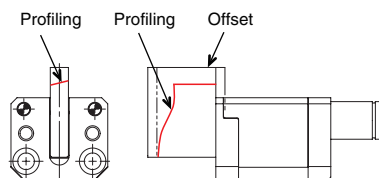
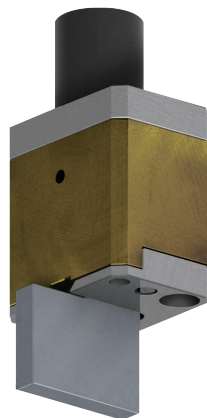


Floating Cutter [Overview]

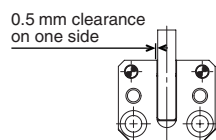
Anti-burr/Anti-chip Cutting Unit

Panel Transfer Components

- Durability increased to 1 million cycles.
- Simple structure for easy maintenance.
- Customizable cutterblank shape.
- Offset structure. No clearance needed on the pad side.
- Easy assembly and adjustment with the upper cutter.



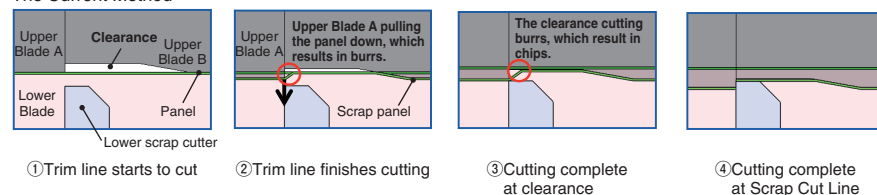
Recommended Machining Area



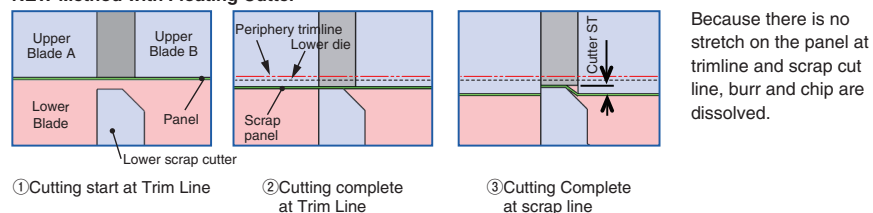
Clearance in the horizontal direction of the cutter

Comparison of NEW Floating Cutter with the Current Method

The Current Method



NEW Method with Floating Cutter

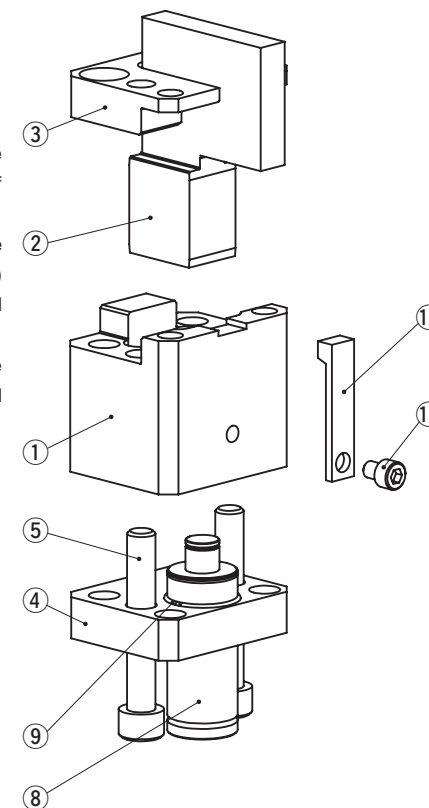


SUFC·SUFCHL Assembly Instruction

- Disassembly
 - 1) 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 lubricant is applied and is then placed in position.
 - Take care that the respective tolerances are observed when assembling the holder (①) and cutter (②), which also should be identified by the same serial number.
 - 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



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 (SUFC) / M10-75 (SUFCHL)
6	Hexagon Socket Head Bolt	2	M10-85 (SUFC) / M10-95 (SUFCHL)
7	Dowel	2	φ 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.

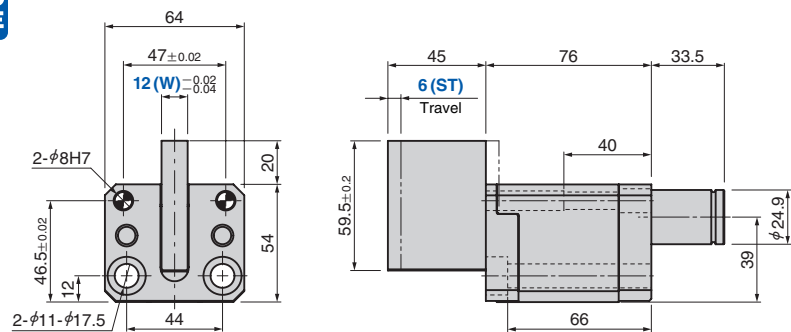
NEW

Floating Cutter

Anti-burr/Anti-chip Cutting Unit

Panel Transfer Components

SUFC

CAD
FILE

(Cutter Material) Flame Hardening Steel

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

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		Spring Model
Deflection [mm]	Load [kN]	
0.5	4.4	CU4 420-10 (KALLER) T4SC-420x10-V152 (HYSON) SC.00420.10 (DADCO)



Order

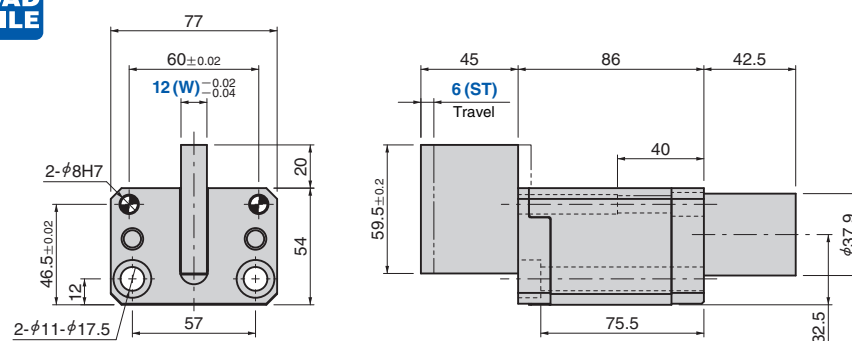
Catalog No.	W	ST	CMT	PS	Option
SUFC	12	6	CMF	GK	NF
SUFC	12	6	CMF	GK	
SUFC	12	6	CMF	NGK	



Option

Option Code	Specification
NF	Nitrogen gas not charged.

SUFCHL

CAD
FILE

(Cutter Material) SKD11

Catalog No.	Cutter Width W	Travel ST	Cutter Material CMT	Spring Type PS	Working Force kN
SUFCHL	12	6	CMS	GK NGK GH NGH GD NGD	10.9

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		Spring Model
Deflection [mm]	Load [kN]	
0.5	10.9	CU4 1000-10 (KALLER) T4SC-1000x10-V152 (HYSON) SC.01000.10 (DADCO)



Order

Catalog No.	W	ST	CMT	PS	Option
SUFCHL	12	6	CMS	GK	NF - SHD
SUFCHL	12	6	CMS	GK	NF
SUFCHL	12	6	CMS	GK	
SUFCHL	12	6	CMS	NGK	



Option

Option Code	Specification
NF	Nitrogen gas not charged.
SHD	Holder and Plate-A and Plate-B assembled with machining accuracy of ±0.02.

Floating Cutter

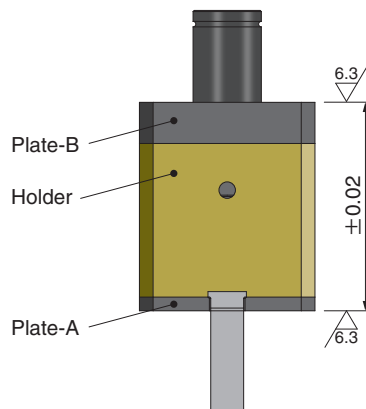
Anti-burr/Anti-chip Cutting Unit

Panel Transfer Components

Option

- **High-Precision (—SHD)** *SUFCHL only

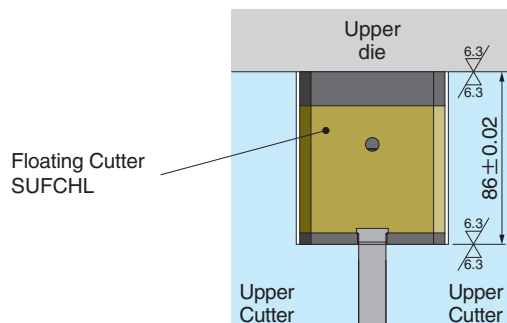
Holder and Plate-A and Plate-B assembled with machining accuracy of ± 0.02 .



The upper cutter's overhang portion can be supported on the plate-A surface.

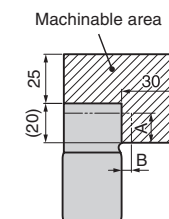


- Example of High-precision location.



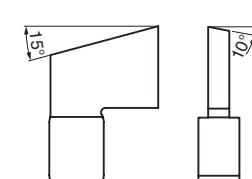
Operational Information

- **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.



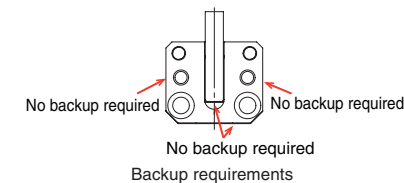
Machinable area shown for regular use

- **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.

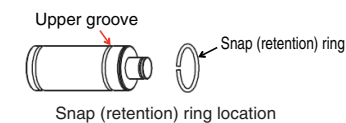


Allowable cutter max angle (upper)

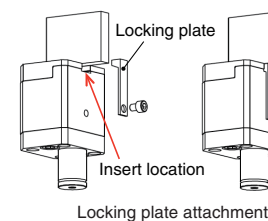
- **Backup Requirements**
No reinforcements needed for holder and cutter.



- **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.



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.