Floating Cutter [Overview]

Anti-burr/Anti-chip Cutting Unit

Panel Transfer Components

Cutter Supplied as Blank

- Off-set Structure
- Easy Adjustment
- Compact Design
- 500,000 cycles under normal use.







Clearance in the horizontal direction of the cutter

Comparison of NEW SUFC unit with the Current Method

The Current Method



SUFC Assembly Instruction

Disassembly

Remove the Hexagonal Socket Head Bolts (5)

Assembly

- Assembly is the reverse procedure of disassembly. · Ensure that all parts are clean, particularly the sliding components to which a small amount of grease is applied and is then placed in position.
- · Take care that the respective tolerances are observed when assembling the holder $(\overline{1})$ and cutter (2)

· Make sure that all bolts are tightened to the recommended torque after assembly and disassembly.

- · Recommended Torque
- for Hexagon Socket Head Bolt (5) 61N∙m





| u | | | |
|---|---|---|---|
| | 1 | 0 | 0 |
| | 5 | | |
| | 4 | | |
| | 9 | | |
| | 8 | | |
| | | | |

| No. | Description | Qty | Material and Remark |
|-----|--------------------------|-----|------------------------------------|
| 1 | Holder | 1 | Bronze |
| 2 | Cutter | 1 | Tool Steel |
| 3 | Plate A | 1 | Steel |
| 4 | Plate B | 1 | Steel |
| 5 | Hexagon Socket Head Bolt | 2 | M10-65 |
| 6 | Hexagon Socket Head Bolt | 2 | M10-85 |
| 7 | Dowel | 2 | \$ 8-50 |
| 8 | Gas Spring | 1 | Refer to the Spring Specification. |
| 9 | Snap (Retention) Ring | 1 | - |
| 10 | Locking Plate | 1 | Steel |
| 11 | Hexagon Socket Head Bolt | 1 | M6-8 |

6 and 7 supplied with unit.

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Floating Cutter

Anti-burr/Anti-chip Cutting Unit

Panel Transfer Components





(Cutter Material) Flame Hardening Steel

| Catalog No. | Cutter Width Travel W ST | | Cutter Material CMT | Spring Type PS | Working Force kN |
|-------------|--------------------------|---|------------------------|-------------------|---------------------|
| | | | | GK NGK | |
| SUFC | 12 | 6 | CMF | GH NGH | 4.4 |
| | | | | GD NGD | |

GK: Gas Spring (KALLER) GH: Gas Spring (HYSON) GD: Gas Spring (DADCO) NGK/NGH/NGD: Without Gas Spring Parts for spring assembly are included.

Spring Specification

| Initial | | | | | | Consistent Mandal | | | | | | |
|-----------------|------------------------------|----------------------|---------------------------|---------------------|--|-------------------|-----------|--------------------------|-------|-----------------------|---------|-----------|
| Deflection [mm] | | Lo | Load [kN] | | | Spring Model | | | | | | |
| 0.5 4.4 | | | | | CU4 420-10 (KALLER) T4SC-420x10-V152 (HYSON) SC.00420.10 (DADCO) | | | | | | | |
| Order | Catalog SUF SUF SUF | g No. C C C | | W 12 12 12 |] – [| ST 6 6 6 |] — [| CMT CMF CMF CMF |] — [| PS GK GK NGK |]_ _ | PS Option |
| 5 | Option C | ode | Specification | | | | | | | | | |
| Option | NF | | Nitrogen gas not charged. | | | | | | | _ | | |

Operational Information

Machinable Area

Machine cross-hatched area as needed. A minimum of 20 mm is required for Dimension A although A can be less than 20 mm as long as A > B.

It is recommended that profiles and shapes be machined together with the upper cutting edge.

· Machine Limits

Allowable angle: 15 degrees front to back and 10 degrees left to right.

- Cutter blade welding and surface treatment are the same as the cross-hatched areas, mentioned above.
- · Backup Requirements

No reinforcements needed for holder and cutter.

- Replaceable Gas Spring
 Easily remove snap (retention) ring and apply it to upper groove of new spring.
- Retention of Cutter During Machining

Ideal condition is to use both locking plate and gas spring to hold the cutter in place during profile machining.

Only a gas spring is sufficient if locking plate is missing.

There is no problem in use even if the shape is machined only with the initial load of Gas Spring.



Machinable area shown for regular use









Gas Spring

Please contact your local sales representative if you prefer to use a gas spring not specified in our catalog. For use and maintenance of gas spring, please contact the manufacturer directly.

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