

## 1693LS

|  | Material Group<br>ISO 513 | P1 P2                     |                |                | P3 P4                      |                |                | K1 K2      |                |                |  |  |  |
|--|---------------------------|---------------------------|----------------|----------------|----------------------------|----------------|----------------|------------|----------------|----------------|--|--|--|
|  | Hardness/Rm               | 500-700 N/mm <sup>2</sup> |                |                | 600-1000 N/mm <sup>2</sup> |                |                | 150-350 HB |                |                |  |  |  |
|  | Vc (m/min)                | 15-25                     |                |                | 10-20                      |                |                | 15-25      |                |                |  |  |  |
|  | D<br>(mm)                 | n<br>(rpm)                | fn<br>(mm/rev) | Vf<br>(mm/min) | n<br>(rpm)                 | fn<br>(mm/rev) | Vf<br>(mm/min) | n<br>(rpm) | fn<br>(mm/rev) | Vf<br>(mm/min) |  |  |  |
|  | 3.5                       | 1820                      | 0.045          | 80             | 1360                       | 0.038          | 50             | 1820       | 0.050          | 90             |  |  |  |
|  | 4                         | 1590                      | 0.053          | 85             | 1190                       | 0.045          | 55             | 1590       | 0.058          | 90             |  |  |  |
|  | 5                         | 1270                      | 0.060          | 75             | 960                        | 0.051          | 50             | 1270       | 0.066          | 85             |  |  |  |
|  | 6                         | 1060                      | 0.068          | 70             | 800                        | 0.057          | 45             | 1060       | 0.074          | 80             |  |  |  |
|  | 7                         | 910                       | 0.075          | 70             | 680                        | 0.064          | 45             | 910        | 0.083          | 75             |  |  |  |
|  | 8                         | 800                       | 0.083          | 65             | 600                        | 0.070          | 40             | 800        | 0.091          | 75             |  |  |  |
|  | 9                         | 710                       | 0.090          | 65             | 530                        | 0.077          | 40             | 710        | 0.099          | 70             |  |  |  |
|  | 10                        | 640                       | 0.098          | 60             | 480                        | 0.083          | 40             | 640        | 0.107          | 70             |  |  |  |
|  | 11                        | 580                       | 0.105          | 60             | 430                        | 0.089          | 40             | 580        | 0.116          | 65             |  |  |  |
|  | 12                        | 530                       | 0.113          | 60             | 400                        | 0.096          | 40             | 530        | 0.124          | 65             |  |  |  |
|  | 13                        | 490                       | 0.120          | 60             | 370                        | 0.102          | 40             | 490        | 0.132          | 65             |  |  |  |