

TAPMATIC

Safety and Operation Instructions

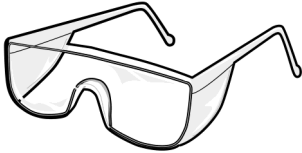
SynchroFlex® Tap Holders

SFT II 5, 10, 50, 75, 100, 150

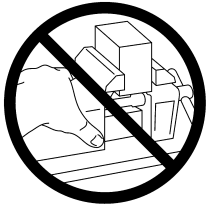
WARNING: To Avoid Serious Injury And Ensure Best Results for Your Tapping Operation, Please Read Carefully All Operator and Safety Instructions provided for this tapping attachment as well as all other safety instructions that are applicable, especially those for your machine tool.

1. Proper Clothing: the rotating spindle of a machine tool can snag loose fitting clothing, jewelry or long hair. Never wear jewelry, long sleeves, neckties, gloves or anything else that could become caught when operating a machine tool. Long hair must be restrained or netted to prevent it from becoming entangled in rotating spindle.

2. Proper Eye Protection: Always wear safety glasses with side shields to protect your eyes from flying particles.



3. Proper Work Piece Fixturing: Never hold the work piece or the vise it is held in, by hand. The work piece must be clamped firmly to the table of the machine so that it cannot move, rotate or lift.



4. Always Be Aware Of The Potential Hazards Of A Machining Operation: sometimes working with your machine can seem routine. You may find that you are no longer concentrating on the operation. A feeling of false security can lead to serious injury. Always be alert to the dangers of the machines with which you work. Always keep hands, body parts, clothing, jewelry and hair out of the areas of operation, when the machine spindle is rotating. Areas of operation include the immediate point of machining and all transmission components including the tapping attachment. Never bring your hand, other body parts or anything attached to your body into any of these areas until the machine spindle is completely stopped.

5. Be aware of any other applicable safety instructions / requirements

CHECK LIST FOR GOOD TAPPING.

1. Never use this unit before reading all safety instructions for this attachment as well as the machine it is to be used on.
2. Is the tap sharp and of correct design for current job?
3. Is tap in proper alignment with drilled hole?
4. Is machine speed correct?
5. Is machine feed correct?
6. Is machine stop set properly so tap does not bottom in work piece or fixture?
7. Is work piece held rigidly against rotation and upward movement?
8. Is drilled hole the correct size?
9. Is clearance between the drilled hole and tap sufficient at start position to allow the tap to clear the hole upon retraction?
10. Is the proper cutting fluid or coolant being used for lubricating the tap?
11. If a bottom hole is being tapped is there sufficient chip clearance?

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FEATURES & ADVANTAGES

Precision Machined Flexure: Corrects for the unavoidable deviations between the machine feed and the actual thread pitch of the tap during the rigid or synchronized tapping cycle. With a solid holder, any deviation at all from the correct feed rate for the thread pitch or the precise hole location results in added wear on the tap. SynchroFlex, with its unique flexure for micro compensation, allows the tap to produce threads of the highest quality without undue wear, resulting in the longest life for the tap.

Uses ER Steel Collets: We recommend the ER GB (square drive) tap collets. Please order collets separately.



Quick Change Also Available: SynchroFlex II size SFT50, SFT75 and SFT100 are also available with quick change chuck.

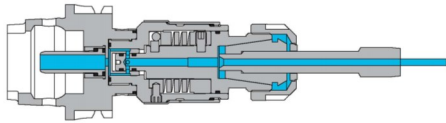


Integral Shank Tools:
Tapmatic Capto and HSK



Extended Length: Four standard extensions available to increase length 50, 100, 150, and 200 mm. Special extended lengths available on request.

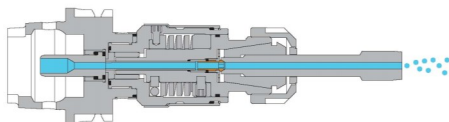
Coolant Through The Spindle Capability: Up to 1120 psi or 80 bar with balanced coolant system. SynchroFlex II with its new balanced system, increases flow rates by up to three times and there is no effect from the internal coolant pressure on the axial compensation. All sizes include the balanced internal coolant system.



Please order collets and seals separately.

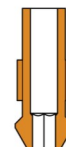
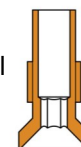


MQL Also Available: Tapmatic can also provide SynchroFlex tools made for the MQL (Minimum Quantity Lubrication) through the spindle systems.



Available for one channel or multi channel systems.

Please order adjusting screws for taps with internal or external cone separately



Program Using Your Standard Rigid or Synchronized Tapping Cycle.

TAPMATIC ● 802 Clearwater Loop, Post Falls ID 83854
Tel. 800 854-6019 ● Tel. 001 208 773-2951 ● Fax 001 208 773-3021
info@tapmatic.com ● www.tapmatic.com

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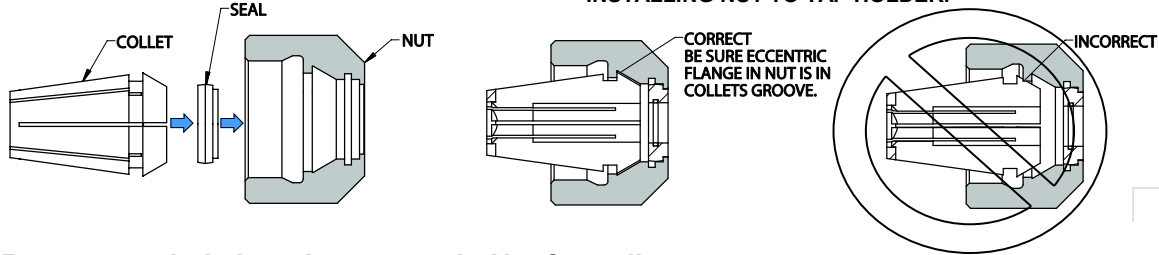
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INSERTING TAP IN STEEL COLLET SPINDLE:

Select the proper square drive steel collet for the tap (Steel collets must be ordered separately) Insert the collet into the nut being sure to fix pawl of collet nut with the seat of the collet for assembly and then mount into spindle.

ALWAYS INSTALL COLLET INTO NUT BEFORE INSTALLING NUT TO TAP HOLDER.

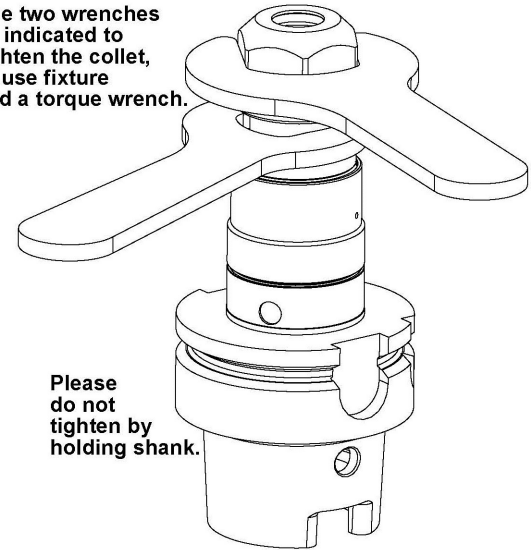


Recommended clamping torque in Nm for collets:

GB Tap Collets (With Square Drive) should be used whenever possible.

Type	Shank Ø	GB Collets (With Square)	Collets (Without Square)
ER 8	1.0 - 5.0 (.039 - .196")	-	6
ER 11 Hi-Q	1.0 - 2.9 (.039 - .098")	8	8
	3.0 - 7.0 (.118 - .256")	16	24
ER 20 Hi-Q/ER C	1.5 - 6.5 (.059 - .256")	32	Not Recommended
	7.0 - 13.0 (.276 - .512")	35	Not Recommended
ER 25 Hi-Q/ER C	5.0 - 7.5 (.196-.295")	80	Not Recommended
	8.0 - 17.0 (.315-.669")	80	Not Recommended
ER 40 Hi-Q/ER C	6.0 - 26.0 (.236 -1.023")	176	Not Recommended
ER 50 Hi-Q/ER C	6.0 - 36.0 (.236 -1.417")	300	See Note 2

Use two wrenches as indicated to tighten the collet, or use fixture and a torque wrench.

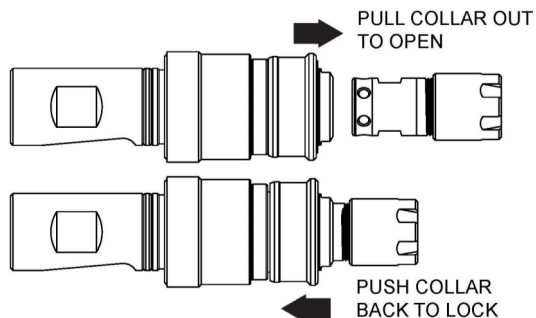


This fixture, 28SFT132, may also be used, together with a torque wrench, to clamp the collet and tap. Fits ER11, 20, 25 and 40.



Note 1: Maximum torque must not be more than 25% higher than above values. (1 Nm = .738 ft-lb)

Note 2: For large taps with 36mm shank, a collet without square is used. There is a 29mm socket inside holder.



FOR QUICK CHANGE TOOLS
Installing the QC adapter into a QC chuck.

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REPAIR POLICY FOR SFT SERIES- SYNCHROFLEX RIGID TAP DRIVERS

MAINTENANCE

When your SFT holder is not in use, please be sure to dry it, if wet from coolant, and apply oil to prevent corrosion. We recommend spraying with protective lubricant.

Repair Service is available at: **Attention:** Repair Department
 Tapmatic Corporation
 802 Clearwater Loop
 Post Falls, ID 83854

To Expedite Repair: Return tool direct to Tapmatic Corporation. Tapmatic will inspect the tool and advise you of the repair costs by fax or email before repair is completed.

IMPORTANT: Be sure to return the tool complete with the tap chuck nut, and if applicable the back jaw and if a reversing unit, include stop arm. Otherwise, we will add these missing parts to every non-warranty repair.

Cost Notification: Tapmatic will FAX a cost notification to you, soliciting your approval before repairs are completed.

If it is determined that a tapping attachment cannot be repaired, at the customer's request, Tapmatic will return the disassembled parts. We are not able to reassemble tapping attachments using damaged or worn out parts.

Optional Return Procedure: Tools may also be returned for repair through your local Tapmatic Distributor. They will ship the tool to us and include instructions for the repair and return. You may already have an open account with them, which facilitates the handling of invoicing.

Priority Service: Tapmatic services tapping attachments returned for repair in the order in which they are received. All tools will be evaluated and repaired within three weeks from the date they arrive subject to receiving the customer's approval to proceed with the repair.

Priority is given to the tools shipped to us by overnight or second day service.

If a repair is sent to us by UPS ground or similar service it can also be given priority. Just call and let us know if you need priority service and advise if you would like the tool returned to you by overnight or second day. Typical turnaround, not including shipping time, for priority repairs is 5-7 days subject to receiving the customer's approval to proceed with the repair.

If we can answer any questions, please call our toll free number: 800 395 8231.