

Synchronous feed tap holders for CNC's with Rigid Tap Cycles



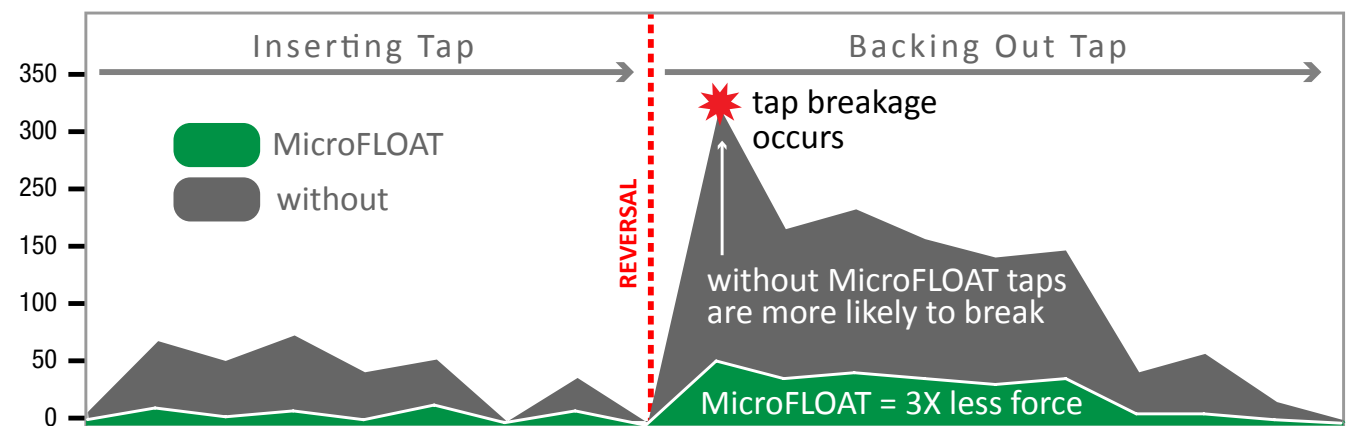
MicroFLOAT Tap Holders

- prevent broken taps
- increase tap life 295%
- improve thread quality



Stop breaking so many taps

This graph shows how MicroFLOAT reduces stress on the tap during tapping cycle.



Synchronous feed eases the tap through the whole cycle, preventing breakage.

MicroFLOAT Synchronous Feed Holders

Why you should consider MicroFLOAT

No matter how good your machine's tapping cycle is, there are always small mechanical variances that produce path inaccuracies during tapping. These variances cause wear on the tap, leading to premature tap failure and poor thread quality.

MicroFLOAT synchronous feed holders cushion the sudden shocks taps are subject to, minimizing damage to the tap. MicroFLOAT's ability to compensate for feed variances provides unmatched stability while cutting. MicroFLOAT is the recommended solution for improving rigid tapping performance and extending tap life.

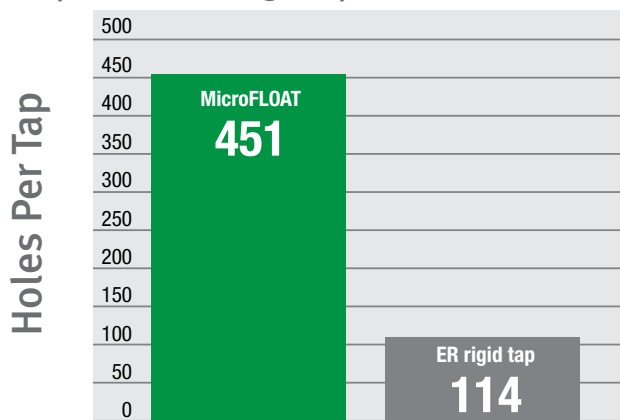
Case-study example, you can expect similar results



Machine: Mori Seiki SH403
Material: AISI 304
Coolant: 7% concentration
Cutting speed: 12m/min
Thread: M6; 12 mm depth
Tap: UFS, K82M6X-TXC

On a machining center we compared an ER rigid tap holder to a MicroFLOAT holder. The only difference was the tool holder. As you can see, the savings are significant. MicroFLOAT yields 337 more threaded holes per tap!

Comparison of ER rigid tap and MicroFLOAT

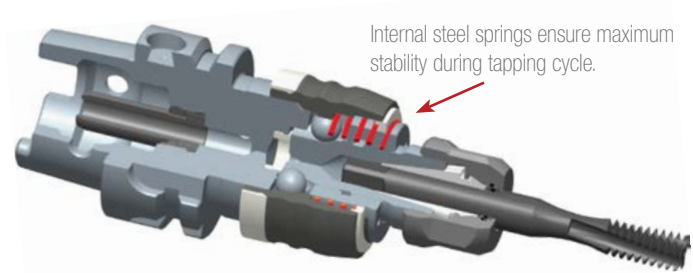


See MicroFLOAT in action...



Learn more at:
<http://ow.ly/u8vK2>

MicroFLOAT Key Technology Features



During the tapping cycle MicroFLOAT's synchronous feed technology automatically corrects for mechanical variances such as ballscrew play, spindle wear, or material irregularities to produce the truest possible threads. Internal steel spring compensation allows 0.008" (.2mm) of compression and 0.040" (1mm) of tension, effectively compensating for path inaccuracies and protecting the tap from metal fatigue and breaking. Because the tap follows the exact same path both in and out of the hole, optimum thread quality is achieved.

Quick-change tap adapters

Quick-change adapters make tap changes fast and easy.

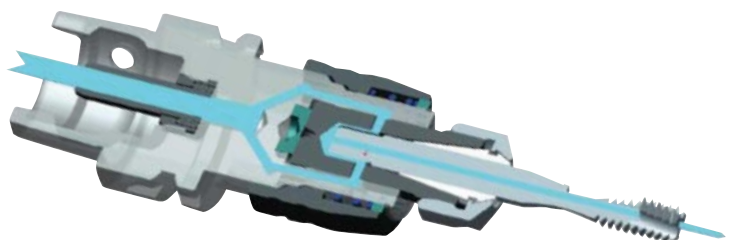


Modular extensions achieve lengths up to 9"



Coolant-thru technology

High-pressure (50 Bar) coolant through is standard.



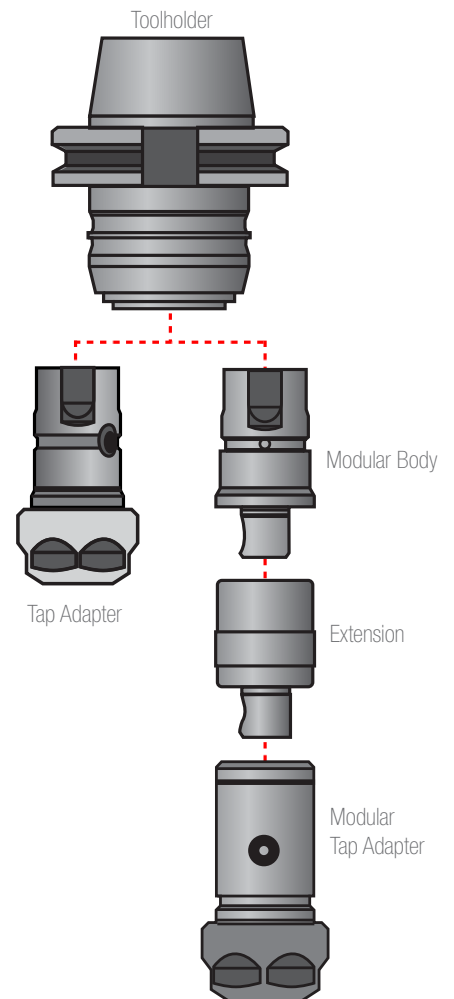
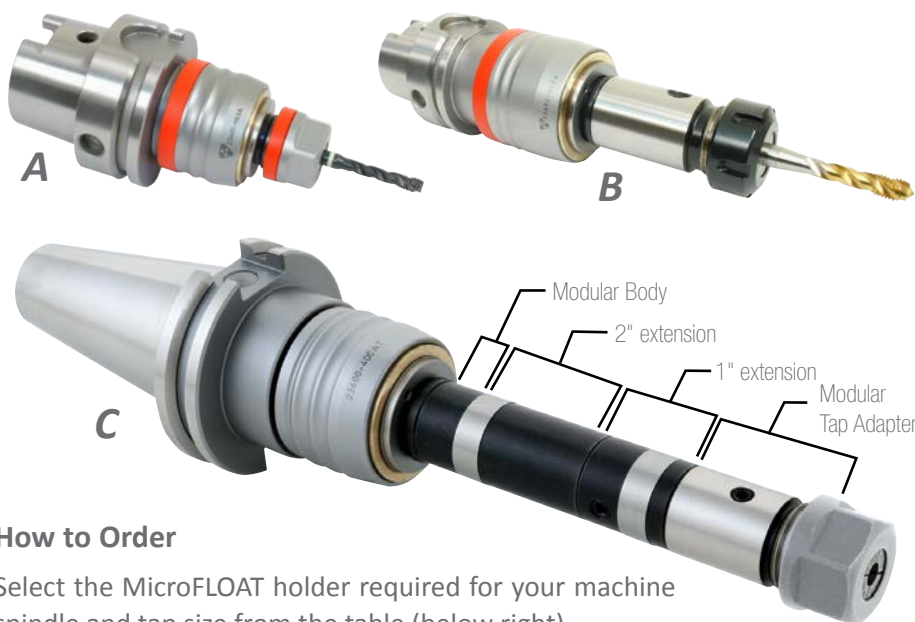
How to Order – MicroFLOAT Synchronous Feed Holders

MicroFLOAT Components

MicroFLOAT is an easy to use system that can be expanded to achieve lengths of 9" using extensions. Quick-change connection to the holder makes tap replacement is fast and easy. Refer to the diagram (right) to identify system components.

MicroFLOAT tap holders can be configured three ways:

- A using a holder with a quick-change tap adapter
- B holder with a modular body and modular tap adapter
- C holder with a modular body, extensions, and modular tap adapter



How to Order

Select the MicroFLOAT holder required for your machine spindle and tap size from the table (below right).

NOTE: #1 holders fit our #1 ER16 tap adapters, which can hold tap sizes up to 3/8".

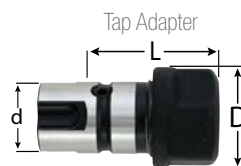
NOTE: #2 holders fit our #2 ER25 tap adapters, which can hold tap sizes up to 11/16".

For configuration **A**, (using a holder with a quick-change tap adapter) select the correct quick-change tap adapter from the table below.

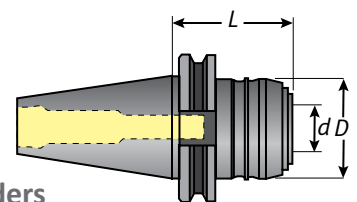
For configurations **B** or **C**, select a modular body, extensions if needed, (1" or 2" available) and modular quick-change tap adapter from the tables on the next page.

Quick-Change Tap Adapter (use for configuration A)

ER16 fits up to 3/8" taps. ER25 fits up to 11/16" taps.



| Part No. | Description | L | D | d |
|------------|---------------------|-------|-------|-------|
| 23410-ER16 | ER16 tap adapter #1 | 2.16" | 1.10" | .79" |
| 23610-ER25 | ER25 tap adapter #2 | 3.39" | 1.65" | 1.27" |



MicroFLOAT Tap Toolholders

#1 holders fit #1 ER16 tap adapters and #1 modular components.

#2 holders fit #2 ER25 tap adapters and #2 modular components.

| Part No. | Description | L | D | d |
|-------------|------------------------------|-------|-------|-------|
| 23400-40CAT | CAT40 holder #1 | 2.75" | 1.7" | 0.79" |
| 23600-40CAT | CAT40 holder #2 | 3.54" | 2.36" | 1.26" |
| 23400-50CAT | CAT50 holder #1 | 2.75" | 1.7" | 0.79" |
| 23600-50CAT | CAT50 holder #2 | 3.54" | 2.36" | 1.26" |
| 23400-30BT | BT30 holder #1 | 2.09" | 1.7" | 0.79" |
| 23400-40BT | BT40 holder #1 | 2.40" | 1.7" | 1.26" |
| 23600-40BT | BT40 holder #2 | 3.22" | 2.36" | 1.26" |
| 23400-H63A | HSK63A holder #1 | 2.52" | 1.7" | .79" |
| 23400-INC1 | 1" Straight Shank holder # 1 | 1.3" | 1.7" | 0.79" |
| 23600-INC1 | 1" Straight Shank holder # 2 | 2.13" | 2.36" | 1.26" |

MicroFLOAT Modular Components and ER Rigid Tap Collets

Modular components are sized #1 and #2

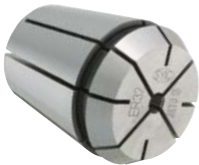
#1 holders fit #1 modular components.

#2 holders fit #2 modular components.



Modular Body

| Part No. | Description | L | D | d |
|-----------|----------------------------|------|-------|-------|
| 23411-MOD | Modular Body MicroFLOAT #1 | .20" | .91" | .79" |
| 23611-MOD | Modular Body MicroFLOAT #2 | .28" | 1.38" | 1.26" |



- Square drive prevents spinning the tap
- High-carbon steel, heat treated for long life
- Precision ground and polished

Modular Extensions

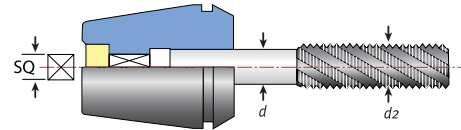


| Part No. | Description | L | D | Chuck |
|-----------|---------------------------------|-------|-------|----------|
| 42150-25 | 1" Mod. Extension MicroFLOAT #1 | .98" | .91" | 23400-.. |
| 42150-50 | 2" Mod. Extension MicroFLOAT #1 | 1.97" | .91" | 23400-.. |
| 42250-50 | 2" Mod. Extension MicroFLOAT #2 | 1.97" | 1.38" | 23600-.. |
| 42250-100 | 4" Mod. Extension MicroFLOAT #2 | 3.94" | 1.38" | 23600-.. |

ER Modular Tap Adapters



| Part No. | Description | L | D | d |
|------------|---------------------------------|-------|-------|-------|
| 42147-ER16 | ER16 Mod. Adapter MicroFLOAT #1 | 1.97" | 1.10" | .91" |
| 42247-ER25 | ER25 Mod. Adapter MicroFLOAT #2 | 3.11" | 1.65" | 1.38" |



ER16, ER25 Rigid Tap Collets (inch)

| Part No. | Size | d | SQ | Tap Size (d2) |
|-----------|------|-------|-------|---------------|
| 05320-141 | ER16 | .141" | .110" | 1/8" or #6 |
| 05320-168 | ER16 | .168" | .131" | 5/32" or #8 |
| 05320-194 | ER16 | .194" | .152" | 3/16" or #10 |
| 05320-220 | ER16 | .220" | .165" | 7/32" or #12 |
| 05320-255 | ER16 | .255" | .191" | 1/4" |
| 05320-318 | ER16 | .318" | .238" | 5/16" |
| 05320-323 | ER16 | .323" | .242" | 7/16" |
| 05320-367 | ER16 | .367" | .275" | 1/2" |
| 05320-381 | ER16 | .381" | .286" | 3/8" |
| 05510-141 | ER25 | .141" | .110" | 1/8" or #6 |
| 05510-168 | ER25 | .168" | .131" | 5/32" or #8 |
| 05510-194 | ER25 | .194" | .152" | 3/16" or #10 |
| 05510-220 | ER25 | .220" | .165" | 7/32" or #12 |
| 05510-255 | ER25 | .255" | .191" | 1/4" |
| 05510-318 | ER25 | .318" | .238" | 5/16" |
| 05510-323 | ER25 | .323" | .242" | 7/16" |
| 05510-367 | ER25 | .367" | .275" | 1/2" |
| 05510-381 | ER25 | .381" | .286" | 3/8" |
| 05510-429 | ER25 | .429" | .322" | 9/16" |
| 05510-437 | ER25 | .437" | .328" | 1/8" NPT |
| 05510-480 | ER25 | .480" | .360" | 5/8" |
| 05510-542 | ER25 | .542" | .406" | 11/16" |

ER16, ER25 Rigid Tap Collets (metric)

| Part No. | Size | d | SQ | Tap Size (d2) |
|-----------|------|-----|-----|---------------|
| 05326-DIN | ER16 | 2.8 | 2.1 | M4 |
| 05330-DIN | ER16 | 3.5 | 2.7 | M3 |
| 05336-DIN | ER16 | 4.5 | 3.4 | M4 |
| 05342-DIN | ER16 | 6 | 4.9 | M5/M6 |
| 05350-DIN | ER16 | 8 | 6.2 | M8 |
| 05352 | ER16 | 8.5 | 6.5 | M12 |
| 05354-DIN | ER16 | 9 | 7 | M12 |
| 05356-DIN | ER16 | 10 | 8 | M10 |
| 05371 | ER16 | 6 | 4.5 | M6 |
| 05385 | ER16 | 6.2 | 5 | M8 |
| 05526-DIN | ER25 | 4.5 | 3.4 | M4 |
| 05534-DIN | ER25 | 6 | 4.9 | M5/M6 |
| 05540-DIN | ER25 | 7 | 5.5 | M10 |
| 05542-DIN | ER25 | 8 | 6.2 | M8 |
| 05548-DIN | ER25 | 9 | 7 | M12 |
| 05550 | ER25 | 10 | 8 | M10 |
| 05550-DIN | ER25 | 10 | 8 | M10 |
| 05554-DIN | ER25 | 11 | 9 | M14 |
| 05558-DIN | ER25 | 12 | 9 | M16 |



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