



## TiAIN-COATED SOLID CARBIDE END MILLS 4 FLUTE SHORT LENGTH

**G9432** PLAIN SHANK

- ▶ Suitable for dry milling applications at high temperatures.
- ▶ Excellent high-performance end mills.
- ▶ 4 flute allows for better work piece finishes.



Unit : mm

| EDP No.  | Mill Diameter | Shank Diameter | Length of Cut | Overall Length |
|----------|---------------|----------------|---------------|----------------|
| G9432010 | 1.0           | 4              | 3             | 40             |
| G9432015 | 1.5           | 4              | 4.5           | 40             |
| G9432020 | 2.0           | 2              | 8             | 32             |
| G9432025 | 2.5           | 2.5            | 8             | 32             |
| G9432030 | 3.0           | 3              | 12            | 32             |
| G9432035 | 3.5           | 3.5            | 12            | 32             |
| G9432040 | 4.0           | 4              | 12            | 40             |
| G9432045 | 4.5           | 4.5            | 14            | 50             |
| G9432050 | 5.0           | 5              | 14            | 50             |
| G9432055 | 5.5           | 5.5            | 16            | 50             |
| G9432060 | 6.0           | 6              | 16            | 50             |
| G9432070 | 7.0           | 7              | 20            | 60             |
| G9432080 | 8.0           | 8              | 20            | 60             |
| G9432090 | 9.0           | 9              | 20            | 60             |
| G9432100 | 10.0          | 10             | 22            | 70             |
| G9432120 | 12.0          | 12             | 22            | 70             |
| G9432140 | 14.0          | 14             | 25            | 75             |
| G9432160 | 16.0          | 16             | 25            | 75             |
| G9432200 | 20.0          | 20             | 32            | 100            |

| Mill Dia.<br>Tolerance (mm) | Shank Dia.<br>Tolerance |
|-----------------------------|-------------------------|
| 0 ~ -0.03                   | h5                      |

◎ : Excellent ○ : Good

| ISO                  | P               |     |     |     |     |                 |     |     |     |                                    |     | M               |     |     | K              |     |                   |     |                      |     |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|------------------------------------|-----|-----------------|-----|-----|----------------|-----|-------------------|-----|----------------------|-----|
| Material Description | Non-alloy steel |     |     |     |     | Low alloy steel |     |     |     | High alloyed steel, and tool steel |     | Stainless steel |     |     | Grey cast iron |     | Nodular cast iron |     | Malleable cast. iron |     |
| VDI 3323             | 1               | 2   | 3   | 4   | 5   | 6               | 7   | 8   | 9   | 10                                 | 11  | 12              | 13  | 14  | 15             | 16  | 17                | 18  | 19                   | 20  |
| HRC                  |                 | 13  | 25  | 28  | 32  | 10              | 29  | 32  | 38  | 15                                 | 35  | 15              | 23  | 10  | 10             | 26  | 3                 | 25  |                      | 21  |
| HB                   | 125             | 190 | 250 | 270 | 300 | 180             | 275 | 300 | 350 | 200                                | 325 | 200             | 240 | 180 | 180            | 260 | 160               | 250 | 130                  | 230 |
| Recommended          | ◎               | ◎   | ◎   | ◎   | ◎   | ◎               | ◎   | ◎   | ◎   | ◎                                  | ◎   | ○               | ○   | ○   | ○              | ○   | ○                 | ○   | ○                    | ○   |

| ISO                  | N                      |     |                        |    |     |                                           |    |     |                        |    | S                           |     |     |     |     |                 |         | H              |     |                   |                    |
|----------------------|------------------------|-----|------------------------|----|-----|-------------------------------------------|----|-----|------------------------|----|-----------------------------|-----|-----|-----|-----|-----------------|---------|----------------|-----|-------------------|--------------------|
| Material Description | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |    |     | Copper and Copper Alloys (Bronze / Brass) |    |     | Non Metallic Materials |    | Heat Resistant Super Alloys |     |     |     |     | Titanium Alloys |         | Hardened steel |     | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323             | 21                     | 22  | 23                     | 24 | 25  | 26                                        | 27 | 28  | 29                     | 30 | 31                          | 32  | 33  | 34  | 35  | 36              | 37      | 38             | 39  | 40                | 41                 |
| HRC                  |                        |     |                        |    |     |                                           |    |     |                        |    | 15                          | 30  | 25  | 38  | 34  |                 |         | 55             | 60  | 42                | 55                 |
| HB                   | 60                     | 100 | 75                     | 90 | 130 | 110                                       | 90 | 100 |                        |    | 200                         | 280 | 250 | 350 | 320 | 400 Rm          | 1050 Rm | 550            | 630 | 400               | 550                |
| Recommended          | ○                      | ○   | ○                      | ○  | ○   | ○                                         | ○  | ○   | ○                      | ○  | ○                           | ○   | ○   | ○   | ○   | ○               | ○       |                |     | ○                 |                    |