



## MS40200330

| d1   | d2   | l1 | l2    |
|------|------|----|-------|
| 3,30 | 3,30 | 65 | 16,00 |

| Coolant holes | Cut   | Point angle | Spiral angle | Cutting edges Z |
|---------------|-------|-------------|--------------|-----------------|
| No            | Right | -           | -            | 4               |

| Coated | Coating type | Material | Material type | Norm            |
|--------|--------------|----------|---------------|-----------------|
| No     | -            | MD       | SMG 10        | Similar DIN 212 |

| Machinable Materials |                                                     |                                                                                                      |                     |                                  |
|----------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------|----------------------------------|
| Cod.                 | Material type                                       | Machinability                                                                                        | Cutting speed<br>Vc | Advancement per<br>revolution fn |
|                      |                                                     | <div>Recommended</div> <div>Part.</div> <div>recommended</div> <div>Not</div> <div>recommended</div> | (m/min)             | (mm/rev)                         |
| <b>P01</b>           | Unalloyed steels up to 800 N/mm2                    |                     | 15 : 22             | 0,08 - 0,12                      |
| <b>P02</b>           | Low alloy steels from 800 N/mm2 to 1100 N/mm2       |                     | 10 : 18             | 0,06 - 0,10                      |
| <b>P03</b>           | Highly alloyed steels from 1100 N/mm2 to 1400 N/mm2 |                     | 5 : 12              | 0,02 - 0,04                      |
| <b>M01</b>           | Ferritic stainless steels                           |                     | 5 : 12              | 0,02 - 0,04                      |
| <b>M02</b>           | Martensitic stainless steels                        |                     | 5 : 12              | 0,02 - 0,04                      |
| <b>M03</b>           | Martensitic stainless steels - PH                   |                     | 5 : 12              | 0,02 - 0,04                      |
| <b>M04</b>           | Austenitic stainless steels                         |                    | 5 : 12              | 0,02 - 0,04                      |
| <b>K01</b>           | Gray/lamellar cast iron                             |                   | 8 : 14              | 0,10 - 0,20                      |
| <b>K02</b>           | Nodular/nodular cast iron                           |                   | 8 : 14              | 0,08 - 0,16                      |
| <b>N01</b>           | Drawn aluminum alloys                               |                   | 20 : 35             | 0,12 - 0,20                      |
| <b>N02</b>           | Die-cast aluminum alloys                            |                   | 15 : 25             | 0,10 - 0,18                      |
| <b>N03</b>           | Copper                                              |                   | 15 : 40             | 0,08 - 0,18                      |
| <b>N04</b>           | Brass - Bronze                                      |                   | 15 : 40             | 0,08 - 0,18                      |
| <b>N05</b>           | Lead-free brass                                     |                   | 12 : 35             | 0,10 - 0,18                      |
| <b>S01</b>           | Super alloys (Inconel - Hastelloy - Nimonic)        |                   | 5 : 10              | 0,02 - 0,04                      |
| <b>S02</b>           | Pure titanium (Grade 2 - Grade 4)                   |                   | 6 : 10              | 0,04 - 0,08                      |
| <b>S03</b>           | Titanium alloys (Grade 5)                           |                   | 6 : 10              | 0,04 - 0,08                      |
| <b>S04</b>           | Cobalt Chrome Alloys                                |                   | 6 : 10              | 0,02 - 0,04                      |
| <b>H01</b>           | Hardened steels up to 55 HRC                        |                   | 5 : 10              | 0,01 - 0,03                      |

| Machinable Materials |                                                     |                                                                                     |                  |                               |
|----------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------|------------------|-------------------------------|
| Cod.                 | Material type                                       | Machinability                                                                       | Cutting speed Vc | Advancement per revolution fn |
|                      |                                                     | Recommended<br>Part.<br>recommended<br>Not<br>recommended                           | (m/min)          | (mm/rev)                      |
| P01                  | Unalloyed steels up to 800 N/mm2                    |    | 15 : 22          | 0,08 - 0,12                   |
| P02                  | Low alloy steels from 800 N/mm2 to 1100 N/mm2       |    | 10 : 18          | 0,06 - 0,10                   |
| P03                  | Highly alloyed steels from 1100 N/mm2 to 1400 N/mm2 |    | 5 : 12           | 0,02 - 0,04                   |
| M01                  | Ferritic stainless steels                           |    | 5 : 12           | 0,02 - 0,04                   |
| M02                  | Martensitic stainless steels                        |    | 5 : 12           | 0,02 - 0,04                   |
| M03                  | Martensitic stainless steels - PH                   |    | 5 : 12           | 0,02 - 0,04                   |
| M04                  | Austenitic stainless steels                         |   | 5 : 12           | 0,02 - 0,04                   |
| K01                  | Gray/lamellar cast iron                             |  | 8 : 14           | 0,10 - 0,20                   |
| K02                  | Nodular/nodular cast iron                           |  | 8 : 14           | 0,08 - 0,16                   |
| N01                  | Drawn aluminum alloys                               |  | 20 : 35          | 0,12 - 0,20                   |
| N02                  | Die-cast aluminum alloys                            |  | 15 : 25          | 0,10 - 0,18                   |
| N03                  | Copper                                              |  | 15 : 40          | 0,08 - 0,18                   |
| N04                  | Brass - Bronze                                      |  | 15 : 40          | 0,08 - 0,18                   |
| N05                  | Lead-free brass                                     |  | 12 : 35          | 0,10 - 0,18                   |
| S01                  | Super alloys (Inconel - Hastelloy - Nimonic)        |  | 5 : 10           | 0,02 - 0,04                   |
| S02                  | Pure titanium (Grade 2 - Grade 4)                   |  | 6 : 10           | 0,04 - 0,08                   |
| S03                  | Titanium alloys (Grade 5)                           |  | 6 : 10           | 0,04 - 0,08                   |
| S04                  | Cobalt Chrome Alloys                                |  | 6 : 10           | 0,02 - 0,04                   |
| H01                  | Hardened steels up to 55 HRC                        |  | 5 : 10           | 0,01 - 0,03                   |
| H02                  | Hardened steels from 55 HRC                         |  | -                | -                             |



SWISS HIGH PRECISION TOOLS

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