

THE NEW VALUE FRONTIER



High efficiency  
modular drill

**DRA**  
chamfering attachment

# DRA chamfering attachment



## New straight shank DRA chamfering attachment

Excellent chip control in a wide range of drilling depths

Chamfer size: Recommended is 4 mm | Max. is 8 mm

Applicably with  $\varnothing$ 10 mm to  $\varnothing$ 20 mm shank of drill body in 3D, 5D and 8D lengths

Hole diameter from  $\varnothing$ 8 mm to  $\varnothing$ 19.9 mm

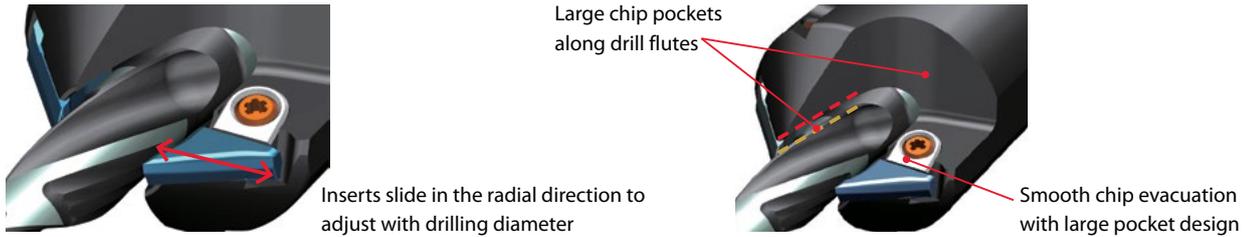
High efficiency modular drill

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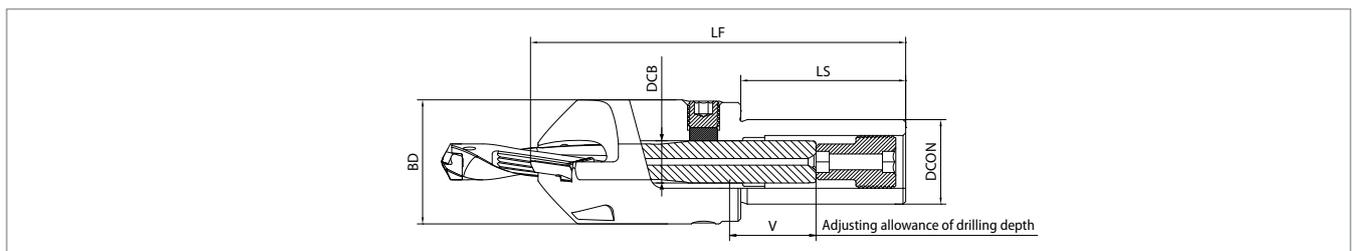
## 1 Excellent stability and chip evacuation

Easy-to-adjust chamfering insert slides in radial direction with a clamp structure that provides good chip evacuation



## 2 Fully adjustable for a wide range of drilling depths

Range of adjustable depths for a  $\phi 14$  mm drilling diameter



### Toolholder

| Description  | Availability | Applicable drill shank dia. DCB ( $\phi$ ) | Dimensions (mm) |    |     |    |         | Applicable insert |
|--------------|--------------|--|-----------------|----|-----|----|---------|-------------------|
|              |              |  | DCON            | BD | LF  | LS | V (Max) |                   |
| S20-CH10-DRA | ●            | 10   | 20              | 39 | 110 | 52 | 18      | CT12T3-45DA       |
| S32-CH12-DRA | ●            | 12   | 32              | 43 | 130 | 62 | 24      |                   |
| S32-CH14-DRA | ●            | 14   | 32              | 45 | 130 | 62 | 24      |                   |
| S32-CH16-DRA | ●            | 16   | 32              | 47 | 141 | 62 | 24      |                   |
| S32-CH18-DRA | ●            | 18   | 32              | 49 | 145 | 62 | 24      |                   |
| S32-CH20-DRA | ●            | 20   | 32              | 53 | 150 | 62 | 24.5    |                   |

● : Available

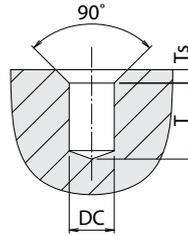
### Applicable insert

| Shape | Description | MEGACOAT NANO |       | Dimensions (mm) |  |
|-------|-------------|---------------|-------|-----------------|--|
|       |             | PR1535        | W1    | S               |  |
|       | CT12T3-45DA | ●             | 13.54 | 3.97            |  |

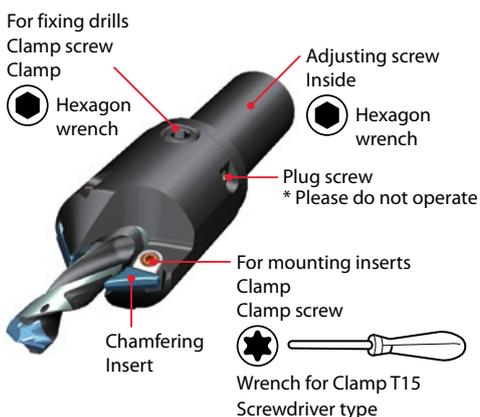
● : Available

| Chamfering attachment | Adjusting screw   |                        | For fixing drills   |   |                        |              | For mounting inserts   |   |   |   |
|-----------------------|---|------------------------|---|---|------------------------|--------------|--|---|---|---|
|                       |   |                        | Clamp   | Clamp screw   |                        | Plug screw   | Clamp  | Clamp screw   | Wrench  |   |
| Description           |  | Width Across Flat (mm) |  |  | Width Across Flat (mm) | Torque [N·m] |  |  |  |  |
| S20-CH10-DRA          | AJ-12X22  | 6                      | CP-CH10   | HS8X8   | 4                      | 12           | BNP6   | C09N  | W6X18N  | DTM-15  |
| S32-CH12-DRA          | AJ-16X30  |                        | CP-CH12   |   |                        | 15           |  |   |   |   |
| S32-CH14-DRA          | AJ-20X30  | CP-CH14                | HS10X10   | 5   | 20                     |              |  |   |   |   |
| S32-CH16-DRA          |   | CP-CH16                |   |   | 30                     |              |  |   |   |   |
| S32-CH18-DRA          | AJ-22x35  | CP-CH18                | HS12X10   | 6   | 30                     |              |  |   |   |   |
| S32-CH20-DRA          |   | CP-CH20                |   |   | HS16X10                | 8            |  |   |   |   |

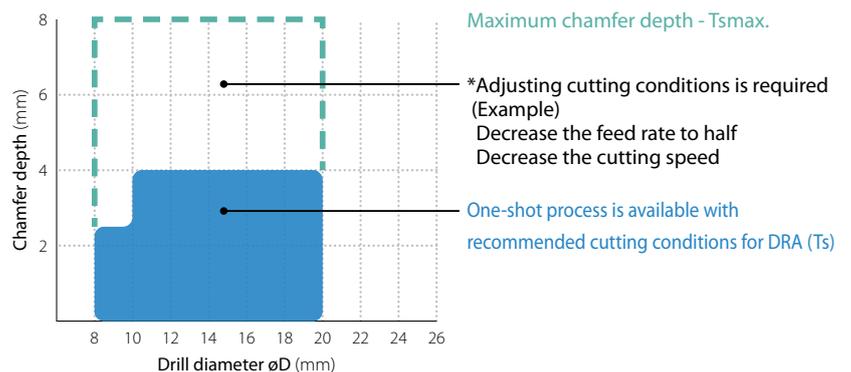
### Drilling and chamfering depths



| Cutting Dia. (mm)<br>DC |        | Drilling Depth (mm) |      |         |      |         |       | Chamfering Dimension (mm) |        | Applicable Toolholder |
|-------------------------|--------|---------------------|------|---------|------|---------|-------|---------------------------|--------|-----------------------|
| min.                    | max.   | T (3XD)             |      | T (5XD) |      | T (8XD) |       | Ts                        | Tsmax. |                       |
| ø7.94                   | ø8.49  | 12.5                | 20   | 18      | 36   | 43      | 60    | 2.5                       | 8      | S20-CH10-DRA          |
| ø8.50                   | ø8.99  | 12.5                | 21.5 | 21.5    | 38.5 | 48      | 64    |                           |        |                       |
| ø9.00                   | ø9.49  | 12.5                | 23   | 24      | 41   | 52      | 68    |                           |        |                       |
| ø9.50                   | ø9.99  | 12.5                | 24.5 | 27.5    | 43.5 | 57.5    | 72.5  |                           |        |                       |
| ø10.00                  | ø10.49 | 15.5                | 26   | 22      | 46   | 52      | 76    | 4                         | 8      | S32-CH12-DRA          |
| ø10.50                  | ø10.99 | 16                  | 27.5 | 24.5    | 48.5 | 56      | 80    |                           |        |                       |
| ø11.00                  | ø11.49 | 16.5                | 29   | 27      | 51   | 60      | 84    |                           |        |                       |
| ø11.50                  | ø11.99 | 17.5                | 30.5 | 29.5    | 53.5 | 64      | 88    |                           |        |                       |
| ø12.00                  | ø12.49 | 18                  | 32   | 32      | 56   | 68      | 92    | 4                         | 8      | S32-CH14-DRA          |
| ø12.50                  | ø12.99 | 19                  | 34   | 35      | 59   | 72.5    | 96.5  |                           |        |                       |
| ø13.00                  | ø13.49 | 19.5                | 35.5 | 37.5    | 61.5 | 76      | 100   |                           |        |                       |
| ø13.50                  | ø13.99 | 20                  | 36.5 | 39.5    | 63.5 | 80      | 104   |                           |        |                       |
| ø14.00                  | ø14.49 | 21                  | 38.5 | 42.5    | 66.5 | 84.5    | 108.5 | 4                         | 8      | S32-CH16-DRA          |
| ø14.50                  | ø14.99 | 21.5                | 40   | 45      | 69   | 88.5    | 112.5 |                           |        |                       |
| ø15.00                  | ø15.99 | 22.5                | 41.5 | 47.5    | 71.5 | 92.5    | 116.5 |                           |        |                       |
| ø16.00                  | ø16.99 | 24                  | 44.5 | 52.5    | 76.5 | 100.5   | 124.5 |                           |        |                       |
| ø17.00                  | ø17.99 | 25.5                | 47.5 | 57.5    | 81.5 | 108.5   | 132.5 | 4                         | 8      | S32-CH18-DRA          |
| ø18.00                  | ø18.99 | 27.5                | 51   | 64      | 87   | 121     | 141   |                           |        |                       |
| ø19.00                  | ø19.99 | 29.5                | 54   | 69      | 92   | 129     | 149   | 4                         | 8      | S32-CH20-DRA          |



### Recommended cutting conditions - C50

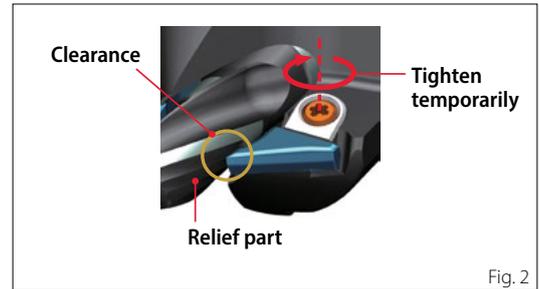


# How to install chamfering attachment

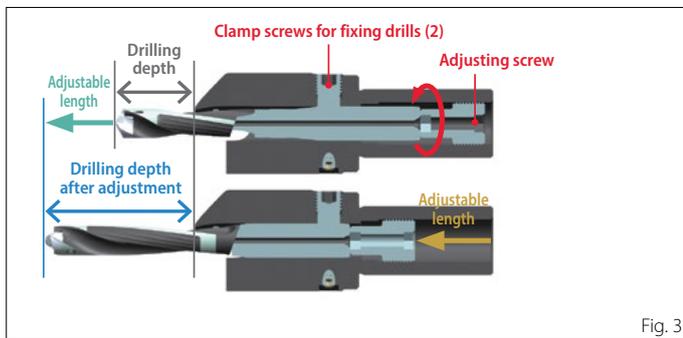
## 1 Mount DRA drill into the chamfering attachment - Fig. 1



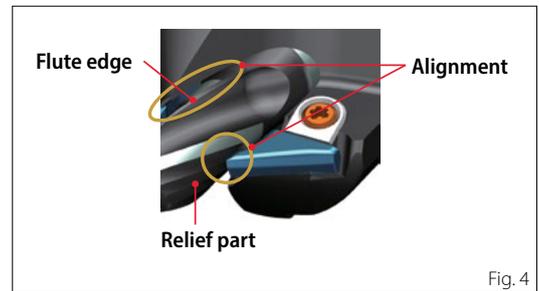
## 2 Install an insert and tighten temporarily with clearance between the cutting edge and DRA body - Fig. 2



## 3 Adjust drilling depth by turning adjustment screw with hexagon wrench - Fig. 3



## 4 Align the flute edge and black relief part of the drill to the position shown in Fig. 4 by rotating the DRA drill

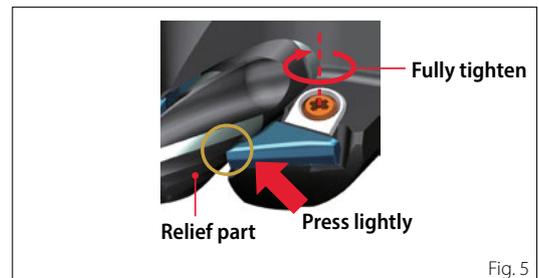


## 5 Fasten the two clamp screws for DRA See table 1 for recommended torque

Table 1

| Chamfering attachment description | Clamp screw              |                        |
|-----------------------------------|--------------------------|------------------------|
|                                   | Recommended torque (N-m) | Width across flat (mm) |
| S20-CH10-DRA                      | 12                       | 4                      |
| S32-CH12-DRA                      | 15                       |                        |
| S32-CH14-DRA                      | 20                       | 5                      |
| S32-CH16-DRA                      | 30                       |                        |
| S32-CH18-DRA                      | 30                       | 6                      |
| S32-CH20-DRA                      | 45                       |                        |

## 6 Tighten the inserts while lightly pressing the edge of insert against the relief part - Fig. 5 (Recommended torque is 3.5 N-m)



### Cautions

- Chamfering attachment is compatible with straight shank SS-DRA. It cannot be used for flanged shank SF-DRA.
- Chamfering requires two chamfering inserts. Using one insert is not recommended.
- Only fully remove clamp screws when replacing them.

- Clamps and clamp screws for mounting inserts need to be replaced regularly.
- Screw locking adhesive is applied to adjustment screw. The effect will eventually wear off if the screws are used for a long time. Regular replacement is recommended.
- Please do not operate the plug screws.