



The new standard in drilling
TRITAN-DRILL





WITH THREE CUTTING EDGES FOR OPTIMUM RESULTS – THE TRITAN-DRILL

Highest performance and process reliability also in difficult drilling situations

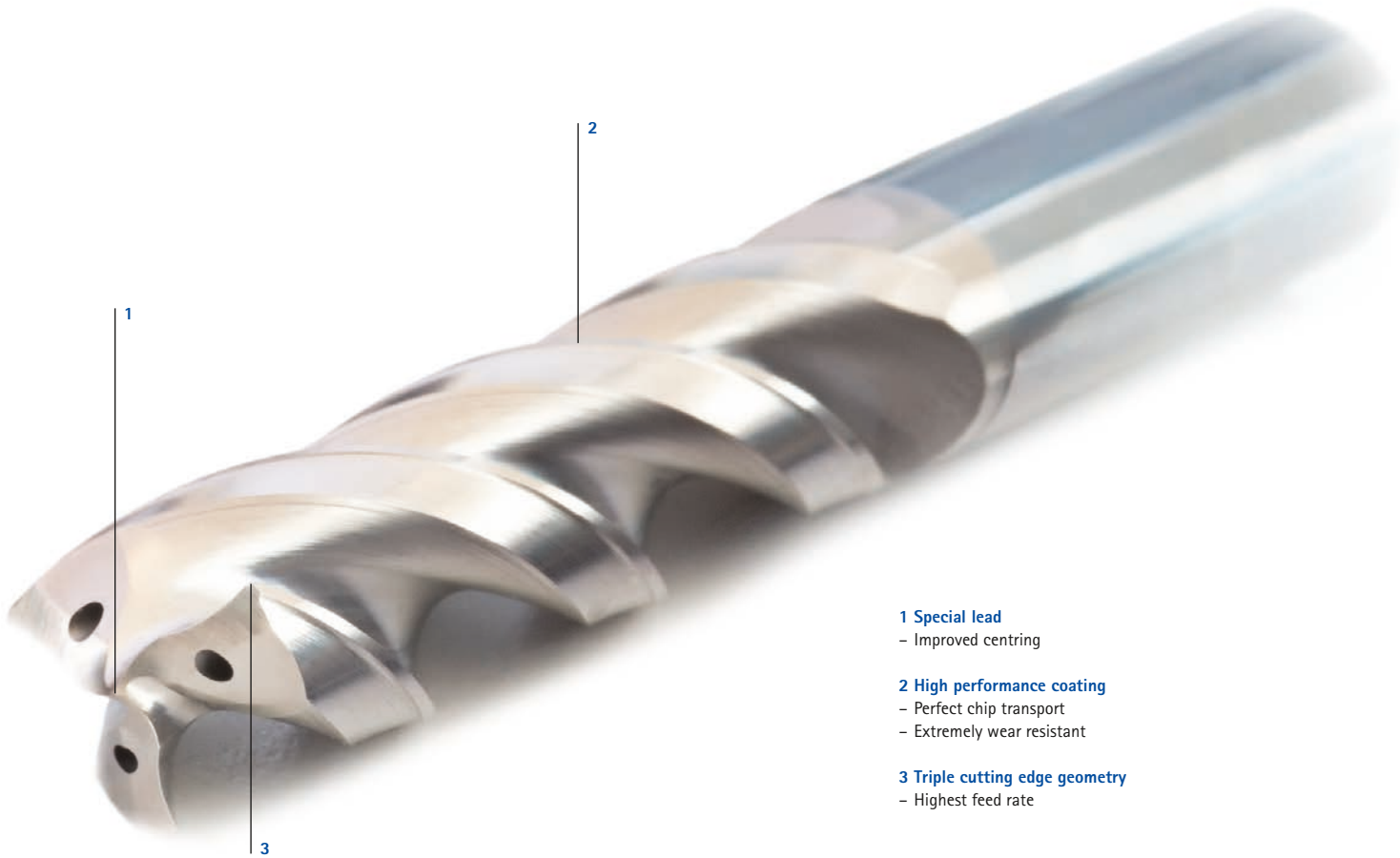
Also on demanding drilling applications where other drills fail, the Tritan-Drill performs. For example in difficult situations, such as deep bores up to 8xD with high positional accuracy, interrupted bores or inclined entry or exit situations. Through its unique chip flutes and splendid point thinning, the chips are freely transported along the three chip flutes, this also applies to long chipping materials. By all machining applications up to double the feed rate can be used, when compared to its twin cutting edged counterpart. Alongside the standard version, MAPAL also

offer customer specific special configurations of Tritan-Drills. The Tritan geometry can also be adopted on deep-hole drills and drill reamers, for example using special point thinning, edge preparation or coatings tailored to the special requirements of specific materials. As well as the various applications in steel and cast-iron. The Tritan-Drill is also available for machining aluminum, titanium or austenitic steels. The Tritan-Drill as stepped drill lends itself perfectly of the single-shot solution of drilling the bolt holes in connecting rods.

AT A GLANCE

- Problem solver for difficult drilling situations
- Special triple cutting edged geometry
- Very good for inclined bore entrances
- Optimal for through bores or entering cross bores
- Innovatively ground for very good chip transport and low cutting pressure
- Significantly improved performance, up to double the feed rate

● Tool features in detail



1 Special lead
– Improved centring

2 High performance coating
– Perfect chip transport
– Extremely wear resistant

3 Triple cutting edge geometry
– Highest feed rate



Tritan-Drill-Uni

The new standard with three cutting edges - where other drills fail, drilling up to double the feed rate.

Diameter range: 5,00 - 20,00 mm

Drilling depth:

5xD 8xD

P M K N



Special geometries

Customer specific special geometries on Tritan-drills are quickly available.

Through special point thinning, edge preparation and material tailored coatings, as well as step length variations, all customer specific requirements can be successfully met.

WITH THREE CUTTING EDGES FOR THE HIGHEST PERFORMANCE AND PROCESS RELIABILITY



At a glance

STANDARD

- 5xD and 8xD
- Ø-range 5 to 20 mm
- For steel, stainless steel, castings
- Available from stock

CUSTOMER SPECIFIC

- Special coatings
- Stepped drill
- Special geometry and lengths
- Drill/reamer combination



● Cylinder head from GG25

PREVIOUSLY

Twin cutting edged solid carbide step drill with internal coolant, coated Ø 15-16 mm

- Tool life: 1800 bores
- $v_c = 100 \text{ m/min} \mid f = 0,2 \text{ mm/rev.}$

NEW

Triple cutting edged Tritan step drill with internal coolant, coated Ø 15-16 mm

- Tool life: 2600 bores
- $v_c = 130 \text{ m/min} \mid f = 0,34 \text{ mm/rev.}$

ADVANTAGE

45% more bores



● Common rail from material 1.4301

PREVIOUSLY

Twin cutting edged solid carbide step drill, Ø 5,5 mm

- Tool life: 3200 bores (48 m)
- $v_c = 80 \text{ m/min} \mid f = 0,12 \text{ mm/rev.}$

NEW

Triple cutting edged Tritan step drill, Ø 5,55 mm

- Tool life: 4200 bores (63 m)
- $v_c = 80 \text{ m/min} \mid f = 0,14 \text{ mm/rev.}$

ADVANTAGE

30% increase in tool life



• Steering knuckle from GGG60

PREVIOUSLY

Drill/reamer, \varnothing 10 mm

- Tool life: 2800 bores (only one regrind possible)
- $v_c = 100$ m/min | $f = 0,35$ mm/rev.

NEW

Triple cutting edged Tritan drill/reamer, \varnothing 10 mm

- Tool life: 3000 bores (four regrinds possible)
- $v_c = 100$ m/min | $f = 0,35$ mm/rev.

ADVANTAGE

40% reduction in machining costs



• Turbo charger from steel 1.4848

PREVIOUSLY

Twin cutting edged solid carbide drill, \varnothing 8,3 mm

- Tool life: max. 60 components
- $v_c = 80$ m/min | $f = 0,18$ mm/rev.

NEW






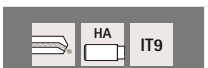

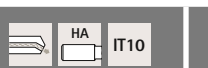
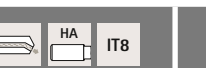
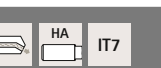
Triple cutting edged Tritan, \varnothing 8,3 mm

- Tool life: 140 components
- $v_c = 80$ m/min | $f = 0,22$ mm/rev.









ADVANTAGE

130% more components

Innovative standard programme of drilling

| |  |  |  |  |  |
|--|---|--|--|---|---|
| Series | MEGA-Drill-180° | MEGA-Drill | MEGA-Drill-Speed | MEGA-Drill-Quadro | MEGA-Drill-Reamer |
| Application / feature | Drilling from solid producing a flat bottom bore and drilling on inclined surfaces | Solid carbide twist drill with two cutting edges – perfectly geared to the material to be machined | Three guiding chamfers for high performance and process reliability | Four guiding chamfers for maximum bore quality, concentricity and positional accuracy | Twin function – drilling and reaming – combined in one tool |
| P General structural steel, non-alloy to high-alloy steels, cast steel | ■ | ■ | ■ | ■ | ■ |
| M Stainless and acid-resistant steels | ▣ | ■ | ■ | ▣ | |
| K Grey cast iron, alloyed grey cast iron, spheroidal graphite cast iron, vermicular graphite cast iron, malleable cast iron | ■ | ■ | ■ | ■ | ■ |
| N Non-ferrous metals | ■ | ■ | | | ■ |
| S Heat-resistant steels, titanium and nickel alloys | | ■ | | | |
| H Hardened steel, chilled cast iron | | ■ | | | |
| Drilling depth | 3xD 5xD 8xD 12xD | 3xD 5xD 8xD 12xD | 3xD 5xD 8xD 12xD | 3xD 5xD 8xD 12xD | 3xD 5xD 8xD 12xD |
| Dia. range [mm] | 3,00 - 20,00 * | 3,00 - 25,00 * | 3,00 - 20,00 * | 3,00 - 20,00 * | 4,00 - 16,00 * |
| * The diameter range can vary, depending on the version. | | | | | |
| |  |  |  |  |  |

Explanation of the pictograms:

| | | | | | | | |
|---|-----------------------------|---|---|---|--|---|---|
|  | Highly suitable |  |  |  |  |  |  |
|  | Suitable in some situations | Cylindrical shank Form HA | Cylindrical shank similar to DIN9766 | Internal coolant supply | QTD connection | TTD connection | Achievable bore tolerance |

| GIGA-Drill | | | | Tritan-Drill | | | | MEGA-Drill-Deep | | | | | MEGA-Drill-Step | | | | SMART-Drill | | | | TTD replaceable head drill | | | | | QTD indexable insert drill | | | | | | | | | | | | | | | | | | | | |
|--|-----|-----|------|--|-----|-----|------|---|------|------|------|------|--|-----|-----|------|---|-----|-----|------|---|-----|-----|-----|------|---|-----|-----|-----|------|-------|-----|-----|-----|------|---|---|---|---|---|---|---|---|---|---|--|
| Four cutting edges and four guiding chamfers for reliable cutting and optimum guidance | | | | Solid carbide twist drill with three cutting edges for very good chip removal and low cutting pressure | | | | Efficient production of deep bores up to 40xD | | | | | Outstanding performance for core holes chamfers for metric threads | | | | The smart solution for the smallest bores with internal cooling | | | | Minimised usage of carbide with highest stability and precision | | | | | Sturdy connection and simple clamping system – additively manufactured from 8 mm diameter | | | | | | | | | | | | | | | | | | | | |
| | | | | ■ | | | | ■ | | | | | | | | ■ | | | | ■ | | | | | | | | | | ■ | | | | | | | | | | | | | | | | |
| | | | | ■ | | | | ■ | ■ | ■ | ■ | ■ | | | | ■ | | | | ■ | | | | | | | | | | ■ | | | | | | | | | | | | | | | | |
| ■ | | | | ■ | | | | ■ | | | | | | | ■ | | | | ■ | | | | | | | | | | ■ | | | | | | | | | | | | | | | | | |
| ■ | | | | ■ | | | | ■ | | | | | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3xD | 5xD | 8xD | 12xD | 3xD | 5xD | 8xD | 12xD | 15xD | 20xD | 25xD | 30xD | 40xD | 3xD | 5xD | 8xD | 12xD | 3xD | 5xD | 8xD | 12xD | 1xD | 3xD | 5xD | 8xD | 12xD | 1,5xD | 3xD | 5xD | 8xD | 12xD | 1,5xD | 3xD | 5xD | 8xD | 12xD | | | | | | | | | | | |
| ■ | ■ | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 6,00 – 20,00 * | | | | 5,00 – 20,00 * | | | | 3,00 – 16,00 * | | | | | 2,50 – 14,00 * | | | | 1,00 – 2,90 * | | | | 12,00 – 45,00 * | | | | | 8,00 – 50,00 * | | | | | | | | | | | | | | | | | | | | |
| * The diameter range can vary, depending on the version. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HA IT9 | | | | HA IT9 | | | | HA IT9 | | | | | HA IT9 | | | | HA IT9 | | | | TTS IT9 | | | | | ISO9766 IT9 | | | | | | | | | | | | | | | | | | | | |

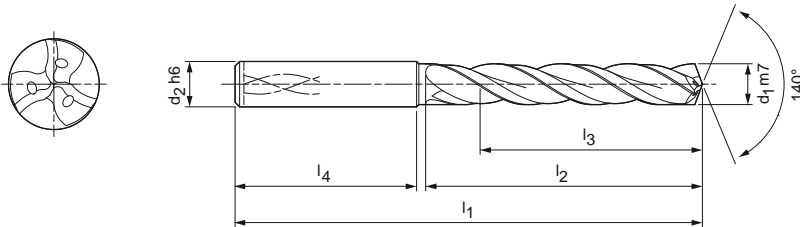
Explanation of specification:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|--|---|---|---|---|-------------------------|---|--------------------------|---|-------------|---|---|------------|---|---------------------|---|-----------------------------------|---|----|---|---|---|---|---|---|
| S | C | D | 4 | 4 | 1 | - | 2 | 0 | 0 | 0 | - | 3 | - | 3 | - | 1 | 4 | 0 | - | H | A | - | 05 | - | H | P | 6 | 1 | 9 |
| Series solid carbide drills | | | | | Diameter in 0,01 mm | | | | | Number of cutting edges | | Number of guide chamfers | | Point angle | | | Shank form | | Depth of bore [5xD] | | Cutting material (coated carbide) | | | | | | | | |
| | | | | | Coolant supply | | | | | | | | | | | | | | | | ISO9766 | | | | | | | | |
| | | | | | 0 = External coolant supply 1 = Internal coolant supply | | | | | | | | | | | | | | | | IT9 | | | | | | | | |

Tritan-Drill-Uni

Solid carbide twist drill
SCD44 (5xD), internal coolant supply

Design:
 Drill diameter: 5,00 – 20,00 mm
 Bore tolerance: IT 9 (achievable)
 Shank form: HA (DIN 6535)
 Coating: Chrome-based TiAl
 Number of cutting edges: 3
 Number of guiding chamfers: 3
 Tip angle: 140°
 Helix angle: 30°



| Dimensions | | | | | | Shank form HA | |
|-------------------|-------------------|----------------|----------------|----------------|----------------|-------------------------------|-----------|
| d ₁ m7 | d ₂ h6 | l ₁ | l ₂ | l ₃ | l ₄ | Specification | Order No. |
| 5,00 | 6 | 82 | 44 | 35 | 36 | SCD441-0500-3-3-140HA05-HP619 | 30551907 |
| 5,10 | 6 | 82 | 44 | 35 | 36 | SCD441-0510-3-3-140HA05-HP619 | 30551908 |
| 5,20 | 6 | 82 | 44 | 35 | 36 | SCD441-0520-3-3-140HA05-HP619 | 30551909 |
| 5,30 | 6 | 82 | 44 | 35 | 36 | SCD441-0530-3-3-140HA05-HP619 | 30551910 |
| 5,40 | 6 | 82 | 44 | 35 | 36 | SCD441-0540-3-3-140HA05-HP619 | 30551911 |
| 5,50 | 6 | 82 | 44 | 35 | 36 | SCD441-0550-3-3-140HA05-HP619 | 30551912 |
| 5,55 | 6 | 82 | 44 | 35 | 36 | SCD441-0555-3-3-140HA05-HP619 | 30551913 |
| 5,60 | 6 | 82 | 44 | 35 | 36 | SCD441-0560-3-3-140HA05-HP619 | 30551914 |
| 5,70 | 6 | 82 | 44 | 35 | 36 | SCD441-0570-3-3-140HA05-HP619 | 30551915 |
| 5,80 | 6 | 82 | 44 | 35 | 36 | SCD441-0580-3-3-140HA05-HP619 | 30551916 |
| 5,90 | 6 | 82 | 44 | 35 | 36 | SCD441-0590-3-3-140HA05-HP619 | 30551917 |
| 6,00 | 6 | 82 | 44 | 35 | 36 | SCD441-0600-3-3-140HA05-HP619 | 30551918 |
| 6,10 | 8 | 91 | 53 | 43 | 36 | SCD441-0610-3-3-140HA05-HP619 | 30551919 |
| 6,20 | 8 | 91 | 53 | 43 | 36 | SCD441-0620-3-3-140HA05-HP619 | 30551920 |
| 6,30 | 8 | 91 | 53 | 43 | 36 | SCD441-0630-3-3-140HA05-HP619 | 30551921 |
| 6,40 | 8 | 91 | 53 | 43 | 36 | SCD441-0640-3-3-140HA05-HP619 | 30551922 |
| 6,50 | 8 | 91 | 53 | 43 | 36 | SCD441-0650-3-3-140HA05-HP619 | 30551923 |
| 6,60 | 8 | 91 | 53 | 43 | 36 | SCD441-0660-3-3-140HA05-HP619 | 30551924 |
| 6,70 | 8 | 91 | 53 | 43 | 36 | SCD441-0670-3-3-140HA05-HP619 | 30551925 |
| 6,80 | 8 | 91 | 53 | 43 | 36 | SCD441-0680-3-3-140HA05-HP619 | 30551926 |
| 6,90 | 8 | 91 | 53 | 43 | 36 | SCD441-0690-3-3-140HA05-HP619 | 30551927 |
| 7,00 | 8 | 91 | 53 | 43 | 36 | SCD441-0700-3-3-140HA05-HP619 | 30551928 |
| 7,10 | 8 | 91 | 53 | 43 | 36 | SCD441-0710-3-3-140HA05-HP619 | 30551930 |
| 7,20 | 8 | 91 | 53 | 43 | 36 | SCD441-0720-3-3-140HA05-HP619 | 30551931 |
| 7,30 | 8 | 91 | 53 | 43 | 36 | SCD441-0730-3-3-140HA05-HP619 | 30551932 |
| 7,40 | 8 | 91 | 53 | 43 | 36 | SCD441-0740-3-3-140HA05-HP619 | 30551933 |
| 7,50 | 8 | 91 | 53 | 43 | 36 | SCD441-0750-3-3-140HA05-HP619 | 30551934 |
| 7,60 | 8 | 91 | 53 | 43 | 36 | SCD441-0760-3-3-140HA05-HP619 | 30551935 |
| 7,70 | 8 | 91 | 53 | 43 | 36 | SCD441-0770-3-3-140HA05-HP619 | 30551936 |
| 7,80 | 8 | 91 | 53 | 43 | 36 | SCD441-0780-3-3-140HA05-HP619 | 30551937 |
| 7,90 | 8 | 91 | 53 | 43 | 36 | SCD441-0790-3-3-140HA05-HP619 | 30551938 |
| 8,00 | 8 | 91 | 53 | 43 | 36 | SCD441-0800-3-3-140HA05-HP619 | 30551939 |
| 8,10 | 10 | 103 | 61 | 49 | 40 | SCD441-0810-3-3-140HA05-HP619 | 30551940 |
| 8,20 | 10 | 103 | 61 | 49 | 40 | SCD441-0820-3-3-140HA05-HP619 | 30551941 |
| 8,30 | 10 | 103 | 61 | 49 | 40 | SCD441-0830-3-3-140HA05-HP619 | 30551942 |
| 8,40 | 10 | 103 | 61 | 49 | 40 | SCD441-0840-3-3-140HA05-HP619 | 30551943 |
| 8,50 | 10 | 103 | 61 | 49 | 40 | SCD441-0850-3-3-140HA05-HP619 | 30551944 |
| 8,60 | 10 | 103 | 61 | 49 | 40 | SCD441-0860-3-3-140HA05-HP619 | 30551945 |

Tritan-Drill-Uni | Solid carbide twist drill | SCD44 (5xD), internal coolant supply

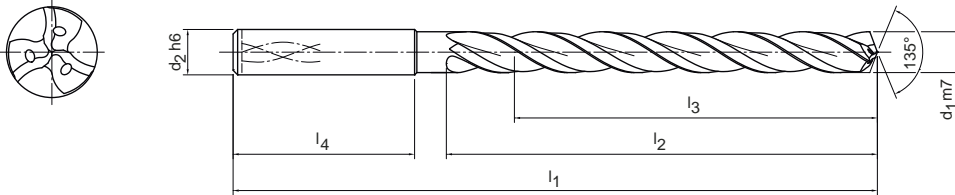
| Dimensions | | | | | | Shank form HA | |
|-------------------|-------------------|----------------|----------------|----------------|----------------|-------------------------------|-----------|
| d ₁ m7 | d ₂ h6 | l ₁ | l ₂ | l ₃ | l ₄ | Specification | Order No. |
| 8,70 | 10 | 103 | 61 | 49 | 40 | SCD441-0870-3-3-140HA05-HP619 | 30551946 |
| 8,80 | 10 | 103 | 61 | 49 | 40 | SCD441-0880-3-3-140HA05-HP619 | 30551947 |
| 8,90 | 10 | 103 | 61 | 49 | 40 | SCD441-0890-3-3-140HA05-HP619 | 30551948 |
| 9,00 | 10 | 103 | 61 | 49 | 40 | SCD441-0900-3-3-140HA05-HP619 | 30551949 |
| 9,10 | 10 | 103 | 61 | 49 | 40 | SCD441-0910-3-3-140HA05-HP619 | 30551950 |
| 9,20 | 10 | 103 | 61 | 49 | 40 | SCD441-0920-3-3-140HA05-HP619 | 30551951 |
| 9,30 | 10 | 103 | 61 | 49 | 40 | SCD441-0930-3-3-140HA05-HP619 | 30551952 |
| 9,40 | 10 | 103 | 61 | 49 | 40 | SCD441-0940-3-3-140HA05-HP619 | 30551953 |
| 9,50 | 10 | 103 | 61 | 49 | 40 | SCD441-0950-3-3-140HA05-HP619 | 30551954 |
| 9,60 | 10 | 103 | 61 | 49 | 40 | SCD441-0960-3-3-140HA05-HP619 | 30551955 |
| 9,70 | 10 | 103 | 61 | 49 | 40 | SCD441-0970-3-3-140HA05-HP619 | 30551956 |
| 9,80 | 10 | 103 | 61 | 49 | 40 | SCD441-0980-3-3-140HA05-HP619 | 30551957 |
| 9,90 | 10 | 103 | 61 | 49 | 40 | SCD441-0990-3-3-140HA05-HP619 | 30551958 |
| 10,00 | 10 | 103 | 61 | 49 | 40 | SCD441-1000-3-3-140HA05-HP619 | 30551959 |
| 10,10 | 12 | 118 | 71 | 56 | 45 | SCD441-1010-3-3-140HA05-HP619 | 30551960 |
| 10,20 | 12 | 118 | 71 | 56 | 45 | SCD441-1020-3-3-140HA05-HP619 | 30551961 |
| 10,30 | 12 | 118 | 71 | 56 | 45 | SCD441-1030-3-3-140HA05-HP619 | 30551962 |
| 10,40 | 12 | 118 | 71 | 56 | 45 | SCD441-1040-3-3-140HA05-HP619 | 30551963 |
| 10,50 | 12 | 118 | 71 | 56 | 45 | SCD441-1050-3-3-140HA05-HP619 | 30551964 |
| 10,60 | 12 | 118 | 71 | 56 | 45 | SCD441-1060-3-3-140HA05-HP619 | 30551965 |
| 10,70 | 12 | 118 | 71 | 56 | 45 | SCD441-1070-3-3-140HA05-HP619 | 30551966 |
| 10,80 | 12 | 118 | 71 | 56 | 45 | SCD441-1080-3-3-140HA05-HP619 | 30551967 |
| 10,90 | 12 | 118 | 71 | 56 | 45 | SCD441-1090-3-3-140HA05-HP619 | 30551968 |
| 11,00 | 12 | 118 | 71 | 56 | 45 | SCD441-1100-3-3-140HA05-HP619 | 30551969 |
| 11,10 | 12 | 118 | 71 | 56 | 45 | SCD441-1110-3-3-140HA05-HP619 | 30551970 |
| 11,20 | 12 | 118 | 71 | 56 | 45 | SCD441-1120-3-3-140HA05-HP619 | 30551971 |
| 11,30 | 12 | 118 | 71 | 56 | 45 | SCD441-1130-3-3-140HA05-HP619 | 30551972 |
| 11,40 | 12 | 118 | 71 | 56 | 45 | SCD441-1140-3-3-140HA05-HP619 | 30551973 |
| 11,50 | 12 | 118 | 71 | 56 | 45 | SCD441-1150-3-3-140HA05-HP619 | 30551974 |
| 11,60 | 12 | 118 | 71 | 56 | 45 | SCD441-1160-3-3-140HA05-HP619 | 30551975 |
| 11,70 | 12 | 118 | 71 | 56 | 45 | SCD441-1170-3-3-140HA05-HP619 | 30551976 |
| 11,80 | 12 | 118 | 71 | 56 | 45 | SCD441-1180-3-3-140HA05-HP619 | 30551977 |
| 11,90 | 12 | 118 | 71 | 56 | 45 | SCD441-1190-3-3-140HA05-HP619 | 30551978 |
| 12,00 | 12 | 118 | 71 | 56 | 45 | SCD441-1200-3-3-140HA05-HP619 | 30551979 |
| 12,50 | 14 | 124 | 77 | 60 | 45 | SCD441-1250-3-3-140HA05-HP619 | 30551980 |
| 12,80 | 14 | 124 | 77 | 60 | 45 | SCD441-1280-3-3-140HA05-HP619 | 30551981 |
| 13,00 | 14 | 124 | 77 | 60 | 45 | SCD441-1300-3-3-140HA05-HP619 | 30551982 |
| 13,50 | 14 | 124 | 77 | 60 | 45 | SCD441-1400-3-3-140HA05-HP619 | 30551983 |
| 13,80 | 14 | 124 | 77 | 60 | 45 | SCD441-1380-3-3-140HA05-HP619 | 30551984 |
| 14,00 | 14 | 124 | 77 | 60 | 45 | SCD441-1400-3-3-140HA05-HP619 | 30551985 |
| 14,50 | 16 | 133 | 83 | 63 | 48 | SCD441-1450-3-3-140HA05-HP619 | 30551986 |
| 14,80 | 16 | 133 | 83 | 63 | 48 | SCD441-1480-3-3-140HA05-HP619 | 30551987 |
| 15,00 | 16 | 133 | 83 | 63 | 48 | SCD441-1500-3-3-140HA05-HP619 | 30551988 |
| 15,50 | 16 | 133 | 83 | 63 | 48 | SCD441-1550-3-3-140HA05-HP619 | 30551989 |
| 15,80 | 16 | 133 | 83 | 63 | 48 | SCD441-1580-3-3-140HA05-HP619 | 30551990 |
| 16,00 | 16 | 133 | 83 | 63 | 48 | SCD441-1600-3-3-140HA05-HP619 | 30551991 |
| 16,50 | 18 | 143 | 93 | 71 | 48 | SCD441-1650-3-3-140HA05-HP619 | 30551992 |
| 16,80 | 18 | 143 | 93 | 71 | 48 | SCD441-1680-3-3-140HA05-HP619 | 30551993 |
| 17,00 | 18 | 143 | 93 | 71 | 48 | SCD441-1700-3-3-140HA05-HP619 | 30551994 |
| 17,50 | 18 | 143 | 93 | 71 | 48 | SCD441-1750-3-3-140HA05-HP619 | 30551995 |
| 17,80 | 18 | 143 | 93 | 71 | 48 | SCD441-1780-3-3-140HA05-HP619 | 30551996 |
| 18,00 | 18 | 143 | 93 | 71 | 48 | SCD441-1800-3-3-140HA05-HP619 | 30551997 |
| 18,50 | 20 | 153 | 101 | 77 | 50 | SCD441-1850-3-3-140HA05-HP619 | 30551998 |
| 18,80 | 20 | 153 | 101 | 77 | 50 | SCD441-1880-3-3-140HA05-HP619 | 30551999 |
| 19,00 | 20 | 153 | 101 | 77 | 50 | SCD441-1900-3-3-140HA05-HP619 | 30552000 |
| 19,50 | 20 | 153 | 101 | 77 | 50 | SCD441-1950-3-3-140HA05-HP619 | 30552001 |
| 19,80 | 20 | 153 | 101 | 77 | 50 | SCD441-1980-3-3-140HA05-HP619 | 30552002 |
| 20,00 | 20 | 153 | 101 | 77 | 50 | SCD441-2000-3-3-140HA05-HP619 | 30552003 |

Dimensions in mm.
Special designs and other coatings on request.

Tritan-Drill-Uni

Solid carbide twist drill
SCD44 (8xD), internal coolant supply

Design:
 Drill diameter: 5,00 – 20,00 mm
 Bore tolerance: IT 9 (achievable)
 Shank form: HA
 Coating: Chrome-based TiAl
 Number of cutting edges: 3
 Number of guiding chamfers: 3
 Tip angle: 135°
 Helix angle: 30°



| Dimensions | | | | | | Shank form HA | |
|-------------------|-------------------|----------------|----------------|----------------|----------------|-------------------------------|-----------|
| d ₁ m7 | d ₂ h6 | l ₁ | l ₂ | l ₃ | l ₄ | Specification | Order No. |
| 5,00 | 6 | 95 | 57 | 48 | 36 | SCD441-0500-3-3-140HA08-HP619 | 30694559 |
| 5,10 | 6 | 95 | 57 | 48 | 36 | SCD441-0510-3-3-140HA08-HP619 | 30694560 |
| 5,20 | 6 | 95 | 57 | 48 | 36 | SCD441-0520-3-3-140HA08-HP619 | 30694561 |
| 5,30 | 6 | 95 | 57 | 48 | 36 | SCD441-0530-3-3-140HA08-HP619 | 30694562 |
| 5,40 | 6 | 95 | 57 | 48 | 36 | SCD441-0540-3-3-140HA08-HP619 | 30694563 |
| 5,50 | 6 | 95 | 57 | 48 | 36 | SCD441-0550-3-3-140HA08-HP619 | 30694564 |
| 5,55 | 6 | 95 | 57 | 48 | 36 | SCD441-0555-3-3-140HA08-HP619 | 30694565 |
| 5,60 | 6 | 95 | 57 | 48 | 36 | SCD441-0560-3-3-140HA08-HP619 | 30694566 |
| 5,70 | 6 | 95 | 57 | 48 | 36 | SCD441-0570-3-3-140HA08-HP619 | 30694567 |
| 5,80 | 6 | 95 | 57 | 48 | 36 | SCD441-0580-3-3-140HA08-HP619 | 30694568 |
| 5,90 | 6 | 95 | 57 | 48 | 36 | SCD441-0590-3-3-140HA08-HP619 | 30694569 |
| 6,00 | 6 | 95 | 57 | 48 | 36 | SCD441-0600-3-3-140HA08-HP619 | 30694570 |
| 6,10 | 8 | 114 | 76 | 64 | 36 | SCD441-0610-3-3-140HA08-HP619 | 30694571 |
| 6,20 | 8 | 114 | 76 | 64 | 36 | SCD441-0620-3-3-140HA08-HP619 | 30694572 |
| 6,30 | 8 | 114 | 76 | 64 | 36 | SCD441-0630-3-3-140HA08-HP619 | 30694573 |
| 6,40 | 8 | 114 | 76 | 64 | 36 | SCD441-0640-3-3-140HA08-HP619 | 30694574 |
| 6,50 | 8 | 114 | 76 | 64 | 36 | SCD441-0650-3-3-140HA08-HP619 | 30694575 |
| 6,60 | 8 | 114 | 76 | 64 | 36 | SCD441-0660-3-3-140HA08-HP619 | 30694576 |
| 6,70 | 8 | 114 | 76 | 64 | 36 | SCD441-0670-3-3-140HA08-HP619 | 30694577 |
| 6,80 | 8 | 114 | 76 | 64 | 36 | SCD441-0680-3-3-140HA08-HP619 | 30694578 |
| 6,90 | 8 | 114 | 76 | 64 | 36 | SCD441-0690-3-3-140HA08-HP619 | 30694579 |
| 7,00 | 8 | 114 | 76 | 64 | 36 | SCD441-0700-3-3-140HA08-HP619 | 30694580 |
| 7,10 | 8 | 114 | 76 | 64 | 36 | SCD441-0710-3-3-140HA08-HP619 | 30694581 |
| 7,20 | 8 | 114 | 76 | 64 | 36 | SCD441-0720-3-3-140HA08-HP619 | 30694583 |
| 7,30 | 8 | 114 | 76 | 64 | 36 | SCD441-0730-3-3-140HA08-HP619 | 30694584 |
| 7,40 | 8 | 114 | 76 | 64 | 36 | SCD441-0740-3-3-140HA08-HP619 | 30694585 |
| 7,50 | 8 | 114 | 76 | 64 | 36 | SCD441-0750-3-3-140HA08-HP619 | 30694586 |
| 7,60 | 8 | 114 | 76 | 64 | 36 | SCD441-0760-3-3-140HA08-HP619 | 30694587 |
| 7,70 | 8 | 114 | 76 | 64 | 36 | SCD441-0770-3-3-140HA08-HP619 | 30694588 |
| 7,80 | 8 | 114 | 76 | 64 | 36 | SCD441-0780-3-3-140HA08-HP619 | 30694589 |
| 7,90 | 8 | 114 | 76 | 64 | 36 | SCD441-0790-3-3-140HA08-HP619 | 30694590 |
| 8,00 | 8 | 114 | 76 | 64 | 36 | SCD441-0800-3-3-140HA08-HP619 | 30694591 |
| 8,10 | 10 | 142 | 95 | 80 | 40 | SCD441-0810-3-3-140HA08-HP619 | 30694592 |
| 8,20 | 10 | 142 | 95 | 80 | 40 | SCD441-0820-3-3-140HA08-HP619 | 30694593 |
| 8,30 | 10 | 142 | 95 | 80 | 40 | SCD441-0830-3-3-140HA08-HP619 | 30694594 |
| 8,40 | 10 | 142 | 95 | 80 | 40 | SCD441-0840-3-3-140HA08-HP619 | 30694595 |
| 8,50 | 10 | 142 | 95 | 80 | 40 | SCD441-0850-3-3-140HA08-HP619 | 30694596 |
| 8,60 | 10 | 142 | 95 | 80 | 40 | SCD441-0860-3-3-140HA08-HP619 | 30694597 |

Tritan-Drill-Uni | Solid carbide twist drill | SCD44 (8xD), internal coolant supply

| Dimensions | | | | | | Shank form HA | |
|-------------------|-------------------|----------------|----------------|----------------|----------------|-------------------------------|-----------|
| d ₁ m7 | d ₂ h6 | l ₁ | l ₂ | l ₃ | l ₄ | Specification | Order No. |
| 8,70 | 10 | 142 | 95 | 80 | 40 | SCD441-0870-3-3-140HA08-HP619 | 30694598 |
| 8,80 | 10 | 142 | 95 | 80 | 40 | SCD441-0880-3-3-140HA08-HP619 | 30694599 |
| 8,90 | 10 | 142 | 95 | 80 | 40 | SCD441-0890-3-3-140HA08-HP619 | 30694600 |
| 9,00 | 10 | 142 | 95 | 80 | 40 | SCD441-0900-3-3-140HA08-HP619 | 30694601 |
| 9,10 | 10 | 142 | 95 | 80 | 40 | SCD441-0910-3-3-140HA08-HP619 | 30694602 |
| 9,20 | 10 | 142 | 95 | 80 | 40 | SCD441-0920-3-3-140HA08-HP619 | 30694603 |
| 9,30 | 10 | 142 | 95 | 80 | 40 | SCD441-0930-3-3-140HA08-HP619 | 30694604 |
| 9,40 | 10 | 142 | 95 | 80 | 40 | SCD441-0940-3-3-140HA08-HP619 | 30694605 |
| 9,50 | 10 | 142 | 95 | 80 | 40 | SCD441-0950-3-3-140HA08-HP619 | 30694606 |
| 9,60 | 10 | 142 | 95 | 80 | 40 | SCD441-0960-3-3-140HA08-HP619 | 30694607 |
| 9,70 | 10 | 142 | 95 | 80 | 40 | SCD441-0970-3-3-140HA08-HP619 | 30694608 |
| 9,80 | 10 | 142 | 95 | 80 | 40 | SCD441-0980-3-3-140HA08-HP619 | 30694609 |
| 9,90 | 10 | 142 | 95 | 80 | 40 | SCD441-0990-3-3-140HA08-HP619 | 30694610 |
| 10,00 | 10 | 142 | 95 | 80 | 40 | SCD441-1000-3-3-140HA08-HP619 | 30694611 |
| 10,10 | 12 | 162 | 114 | 96 | 45 | SCD441-1010-3-3-140HA08-HP619 | 30694612 |
| 10,20 | 12 | 162 | 114 | 96 | 45 | SCD441-1020-3-3-140HA08-HP619 | 30694613 |
| 10,30 | 12 | 162 | 114 | 96 | 45 | SCD441-1030-3-3-140HA08-HP619 | 30694614 |
| 10,40 | 12 | 162 | 114 | 96 | 45 | SCD441-1040-3-3-140HA08-HP619 | 30694615 |
| 10,50 | 12 | 162 | 114 | 96 | 45 | SCD441-1050-3-3-140HA08-HP619 | 30694616 |
| 10,60 | 12 | 162 | 114 | 96 | 45 | SCD441-1060-3-3-140HA08-HP619 | 30694617 |
| 10,70 | 12 | 162 | 114 | 96 | 45 | SCD441-1070-3-3-140HA08-HP619 | 30694618 |
| 10,80 | 12 | 162 | 114 | 96 | 45 | SCD441-1080-3-3-140HA08-HP619 | 30694619 |
| 10,90 | 12 | 162 | 114 | 96 | 45 | SCD441-1090-3-3-140HA08-HP619 | 30694620 |
| 11,00 | 12 | 162 | 114 | 96 | 45 | SCD441-1100-3-3-140HA08-HP619 | 30694621 |
| 11,10 | 12 | 162 | 114 | 96 | 45 | SCD441-1110-3-3-140HA08-HP619 | 30694622 |
| 11,20 | 12 | 162 | 114 | 96 | 45 | SCD441-1120-3-3-140HA08-HP619 | 30694623 |
| 11,30 | 12 | 162 | 114 | 96 | 45 | SCD441-1130-3-3-140HA08-HP619 | 30694624 |
| 11,40 | 12 | 162 | 114 | 96 | 45 | SCD441-1140-3-3-140HA08-HP619 | 30694625 |
| 11,50 | 12 | 162 | 114 | 96 | 45 | SCD441-1150-3-3-140HA08-HP619 | 30694626 |
| 11,60 | 12 | 162 | 114 | 96 | 45 | SCD441-1160-3-3-140HA08-HP619 | 30694627 |
| 11,70 | 12 | 162 | 114 | 96 | 45 | SCD441-1170-3-3-140HA08-HP619 | 30694628 |
| 11,80 | 12 | 162 | 114 | 96 | 45 | SCD441-1180-3-3-140HA08-HP619 | 30694629 |
| 11,90 | 12 | 162 | 114 | 96 | 45 | SCD441-1190-3-3-140HA08-HP619 | 30694630 |
| 12,00 | 12 | 162 | 114 | 96 | 45 | SCD441-1200-3-3-140HA08-HP619 | 30694631 |
| 12,50 | 14 | 178 | 133 | 112 | 45 | SCD441-1250-3-3-140HA08-HP619 | 30694632 |
| 12,80 | 14 | 178 | 133 | 112 | 45 | SCD441-1280-3-3-140HA08-HP619 | 30694633 |
| 13,00 | 14 | 178 | 133 | 112 | 45 | SCD441-1300-3-3-140HA08-HP619 | 30694634 |
| 13,50 | 14 | 178 | 133 | 112 | 45 | SCD441-1350-3-3-140HA08-HP619 | 30694635 |
| 13,80 | 14 | 178 | 133 | 112 | 45 | SCD441-1380-3-3-140HA08-HP619 | 30694636 |
| 14,00 | 14 | 178 | 133 | 112 | 45 | SCD441-1400-3-3-140HA08-HP619 | 30694637 |
| 14,50 | 16 | 203 | 152 | 128 | 48 | SCD441-1450-3-3-140HA08-HP619 | 30694638 |
| 14,80 | 16 | 203 | 152 | 128 | 48 | SCD441-1480-3-3-140HA08-HP619 | 30694639 |
| 15,00 | 16 | 203 | 152 | 128 | 48 | SCD441-1500-3-3-140HA08-HP619 | 30694640 |
| 15,50 | 16 | 203 | 152 | 128 | 48 | SCD441-1550-3-3-140HA08-HP619 | 30694641 |
| 15,80 | 16 | 203 | 152 | 128 | 48 | SCD441-1580-3-3-140HA08-HP619 | 30694642 |
| 16,00 | 16 | 203 | 152 | 128 | 48 | SCD441-1600-3-3-140HA08-HP619 | 30694643 |
| 16,50 | 18 | 222 | 171 | 144 | 48 | SCD441-1650-3-3-140HA08-HP619 | 30694644 |
| 16,80 | 18 | 222 | 171 | 144 | 48 | SCD441-1680-3-3-140HA08-HP619 | 30694645 |
| 17,00 | 18 | 222 | 171 | 144 | 48 | SCD441-1700-3-3-140HA08-HP619 | 30694646 |
| 17,50 | 18 | 222 | 171 | 144 | 48 | SCD441-1750-3-3-140HA08-HP619 | 30694647 |
| 17,80 | 18 | 222 | 171 | 144 | 48 | SCD441-1780-3-3-140HA08-HP619 | 30694648 |
| 18,00 | 18 | 222 | 171 | 144 | 48 | SCD441-1800-3-3-140HA08-HP619 | 30694649 |
| 18,50 | 20 | 243 | 190 | 160 | 50 | SCD441-1850-3-3-140HA08-HP619 | 30694650 |
| 18,80 | 20 | 243 | 190 | 160 | 50 | SCD441-1880-3-3-140HA08-HP619 | 30694651 |
| 19,00 | 20 | 243 | 190 | 160 | 50 | SCD441-1900-3-3-140HA08-HP619 | 30694652 |
| 19,50 | 20 | 243 | 190 | 160 | 50 | SCD441-1950-3-3-140HA08-HP619 | 30694653 |
| 19,80 | 20 | 243 | 190 | 160 | 50 | SCD441-1980-3-3-140HA08-HP619 | 30694654 |
| 20,00 | 20 | 243 | 190 | 160 | 50 | SCD441-2000-3-3-140HA08-HP619 | 30694655 |

Dimensions in mm.
Special designs and other coatings on request.



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