



## MTB25N0450

**Type:** Short twist drill

| d1   | d2   | l1 | l2    |
|------|------|----|-------|
| 4,50 | 4,50 | 60 | 30,00 |

| Coolant holes | Cut   | Point angle | Spiral angle | Cutting edges Z |
|---------------|-------|-------------|--------------|-----------------|
| No            | Right | 118°        | 25°          | 2               |

| Coated | Coating type | Material | Material type | Norm |
|--------|--------------|----------|---------------|------|
| No     | -            | MD       | SMG 10        | TUSA |

| 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                    |                     | 40 : 60             | 0,02 - 0,05                      |
| <b>P02</b>           | Low alloy steels from 800 N/mm2 to 1100 N/mm2       |                     | 30 : 50             | 0,02 - 0,03                      |
| <b>P03</b>           | Highly alloyed steels from 1100 N/mm2 to 1400 N/mm2 |                     | 20 : 40             | 0,015 - 0,025                    |
| <b>M01</b>           | Ferritic stainless steels                           |                     | 15 : 30             | 0,01 - 0,02                      |
| <b>M02</b>           | Martensitic stainless steels                        |                     | 15 : 30             | 0,01 - 0,02                      |
| <b>M03</b>           | Martensitic stainless steels - PH                   |                     | 15 : 30             | 0,01 - 0,02                      |
| <b>M04</b>           | Austenitic stainless steels                         |                    | 15 : 30             | 0,01 - 0,02                      |
| <b>K01</b>           | Gray/lamellar cast iron                             |                   | 30 : 50             | 0,02 - 0,05                      |
| <b>K02</b>           | Nodular/nodular cast iron                           |                   | 30 : 50             | 0,02 - 0,05                      |
| <b>N01</b>           | Drawn aluminum alloys                               |                   | 60 : 100            | 0,04 - 0,07                      |
| <b>N02</b>           | Die-cast aluminum alloys                            |                   | 50 : 80             | 0,02 - 0,05                      |
| <b>N03</b>           | Copper                                              |                   | 30 : 60             | 0,04 - 0,07                      |
| <b>N04</b>           | Brass - Bronze                                      |                   | 40 : 70             | 0,04 - 0,07                      |
| <b>N05</b>           | Lead-free brass                                     |                   | 30 : 60             | 0,04 - 0,07                      |
| <b>S01</b>           | Super alloys (Inconel - Hastelloy - Nimonic)        |                   | -                   | -                                |
| <b>S02</b>           | Pure titanium (Grade 2 - Grade 4)                   |                   | -                   | -                                |
| <b>S03</b>           | Titanium alloys (Grade 5)                           |                   | -                   | -                                |
| <b>S04</b>           | Cobalt Chrome Alloys                                |                   | -                   | -                                |
| <b>H01</b>           | Hardened steels up to 55 HRC                        |                   | -                   | -                                |

Machinable Materials

| Cod. | Material type                                       | Machinability                                                                       | Cutting speed<br>Vc | Advancementper<br>revolution fn |
|------|-----------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|---------------------------------|
|      |                                                     | Recommended<br>Part.<br>recommended<br>Not<br>recommended                           | (m/min)             | (mm/rev)                        |
| P01  | Unalloyed steels up to 800 N/mm2                    |    | 40 : 60             | 0,02 - 0,05                     |
| P02  | Low alloy steels from 800 N/mm2 to 1100 N/mm2       |    | 30 : 50             | 0,02 - 0,03                     |
| P03  | Highly alloyed steels from 1100 N/mm2 to 1400 N/mm2 |    | 20 : 40             | 0,015 - 0,025                   |
| M01  | Ferritic stainless steels                           |    | 15 : 30             | 0,01 - 0,02                     |
| M02  | Martensitic stainless steels                        |    | 15 : 30             | 0,01 - 0,02                     |
| M03  | Martensitic stainless steels - PH                   |    | 15 : 30             | 0,01 - 0,02                     |
| M04  | Austenitic stainless steels                         |   | 15 : 30             | 0,01 - 0,02                     |
| K01  | Gray/lamellar cast iron                             |  | 30 : 50             | 0,02 - 0,05                     |
| K02  | Nodular/nodular cast iron                           |  | 30 : 50             | 0,02 - 0,05                     |
| N01  | Drawn aluminum alloys                               |  | 60 : 100            | 0,04 - 0,07                     |
| N02  | Die-cast aluminum alloys                            |  | 50 : 80             | 0,02 - 0,05                     |
| N03  | Copper                                              |  | 30 : 60             | 0,04 - 0,07                     |
| N04  | Brass - Bronze                                      |  | 40 : 70             | 0,04 - 0,07                     |
| N05  | Lead-free brass                                     |  | 30 : 60             | 0,04 - 0,07                     |
| S01  | Super alloys (Inconel - Hastelloy - Nimonic)        |  | -                   | -                               |
| S02  | Pure titanium (Grade 2 - Grade 4)                   |  | -                   | -                               |
| S03  | Titanium alloys (Grade 5)                           |  | -                   | -                               |
| S04  | Cobalt Chrome Alloys                                |  | -                   | -                               |
| H01  | Hardened steels up to 55 HRC                        |  | -                   | -                               |

|     |                             |                                                                                     |   |   |
|-----|-----------------------------|-------------------------------------------------------------------------------------|---|---|
| H02 | Hardened steels from 55 HRC |  | - | - |
|-----|-----------------------------|-------------------------------------------------------------------------------------|---|---|



SWISS HIGH PRECISION TOOLS

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