuv (mm/ot.) |                |                |                |                |                |                |
|---|---------|---------|-------------------|-----------------|--|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|   | BHN     | kg      | N/mm <sup>2</sup> |                 |  |   | 18             | 20             | 22             | 24             | 26             | 29             | 32             |
|   |         |         |                   |                 |  |   | 11.00 do 11.99 | 12.00 do 12.99 | 13.00 do 13.99 | 14.00 do 14.99 | 15.00 do 15.99 | 16.00 do 16.99 | 17.00 do 17.99 |
| Automatová ocel<br>118, 1215, 12L14, atd.                                   | 100-150 | 38-50   | 370-500           | K35             | 168  | 146   | 0.48           | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           | 0.66           |
|   | 150-200 | 50-70   | 500-700           | K35             | 145  | 127   | 0.43           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           |
|   | 200-250 | 70-88   | 700-870           | K35             | 130  | 119   | 0.41           | 0.46           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           |
| Ocel s nízkým obsahem uhlíku<br>1010, 1020, 1025, 1522, 1144, atd.          | 85-125  | 30-46   | 300-450           | K35             | 158  | 137   | 0.48           | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           | 0.66           |
|   | 125-175 | 46-62   | 450-600           | K35             | 137  | 119   | 0.46           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           |
|   | 175-225 | 62-77   | 600-775           | K35             | 125  | 108   | 0.43           | 0.46           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           |
| Ocel se středním obsahem uhlíku<br>1030, 1040, 1050, 1527, 1140, 1151, atd. | 125-175 | 46-62   | 450-600           | K35             | 137  | 119   | 0.46           | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           |
|   | 175-225 | 62-77   | 600-775           | K35             | 125  | 108   | 0.43           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           |
|   | 225-275 | 77-96   | 775-940           | K35             | 107  | 95  | 0.41           | 0.46           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           |
| Legovaná ocel<br>4140, 5140, 8640, atd.                                     | 125-175 | 46-62   | 450-600           | K35             | 126  | 114   | 0.46           | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           |
|   | 175-225 | 62-77   | 600-775           | K35             | 116  | 105   | 0.43           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           |
|   | 225-275 | 77-96   | 775-940           | K35             | 104  | 95  | 0.41           | 0.46           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           |
| Ocel s vysokou pevností<br>4340, 4330V, 300M, atd.                          | 275-325 | 96-111  | 940-1090          | K35             | 94   | 87  | 0.36           | 0.38           | 0.41           | 0.43           | 0.46           | 0.48           | 0.51           |
|   | 325-375 | 111-129 | 1090-1265         | K35             | 85   | 78  | 0.33           | 0.36           | 0.38           | 0.41           | 0.43           | 0.46           | 0.48           |
|   | 225-300 | 77-104  | 600-1020          | K35             | 76   | 70  | 0.36           | 0.38           | 0.41           | 0.43           | 0.46           | 0.48           | 0.51           |
| Konstrukční ocel<br>A36, A285, A516, atd.                                   | 300-350 | 104-121 | 1020-1180         | K35             | 69   | 63  | 0.30           | 0.33           | 0.36           | 0.38           | 0.41           | 0.43           | 0.46           |
|   | 350-400 | 121-139 | 1180-1365         | K35             | 61   | 56  | 0.28           | 0.30           | 0.33           | 0.36           | 0.38           | 0.41           | 0.43           |
|   | 100-150 | 38-50   | 370-500           | K35             | 125  | 108   | 0.43           | 0.48           | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           |
| Nástrojová ocel<br>H-13, H-21, A-4, O-2, S-3                                | 150-250 | 50-88   | 500-850           | K35             | 101  | 87  | 0.38           | 0.43           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           |
|   | 250-350 | 88-121  | 850-1180          | K35             | 93   | 81  | 0.36           | 0.38           | 0.43           | 0.48           | 0.51           | 0.53           | 0.56           |
|   | 150-200 | 50-70   | 500-700           | K35             | 81   | 78  | 0.25           | 0.28           | 0.30           | 0.33           | 0.36           | 0.38           | 0.41           |
| Žárovzdorná slitina   | 200-250 | 70-88   | 700-870           | K35             | 62   | 59  | 0.23           | 0.25           | 0.28           | 0.30           | 0.33           | 0.36           | 0.38           |
|   | 140-220 | 49-77   | 480-755           | K20             | 40   | 37  | 0.25           | 0.28           | 0.28           | 0.30           | 0.30           | 0.33           | 0.36           |
| Titanová slitina  | 223-310 | 77-101  | 755-990           | K20             | 30   | 29  | 0.23           | 0.25           | 0.25           | 0.28           | 0.28           | 0.30           | 0.33           |
|   | 140-220 | 49-77   | 480-755           | K20             | 43   | 42  | 0.25           | 0.28           | 0.28           | 0.30           | 0.30           | 0.33           | 0.33           |
| Letecká slitina<br>S82  | 220-310 | 77-101  | 755-990           | K20             | 34   | 33  | 0.22           | 0.25           | 0.25           | 0.28           | 0.28           | 0.30           | 0.30           |
|   | 185-275 | 65-96   | 640-940           | K20             | 50   | 45  | 0.18           | 0.20           | 0.22           | 0.24           | 0.26           | 0.28           | 0.31           |
| Nerezová ocel série 400<br>416, 420   | 275-350 | 96-121  | 940-1180          | K20             | 41   | 37  | 0.16           | 0.18           | 0.20           | 0.22           | 0.24           | 0.26           | 0.29           |
|   | 185-275 | 65-96   | 640-940           | K20             | 73   | 73  | 0.28           | 0.30           | 0.33           | 0.36           | 0.38           | 0.41           | 0.43           |
| Nerezová ocel série 300<br>304, 316, 17-4PH                                 | 275-350 | 96-121  | 940-1180          | K20             | 56   | 56  | 0.25           | 0.28           | 0.30           | 0.33           | 0.36           | 0.38           | 0.41           |
|   | 135-185 | 49-65   | 480-640           | K20             | 67   | 64  | 0.20           | 0.20           | 0.23           | 0.23           | 0.25           | 0.25           | 0.28           |
| Super Duplex Duplex St.Stl  | 185-275 | 65-96   | 640-940           | K20             | 49   | 47  | 0.18           | 0.18           | 0.20           | 0.20           | 0.23           | 0.23           | 0.25           |
|   | 135-185 | 49-65   | 480-640           | K20             | 38   | 38  | 0.15           | 0.16           | 0.18           | 0.20           | 0.20           | 0.22           | 0.25           |
| Hardox  | 185-275 | 65-96   | 640-940           | K20             | 30   | 30  | 0.14           | 0.15           | 0.16           | 0.18           | 0.18           | 0.20           | 0.22           |
|   | 400     | 139     | 1365              | K35             | 49   | 45  | 0.25           | 0.27           | 0.27           | 0.29           | 0.29           | 0.31           | 0.31           |
|   | 500     | 160     | 1600              | K35             | 40   | 37  | 0.23           | 0.25           | 0.25           | 0.27           | 0.27           | 0.29           | 0.29           |
| Kalená ocel   | 600     | 210     | 2000              | K20             | 27   | 25  | 0.21           | 0.23           | 0.23           | 0.25           | 0.25           | 0.27           | 0.27           |
|   | 300-400 | 104-139 | 1020-1365         | K35             | 51   | 47  | 0.23           | 0.25           | 0.25           | 0.27           | 0.27           | 0.29           | 0.29           |
|   | 400-500 | 139+    | 1365+             | K35             | 40   | 37  | 0.21           | 0.23           | 0.23           | 0.25           | 0.25           | 0.27           | 0.27           |
| Tvárná litina   | 120-150 | 44-50   | 430-500           | K20             | 168  | 146   | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           | 0.66           |
|   | 150-200 | 50-70   | 500-700           | K20             | 159  | 138   | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           | 0.63           |
|   | 200-220 | 70-77   | 700-755           | K20             | 141  | 123   | 0.46           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           | 0.60           |
|   | 220-260 | 77-90   | 755-890           | K20             | 124  | 108   | 0.43           | 0.46           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           |
| Šedá / bílá litina  | 260-320 | 90-104  | 890-1020          | K20             | 112  | 97  | 0.38           | 0.43           | 0.46           | 0.48           | 0.51           | 0.53           | 0.55           |
|   | 120-150 | 44-50   | 430-500           | K20             | 175  | 152   | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           | 0.66           | 0.69           |
|   | 150-200 | 50-70   | 500-700           | K20             | 168  | 146   | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           | 0.66           |
|   | 200-220 | 70-77   | 700-755           | K20             | 151  | 131   | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           |
| Slévarenské slitiny hliníku   | 220-260 | 77-90   | 755-890           | K20             | 130  | 113   | 0.46           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           | 0.61           |
|   | 260-320 | 90-104  | 890-1020          | K20             | 116  | 102   | 0.43           | 0.46           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           |
|   | 30      | 10      | 100               | K20             | 351  | 300   | 0.48           | 0.50           | 0.53           | 0.56           | 0.58           | 0.61           | 0.64           |
|   | 180     | 62      | 600               | TiCN            | 262  | 225   | 0.45           | 0.48           | 0.51           | 0.53           | 0.56           | 0.58           | 0.58           |
| Tvážené slitiny hliníku   | 30      | 10      | 100               | K20             | 488  | 425   | 0.55           | 0.58           | 0.61           | 0.66           | 0.68           | 0.74           | 0.76           |
|   | 180     | 62      | 600               | K20             | 351  | 300   | 0.50           | 0.55           | 0.58           | 0.63           | 0.66           | 0.71           | 0.74           |
| Hliníkový bronz   | 100-200 | 38-68   | 370-670           | K20             | 126  | 110   | 0.40           | 0.42           | 0.44           | 0.46           | 0.48           | 0.48           | 0.50           |
|   | 200-250 | 68-87   | 670-855           | K20             | 103  | 90  | 0.36           | 0.38           | 0.42           | 0.48           | 0.46           | 0.46           | 0.48           |
| Mosaz   | 100     | 38      | 370               | K20             | 230  | 200   | 0.48           | 0.53           | 0.56           | 0.60           | 0.63           | 0.66           | 0.66           |
| Měď   | 60      | 21      | 200               | K20             | 149  | 130   | 0.18           | 0.20           | 0.20           | 0.22           | 0.25           | 0.25           | 0.28           |

**Příklad pro Doporučenou řeznou rychlost a posuv:** Doporučená řezná rychlost je 61 m/min and posuv 0.20 mm/ot. pro držák dlouhý 3xD nebo držák 5xD. Pro držák dlouhý 7xD použijeme multiplikátor 0.8 a výsledná řezná rychlost bude 48.8 m/min a posuv 0.16 mm/ot.

**Příklad:** 61 m/min • 0.80 = 48.8 m/min      0.20 mm/ot. • 0.80 = 0.16 mm/ot.