ENGLISH VERSION

TAPMATIC

Quality, reliability and good service are what TAPMATIC stands for

Tapmatic Celebrates 70 years of Innovation!

Tapmatic was founded in 1952 by my grandfather, Andrew Johnson and his sons Eric and Allan. My father Allan is a self-taught Engineer. He designed the original Tapmatic reversing tapping attachment and a wide range of other products including drill speeders, polishing lathes, and even the worlds most powerful spear gun. He has received more than 50 patents worldwide. After the passing of Eric and Andrew in 1968, Allan took over management of the company and the marketing of our products, introducing the Tapmatic brand to manufacturing companies all over the world. His tradition of innovation, and enthusiasm for developing friendships with people in other countries, continue to inspire us today. Allan retired from the day to day business in 1993, but thanks to him, we are proud to be an American exporter with half our sales to customers outside the United States. After 70 years in business we would like to take this chance to thank our friends, colleagues and customers for all your support over the years. We are very grateful to still be working together with you.

Mark Johnson
President

Allan, Eric, and Andrew Johnson

Tapmatic Corporation is an ISO 9001 certified company.

effectivity tools

We're not just tapping!

Now Tapmatic also offers a complete program of marking tools. Whether your application calls for dot peen marking, scribing, or stamping, our tools allow you to mark the work piece during the machining process. Mark it while you make it.

Tapmatic is pleased to introduce the new DeBurr-Z for deburring and chamfering operations on your CNC machine.

TAPMATIC Post Falls, USA

Thread production on machining centers with constant speed tapping

RCT

RCTXT

RCT

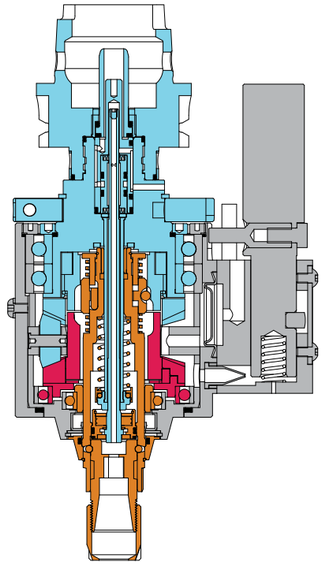
CST Constant Speed Tapping relies on a compact tapping attachment to provide tap reversal. The machine spindle runs in one direction at the exact programmed speed and reversal occurs within the tapping attachment instantaneously upon machine retraction. This avoids the inevitable RPM fluctuations which occur with reversal of the machine spindle. Benefits include the following...

Reduced Cycle Time
By eliminating the machine spindles need to decelerate, stop, reverse and reaccelerate twice for each tapped hole the tapping time is dramatically reduced.

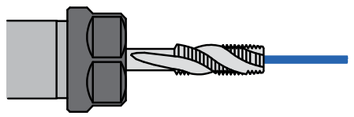
Longer Tap Life, Improved Thread Quality
Constant speed tapping means that the tap is allowed to cut at the optimum speed continuously without deceleration at the bottom of the hole. The result is the longest tap life and improved thread quality.

Reduced Machine Spindle Wear
Tapping is the only operation requiring machine reversal. Using a Constant Speed Tapping Head eliminates this strain on the machine.

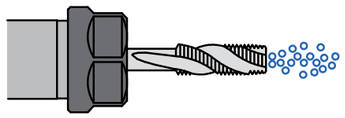
Reduced Energy Costs of up to 75 %
CST attachments reduce the energy costs required by machine spindle reversal by 75 %.



Two Through the Spindle Lubrication Options...



Standard balanced high pressure coolant through the spindle.



Minimum Quantity Lubrication, available on request.

Patented Design
TAPMATIC tapping attachments include a patented reversing ball drive. The ball drive allows for an exact and immediate change over into reverse once the desired thread depth is reached.

Advantages of tapping attachments with automatic reversal

General Information
Thread cutting is the only machining operation which requires a change of direction for the retraction of the tool. Reversing the spindle causes wear and is a costly procedure for any machine.

RCT and RDT tapping attachments
These reversing tapping attachments are specially designed for fast thread production on CNC machining centers. They eliminate reversal related machine wear and tear and reduce energy consumption. The patented ball drive with integrated planet gear for automatic reversal creates an almost constant cutting speed and eliminates the need to stop and reverse the machine spindle twice per tapped hole.
By using the RDT and RCT tapping attachments the cycle time is reduced and the life of the tap is increased. The IC-version allows coolant to flow directly through the tapping head.

Case history:

Original Application
Thread cutting on a horizontal machining center Fritz Werner TC800 with internal coolant.

Material
GG20

Tap
M6 standard thread HSS with TIN-AL coating

Thread
M6 standard thread, 9 mm deep, tapping drill ø 5.05 and 12.5 mm deep

Speed with machine reversal
Rigid tapping with spindle reversal, programmed speed 1,200 RPM

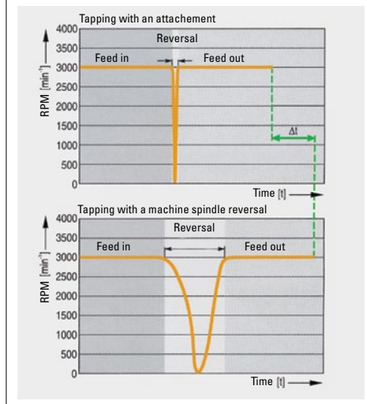
Original Results
Cycle time of 6 min 34 sec for 68 threads

Change with TAPMATIC
Using a TAPMATIC tapping attachment RDT-IC50 with ER16 spindle, programmed speed 1,800 RPM.

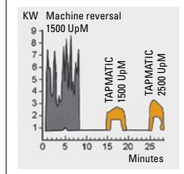
Improvement
Cycle time reduced to 3 min 22 sec for 68 threads, tap life tripled.

Advantage
Besides reducing the cycle time, tap life was considerably increased.

Constant speed tapping – the secret of longer tap life



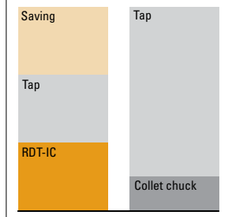
Power consumption for 144 threads M8



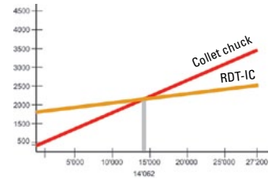
Energy cost saving of 75 %

Not only is the shorter cycle time of importance, but also the constant spindle direction. By changing the direction (decelerating and accelerating) of the spindle, higher spikes of power are needed, which can be prevented by constant spindle rotation.

Total cost/year



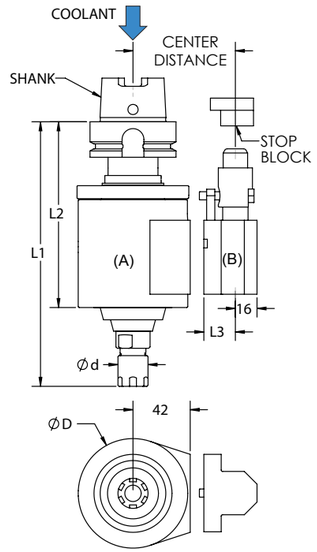
Break Even Point



Results
- reduction of cycle time by 50 %
- increase of production capacity
- tap life tripled
- less machine wear (no spindle reversals)
- roughly 75 % energy savings by constant speed tapping

Conclusion
With the use of Tapmatic constant speed tapping, the cycle time is less, which increases productivity. Additionally, machine repair / downtime and energy costs are reduced and tap life is dramatically improved.

High speed tapping attachments with integral HSK shank and internal coolant system



Features and Advantages
- high speed self-reversing tapping for fastest cycle time
- rugged design for years of production, with little maintenance
- high pressure internal coolant system, 50 Bar
- simple installation and programming

How to Order
Please select the Tapping attachment **(A)** and stop arm (B) to fit your machine. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 11, fill in the form on the back cover or contact us directly.

(A) Tapping Attachment RCT HSK

Model	Capacity (steel)	Collets	Shank	**Order code**	L1	L2	Weight kg	D	d	Max. RPM
RCT50	M4.5–M12 #10–1/2"	ER16	HSK63A	**0550H63161**	194	136	3.5	80	22	2500
			HSK80A	**0550H80161**	199	141	3.9			
			HSK100A	**0550H100161**	201	143	4.8			
		ER20	HSK63A	**0550H63201**	206	136	3.5	80	28	2300
			HSK80A	**0550H80201**	211	141	3.9			
			HSK100A	**0550H100201**	213	143	4.8			
RCT85HS	M10–M20 7/16"–3/4"	ER25	HSK63A	**0585H6325**	217	168	4.2	80*	42	1500
			HSK80A	**0585H8025**	222	173	4.6			
			HSK100A	**0585H10025**	224	175	5.5			
RCT85HD	M12–M25 1/2"–1"	ER32	HSK63A	**0585H6332**	223	168	4.4	80*	50	1200
			HSK80A	**0585H8032**	228	173	4.8			
			HSK100A	**0585H10032**	230	175	5.7			
RCT100	M18–M27 3/4"–1"	ER40	HSK63A	**05100H6340**	229	168	4.6	80*	63	800
			HSK80A	**05100H8040**	234	173	5.0			
			HSK100A	**05100H10040**	236	175	5.9			

Notes: These internal coolant tools come standard with sealing nuts. These models are also available without internal coolant upon request. When using Roll Form Taps the tool's capacity must be reduced 25 %. All dimensions are shown in mm. 25.4mm = 1"

*Please note that size 85 and 100 tools have an 80mm square housing with ø102mm across corners

(B) Stop Arm Assembly

Center Distance (42+L3)	**Order code RCT50**	**Order code RCT85, 100**	L3
55	**0550551**	**3985551**	13
65	**0550651**	**3985651**	23
80	**0550801**	**3985801**	38

Stop Block
Page 11

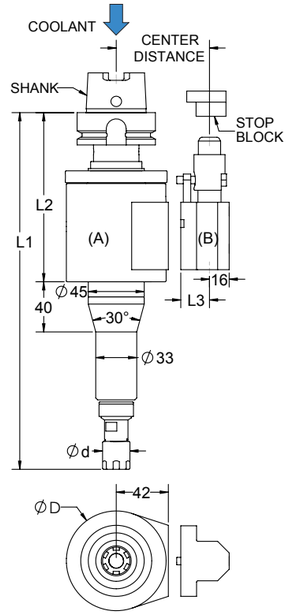
Page 49-51 Page 52 Pages 12


Steel Collets


Sealing Gaskets


Installation

Extended length tapping attachments with integral HSK shank and internal coolant system



Features and Advantages
- high speed self-reversing tapping for fastest cycle time
- extended length for difficult to reach holes
- rugged design for years of production, with little maintenance
- RCTXT50 for high pressure internal coolant, 50 Bar
- simple installation and programming

How to Order
Please select the Tapping attachment (A), and stop arm (B) to fit your application. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 11, fill in the form on the back cover or contact us directly.

(A) Tapping Attachment RCTXT50 HSK Shank, Internal Coolant System

Model	Capacity (steel)	Collets	Shank	**Order code**	L1	L2	Weight kg	D	d	Max. RPM
RCTXT50	M4.5–M12 #10–1/2"	ER16	HSK63A	**0550H6316L287**	287	136	4.0	80	22	1800
			HSK80A	**0550H8016L292**	292	141	4.4			
			HSK100A	**0550H10016L294**	294	143	5.3			
		ER20	HSK63A	**0550H6320L297**	297	136	4.0	80	28	1600
			HSK80A	**0550H8020L302**	302	141	4.4			
			HSK100A	**0550H10020L304**	304	143	5.3			
		ER16	HSK63A	**0550H6316L360**	360	136	4.2	80	22	1600
			HSK80A	**0550H8016L365**	365	141	4.6			
			HSK100A	**0550H10016L367**	367	143	5.5			
		ER20	HSK63A	**0550H6320L370**	370	136	4.2	80	28	1400
			HSK80A	**0550H8020L375**	375	141	4.6			
			HSK100A	**0550H10020L377**	377	143	5.5			

Notes: Special extended length tools are also available on request. These models are also available without internal coolant on request. When using Roll Form Taps the tool's capacity must be reduced 25 %. All dimensions are shown in mm. 25.4mm = 1"

(B) Stop Arm Assembly

Center Distance (42+L3)	Order code RCT50	L3
55	**0550551**	13
65	**0550651**	23
80	**0550801**	38

Stop Block
Page 11

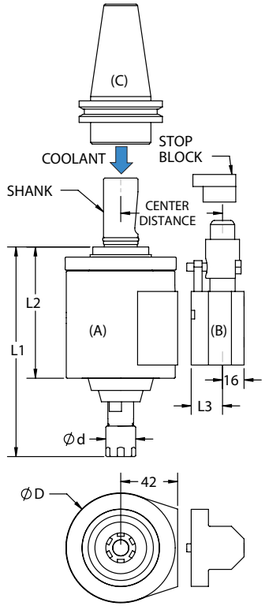
Pages 49-51 Page 52 Pages 12


Steel Collets


Sealing Gaskets


Installation

High speed tapping attachments with modular straight shank and internal coolant system or without internal coolant, (W/O IC)



Features and Advantages
- high speed self-reversing tapping for fastest cycle time
- rugged design for years of production, with little maintenance
- high pressure internal coolant system, 50 Bar
- simple installation and programming

How to Order
Please select the Tapping attachment (A) and stop arm (B) and CAT, SK or BT shank (C) to fit your machine. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 11, fill in the form on the back cover or contact us directly.

(A) Tapping Attachment RCT Cylindrical Shank with or without Internal Coolant (IC)

Model	Capacity (steel)	Collets	Shank	**Order code W IC**	Order Code W/O IC	L1 W IC	L1 W/O IC	L2	Weight kg	D	d	Max. RPM
RCT50	M4.5–M12 #10–1/2"	ER16	25 mm	**05502516**	04502516	155	152	97	3.0	80	22	2500
			1"	**0550116**	0450116							
		ER20	25 mm	**05502520**	04502520	167	162	97		80	28	2300
			1"	**0550120**	0450120							
RCT85HS	M10–M20 7/16"–3/4"	ER25	25 mm	**05852525**	04852525	168	163	119	3.7	80*	42	1500
			1"	**0585125**	0485125							
RCT85HD	M12–M25 1/2"–1"	ER32	25 mm	**05852532**	04852532	174	169	119	3.9	80*	50	1200
			1"	**0585132**	0485132							
RCT100	M18–M27 3/4"–1"	ER40	25 mm	**051002540**	041002540	180	175	119	4.1	80*	63	800
			1"	**05100140**	04100140							

Notes: These internal coolant tools come standard with sealing nuts.
These models are also available without internal coolant upon request.
When using Roll Form Taps the tool's capacity must be reduced 25 %.
All dimensions are shown in mm. 25.4mm = 1".

* Please note that size 85 and 100 tools have an 80mm square housing with ø102mm across corners.

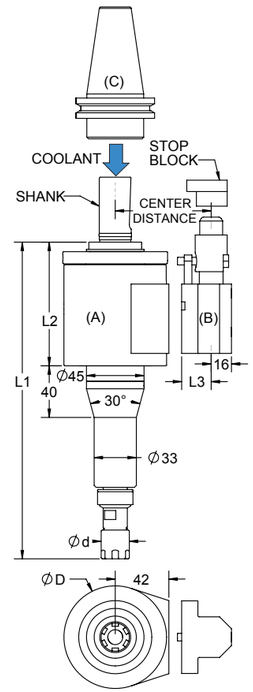
(B) Stop Arm Assembly

Center Distance (42+L3)	**Order code RCT50**	**Order Code RCT 85, 100**	L3
55	**0550551**	**3985551**	13
65	**0550651**	**3985651**	23
80	**0550801**	**3985801**	38

Stop Block
Page 11

Page 54 (C) Interchangeable Steep Taper
Pages 49-51 Steel Collets
Page 52 Sealing Gaskets
Pages 12 Installation

Extended length tapping attachments with modular straight shank and internal coolant system or without internal coolant, (W/O IC)



Features and Advantages
- high speed self-reversing tapping for fastest cycle time
- extended length for difficult to reach holes
- rugged design for years of production, with little maintenance
- RCTXT50 for high pressure internal coolant, 50 Bar
- simple installation and programming

How to Order
Please select the Tapping attachment (A), stop arm (B), shank (C) to fit your application. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 11, fill in the form on the back cover or contact us directly.

(A) Tapping Attachment RCTXT50 Cylindrical Shank, with or without Internal Coolant System (IC)

Model	Capacity (steel)	Collets	Shank	**Order code W IC**	Order code W/O IC	L1 W IC	L1 W/O IC	L2	Weight kg	D	d	Max. RPM
RCTXT50	M4.5–M12 #10–1/2"	ER16	25 mm	**05502516L248**	04502516L245	248	245	97	3.5	80	22	1800
			1"	**0550116L248**	0450116L245							
		ER20	25 mm	**05502520L258**	04502520L253	258	253				28	1600
			1"	**0550120L258**	0450120L253							
		ER16	25 mm	**05502516L321**	04502516L318	321	318		3.7		22	1600
			1"	**0550116L321**	0450116L318							
		ER20	25 mm	**05502520L331**	04502520L326	331	326				28	1400
			1"	**0550120L331**	0450120L326							

Notes: These internal coolant tools come standard with sealing nuts.
These models are also available without internal coolant upon request.
Special extended length tools are also available on request.
When using Roll Form Taps the tool's capacity must be reduced 25 %.
All dimensions are shown in mm. 25.4mm = 1"

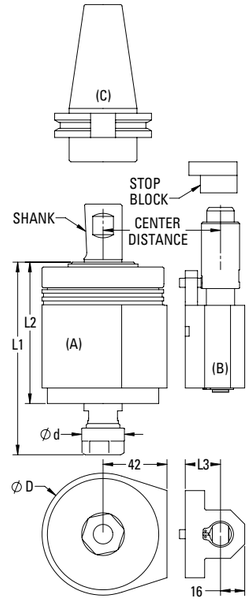
(B) Stop Arm Assembly

Center Distance (42+L3)	**Order code RCT50**	L3
55	**0550551**	13
65	**0550651**	23
80	**0550801**	38

Stop Block
Page 11

Page 54 (C) Interchangeable Steep Taper
Pages 49-51 Steel Collets
Page 52 Sealing Gaskets
Pages 12 Installation

High speed tapping attachments with modular straight shank, without internal coolant system



Features and Advantages
- high speed self-reversing tapping for fastest cycle time
- rugged design for years of production, with little maintenance
- simple installation and programming
- large capacity

How to Order
Please select the Tapping attachment (A), stop arm (B) and CAT, SK, or BT shank (C), to fit your machine. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 11, fill in the form on the back cover or contact us directly.

(A) Tapping Attachment RDT Cylindrical Shank

Model	Capacity (steel)	Collets	Shank	Order code	L1	L2	Weight kg	D	d	Max. RPM
RDT15	M1–M3	ER8	25 mm	**3915258HD**	97	79	1.7	57	12	5000
	#0–#6		1"	**391518HD**						
RDT25	M2–M6	ER11	25 mm	**39252511**	106	79	1.7	57	19	4000
	#4–1/4"		1"	**3925111**						
RDT50	M4.5–M12	ER16	25 mm	**39502516**	126	93	3.7	80	28	2000
	#10–1/2"		1"	**3950116**						

Notes: When using Roll Form Taps the tool's capacity must be reduced 25 %.
To hold larger taps with RDT50 ER16, use standard collet 20953 and separate square drives packaged with tool.
All dimensions are shown in mm. 25.4mm = 1"

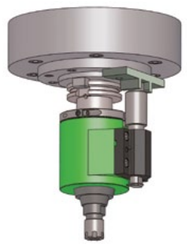
(B) Stop Arm Assembly

Center Distance (42+L3)	Order code RDT15 RDT25	Order code RDT50	L3
55	**3925551**	**3950551**	13
65	**3925651**	**3950651**	23
80	**3925801**	**3950801**	38

Stop Block
Page 11

Page 54 Pages 49-51 Pages 12

(C)
Interchangeable Steep Taper
Steel Collets
Installation



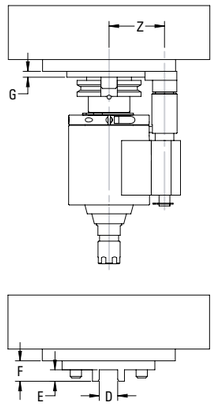
Tapmatic can supply a tapping attachment ready to fit your machining center
RDT and RCT tapping attachments eliminate the need for the machine spindle to reverse by automatically reversing the taps rotation when the machine retracts. For the automatic reversal to function a stop arm is needed to prevent the housing of the tapping attachment from rotating. Our stop arm locking mechanism allows the tool to easily make automatic tool changes.

Tapmatic maintains a large data base of machining center installations
Please simply let us know the machine manufacturer, make and model and we may already have the installation information available to provide a tool ready to run on your machine.

My machine already has a stop block
If your machine already has an anti-rotation stop block installed, please let us know the dimensions shown in the drawing below. We can prepare a tool to go with your existing stop block.

My machine does not have a stop block
If your machine does not have a stop block already installed, we would be pleased to prepare one for you. Please simply fill in the form on the inside back cover or download it from our website under "Customer Service", and forward us the information. We will be pleased to submit an offer to you.

Preferred Installation



Gage Line to Mounting Surface
G =

Center Distance
(commonly 55, 65, or 80)
Z =

Diameter of Bore or
Width of Slot in Stop Block
D =

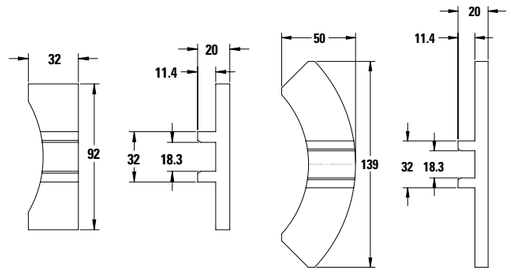
Depth of Bore or Slot in Stop Block
E =

Total Height of Stop Block
F =

Machine Spindle Taper
(SK, BT, CAT, HSK...)
Shank =

Machine Manufacturer and
Model =

Standard stop blocks are available if you would like to design your own installation. These blank stop blocks can be modified to fit the bolt pattern of your machine.



Order code.
36007 Standard Block

Order code
36010 Standard Block

Tapping attachments with VDI shank for CNC lathes

Model RSR

Model ASR

Features and Advantages
- high speed self reversing tapping for fastest cycle time
- lower energy cost
- improves tap life
- steel collets ER-GB (ER)
- modular base adaptors VDI and BMT, to fit all turrets, provided by EWS

Developed in cooperation with EWS, a world leader in driven tooling for CNC lathes

Radial Tapping Attachment RSR

Model	Order code	Capacity (steel)	Collets ER	Max. RPM (I - O = 1 - .666)
RSR50	**37014E1**	M4.5–M12	ER16	2500 In-1665 Out

Axial Tapping Attachment ASR

Model	Order code	Capacity (steel)	Collets ER	Max. RPM
ASR50	**32161E**	M4.5–M12	ER16	2500

Note: Steel collets and VDI shank have to be ordered separately. The VDI shank is manufactured specifically for your lathe. When using Roll Form Taps the tools capacity must be reduced by 25 %. Dimensions for the attachments available on request.

Pages 49-51

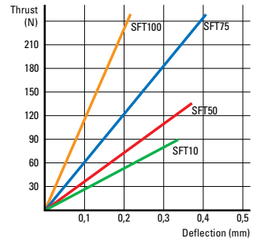
Steel Collets

Tap holders for synchronized tapping cycles

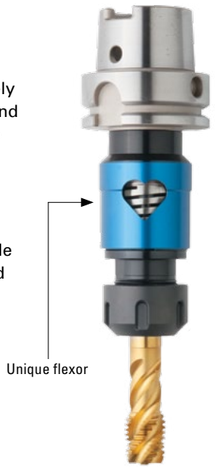
General Information
Modern CNC machines have the capability of synchronizing the spindle rotation to match the feed advance for a specific tap pitch. The «Rigid» or synchronized tapping cycle is very accurate, but it is impossible to avoid small discrepancies between the machine synchronization and the actual pitch of the specific tap being used. Using a rigid tap holder means that any deviation at all increases the thrust forces acting on the tap and this dramatically reduces tap life.

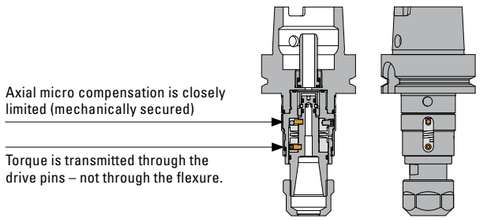
New SynchroFlex® II with increased flow rates for high pressure internal coolant.

SynchroFlex® – Force vs. Deflection Rates
Unlike competitors that employ elastomer rings to provide a small amount of axial compensation (±0.5 mm), the SynchroFlex® flexure has a consistent force vs. deflection rate. This means consistently superior tap life and thread quality.



SynchroFlex® – The Unique Solution
At the heart of SynchroFlex® is a precisely machined flexure which provides axial and radial compensation for the unavoidable discrepancy between the machine feed advance and the actual tap pitch. By compensating for this error, the thrust forces acting on the tap are dramatically reduced. The result is the longest possible tap life, 100 % improvement or more, and much better quality threads.



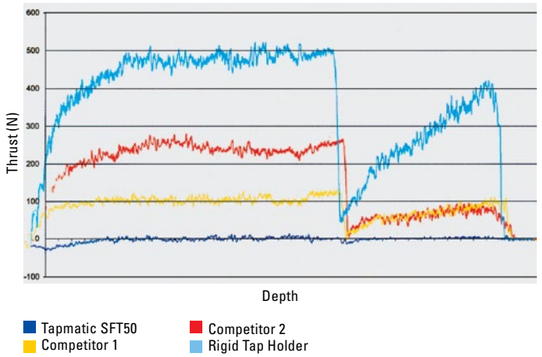


Design and Development
Flexure geometries have been designed using the ANSYS finite element analysis method in order to achieve the optimal force vs. deflection rates for the tap capacity of each holder.

As you can see from the cross section drawing, torque is transmitted through the drive pins not through the flexure.

By limiting the axial compensation travel, and torsional forces acting on the flexure, millions of holes can be tapped without causing the SynchroFlex® holder to fatigue, take a set, or wear out. Below is an example of stress analysis at maximum compression.

Comparison tapping with an M6 spiral fluted tap in 6061 Aluminum to depth of 18 mm.

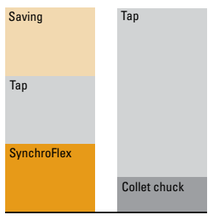


Case History

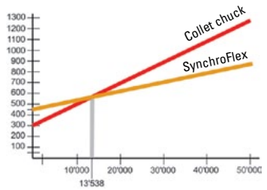
Application: Thread cutting on horizontal machining center rigid tapping during an unmanned shift.
Material: 42CrMo4V steel, heat treated to 650 N/mm2
Tap Size: M8 x 1
Lubrication: Coolant, oil emulsion 6%
Results: With the tap held in a rigid holder the life was just 1'000 components per tap.

Improvement with SynchroFlex®
Tap life increased to 2'400 to 2'900 components per tap saving the customer not only in tap costs, but the ability to run without interruption through the entire unmanned shift.

Total cost/year



Break Even Point



Test Results
SynchroFlex® tap holders have been tested by tap manufacturers all over the world and they have confirmed the dramatic improvement in tap life, and thread quality resulting from the reduction of thrust forces acting on the tap.

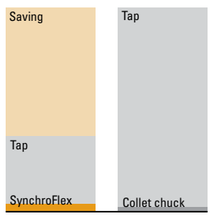
The graph to the left is an example of a test conducted by an independent tap manufacturer using a Kistler dynamometer to measure the thrust forces during the tapping process. As you can see from the graph, although the competitive holders do reduce thrust forces compared to a rigid tap holder, they are not as effective as SynchroFlex®.

Case History

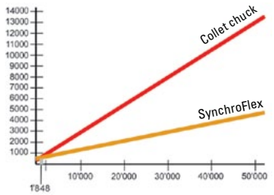
Application: Thread cutting on machining center rigid tapping.
Material: CF8M steel casting
Tap Size: #10-32
Lubrication: Coolant
Results: With the tap held in a rigid holder the life was just 72 holes per tap.

Improvement with SynchroFlex®
Tap life increased to more than 216 holes per tap in this difficult material saving the customer not only in tap costs, but by also reducing his down time caused by frequent tap replacement.

Total cost/year



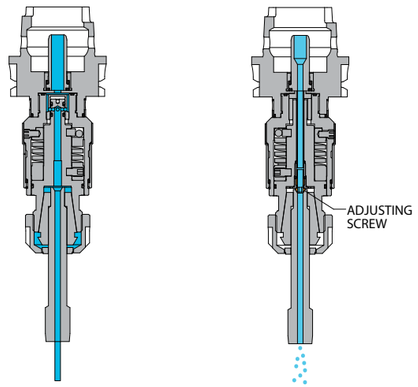
Break Even Point



Overview of the SynchroFlex® program

Pictured with ER-collet, spindle and straight shank

Six Sizes to Cover a Wide Range of Taps
- SFT II 5 with capacity M1–M3
- SFT II 10 with capacity M2–M5
- SFT II 50 with capacity M4–M12
- SFT II 75 with capacity M8–M20
- SFT II 100 with capacity M16–M30
- SFT II 150 with capacity M22–M48



SFT II
High Pressure Internal Coolant with increased flow rates

Minimum Quantity Lubrication
Available for 1 channel or Multi channel systems

Internal Coolant and MQL
Tapmatic's high pressure internal coolant system may be used at pressures up to 80 bar without affecting the axial compensation.

Tapmatic also can provide tools ready for Minimum Quantity Lubrication through the spindle. Our system provides direct flow of air and lubricant to the back of the tap. See page 21.

Available with QC spindle
Accepts the standard Quick Change adapters or Tapmatic's ER collet chuck QC adapters for improved tap grip.

Integral shank models
Tapmatic offers standard integral shank HSK and Tapmatic Capto tools. ABS shanks are also available on request.

We can also offer integral Steep Taper shank tools but in most cases we recommend a modular system using a cylindrical shank SynchroFlex® together with our Short Projection SK, BT or CAT shank.

No hole beyond your reach
Four standard extensions are available which increase the tool length by 50, 100, 150, or 200 mm.
Special extensions are also available to fit your specific application. Our extensions keep the flexure in close proximity to the tap ensuring the best performance.

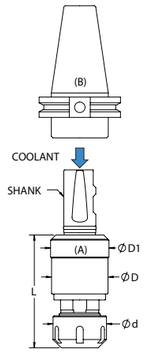
Synchronous feed tap holders with modular straight shank, with internal coolant system

ER Collet Chuck

Quick-Change

Features and Advantages
- increase tap life by 100% or more
- improves thread quality
- reduces downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm (SFT II 150 +/- 1.5mm)
- wide range of sizes
- available with ER collet or Quick Change chuck
- available with high pressure internal coolant system up to 80 bar (Balanced Coolant System)

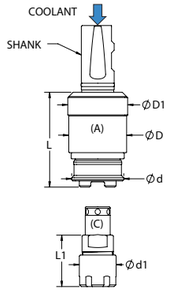
How to Order
Please select the tap holder (A) and SK or BT shank (B), to fit your machine. For Quick Change models order ER collet adapter (C) shown below or standard adapters shown in accessories section. Please order accessories like collets and sealing gaskets separately as they are not included.



(A) Tap Holder SFTII Cylindrical Shank, ER Collet Chuck, Internal Coolant System

Model	Capacity (steel)	Collets	Shank	Order code (nut w/o seal)	Order code (with seal nut)	L (nut w/o seal)	L (with seal nut)	Weight kg	D	D1	d
SFT II 5	M1–M3 #00–#5	ER8	12 mm	**41051208**		28		0.1	12.0	12.0	12
SFT II 10	M2–M5 #2–#10	ER11	25 mm	**41102511**		52		0.4	23.5	23.5	19
			1"	**4110111**							
			20 mm	**41102011**							
			16 mm	**41101611**							
SFT II 50	M4.5–M12 #8–1/2"	ER20	25 mm	**41502520N**	**41502520**	64	69	0.5	34.6	36.3	34
			1"	**4150120N**	**4150120**						
			20 mm	**41502020N**	**41502020**						
SFT II 75	M8–M20 1/4"–3/4"	ER25	25 mm	**41752525N**	**41752525**	83	88	1.0	44.0	45.6	42
			1"	**4175125N**	**4175125**						
SFT II 100	M16–M30 5/8"–1"	ER40	25 mm	**411002540N**	**411002540**	112	117	2.0	62.0	63.6	63
			1"	**41100140N**	**41100140**						
SFT II 150	M22–M48 7/8"–1 7/8"	ER50	40 mm	**411504050N**	**411504050** *	159	167	5.1	80.0	86.0	78

***Note:** Availability of inch size ER50GB collets is limited. Please consult a Tapmatic sales representative for sizes currently available.
These internal coolant tools come standard with sealing nut, but tools with standard nuts are also available.
When using Roll Form Taps the tool's capacity must be reduced 25%.
All dimensions are shown in mm. 25.4mm = 1".



(A) Tap Holder SFTII Cylindrical Shank, Quick-Change Internal Coolant System

Model	Capacity (steel)	Adapter	Shank	Order code	L	Weight kg	D	D1	d
SFT II 10	M2–M5 #2-#10	Nr. 0	25 mm	**411025QC**	54.5	0.4	23.5	23.5	25
			1"	**41101QC**					
			20 mm	**411020QC**					
			16 mm	**411016QC**					
SFT II 50	M4–M12 #8–1/2"	Nr. 1	25 mm	**415025QC**	56	0.5	34.6	36.3	35
			1"	**41501QC**					
SFT II 75	M8–M16 1/4"–5/8"	Nr. 1	25 mm	**417525QC**	72	1.0	44.0	45.6	40
			1"	**41751QC**					
SFT II 100	M22–M48 7/8"–1 7/8"	Nr. 2	25 mm	**4110025QC**	105	2.0	62.0	63.6	59
			1"	**411001QC**					

Note: When using Roll Form Taps the tool's capacity must be reduced 25%.
All dimensions are shown in mm. 25.4mm = 1".
For best performance we recommend ER collet adapters shown below.

(C) ER collet adapter

Order code with Standard Nut	Adapter	Collets	d1	L1	Order code with Seal Nut	L1 (BCS)
8138211N	Nr. 0	ER11	19	20		
8208216	Nr. 1	ER16	22	24	**8208216S**	28
8218220	Nr. 1	ER20	28	35	**8218220S**	40
8288225	Nr. 2	ER25	35	38	**8288225S**	43
8288232	Nr. 2	ER32	50	48	**8288232S**	53

Page 54 Pages 49-51 Page 52

(B) Interchangeable Steep Taper

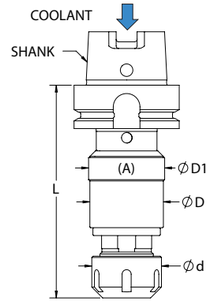
Steel Collets

Sealing Gaskets

Synchronous feed tap holders with integral HSK shank, with internal coolant system

Features and Advantages
- increase tap life by 100% or more
- improves thread quality
- reduces downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- wide range of sizes
- available with ER collet or Quick Change chuck
- available with high pressure internal coolant system up to 80 bar. (Balanced Coolant System)
- also available for Minimum Quantity Lubrication (MQL) through the spindle. Please see page 21

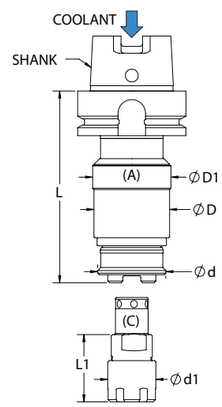
How to Order
Please select the tap holder (A) including the HSK shank, to fit your machine. For Quick Change models order ER collet adapter (C) shown below or standard adapters shown in Accessories section. Please order accessories like collets and sealing gaskets separately as they are not included.



(A) Tap Holder SFTII HSK Shank, ER Collet Chuck, Internal Coolant System

Model	Capacity (steel)	Collets	Shank	Order code (with seal nut)	L	Weight kg	D	D1	d
SFT II 50	M4–M12 #8–1/2"	ER20	HSK63A	**4150H6320**	108	1.0	34.6	36.3	34
			HSK80A	**4150H8020**	113	1.9			
			HSK100A	**4150H10020**	115	2.7			
SFT II 75	M8–M20 1/4"–3/4"	ER25	HSK63A	**4175H6325**	128	1.6	44.0	45.6	42
			HSK80A	**4175H8025**	131	2.4			
			HSK100A	**4175H10025**	133	3.2			
SFT II 100	M16–M30 5/8"–1"	ER40	HSK63A	**41100H6340**	160	2.2	62.0	63.6	63
			HSK80A	**41100H8040**	161	2.9			
			HSK100A	**41100H10040**	163	3.7			

Note: These internal coolant tools come standard with sealing nut, but tools with standard nuts are also available.
When using Roll Form Taps the tool's capacity must be reduced 25%.
All dimensions are shown in mm. 25.4mm = 1".



(A) Tap Holder SFTII HSK Shank, Quick-Change, Internal Coolant System

Model	Capacity (steel)	Adapter	Shank	Order code	L	Weight kg	D	D1	d
SFT II 50	M4–M12 #8–1/2"	Nr. 1	HSK63A	**4150H63QC**	95	1.0	34.6	36.3	35
			HSK80A	**4150H80QC**	100	1.9			
			HSK100A	**4150H100QC**	102	2.7			
SFT II 75	M8–M16 1/4"–5/8"	Nr. 1	HSK63A	**4175H63QC**	112	1.6	44.0	45.6	40
			HSK80A	**4175H80QC**	115	2.4			
			HSK100A	**4175H100QC**	117	3.2			
SFT II 100	M16–M30 1/2"–7/8"	Nr. 2	HSK63A	**41100H63QC**	148	2.2	62.0	63.6	59
			HSK80A	**41100H80QC**	149	2.9			
			HSK100A	**41100H100QC**	151	3.7			

Note: When using Roll Form Taps the tool's capacity must be reduced 25%.
All dimensions are shown in mm. 25.4mm = 1".
For best performance we recommend ER collet adapters shown below.

(C) ER Collet Adapter

Order code with Standard Nut	Adapter	Collets	d1	L1	Order code with Seal Nut	L1
8208216	Nr. 1	ER16	22	24	**8208216S**	28
8218220	Nr. 1	ER20	28	35	**8218220S**	40
8288225	Nr. 2	ER25	35	38	**8288225S**	43
8288232	Nr. 2	ER32	50	48	**8288232S**	53

Pages 49-51 Page 52

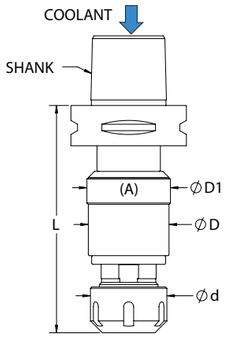
Steel Collets

Sealing Gaskets

Synchronous feed tap holders with Tapmatic Capto shank, with internal coolant system

Features and Advantages
- increase tap life by 100% or more
- improves thread quality
- reduces downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- wide range of sizes
- available with ER collet or Quick Change chuck
- available with high pressure internal coolant system up to 80 bar. (Balanced Coolant System)

How to Order
Please select the tap holder (A) including the Tapmatic Capto shank, to fit your machine. For Quick Change models order ER collet adapter (C) shown below or standard adapters shown in Accessories section. Please order accessories like collets and sealing gaskets separately as they are not included.

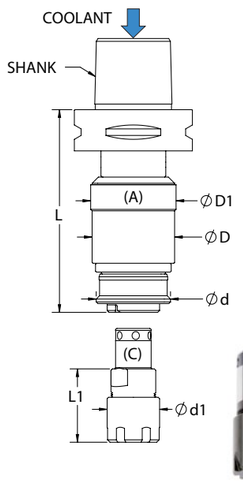


(A) Tap Holder SFT II Tapmatic Capto Shank, ER Collet Chuck, Internal Coolant System

Model	Capacity (steel)	Collets	Shank	Order code (with seal nut)	L	Weight kg	D	D1	d
SFT II 50	M4–M12 #8–1/2"	ER20	C4	**4150C420**	102	0.7	34.6	36.3	34
			C5	**4150C520**	103	1.0			
			C6	**4150C620**	105	1.2			
			C8	**4150C820**	112	2.1			
SFT II 75	M8–M20 1/4"–3/4"	ER25	C5	**4175C525**	122	1.2	44.0	45.6	42
			C6	**4175C625**	124	1.5			
			C8	**4175C825**	131	2.4			
SFT II 100	M16–M30 5/8"–1"	ER40	C6	**41100C640**	154	2.9	62.0	63.6	63
			C8	**41100C840**	161	3.8			

Note: These internal coolant tools come standard with sealing nut, but tools with standard nuts are also available. Please add N to part number to specify nut without sealing.
When using Roll Form Taps the tool's capacity must be reduced 25%.
All dimensions are shown in mm. 25.4mm = 1"

(A) Tap Holder SFT II Tapmatic Capto Shank, Quick-Change, Internal Coolant System



Model	Capacity (steel)	Adapter	Shank	Order code	L	Weight kg	D	D1	d
SFT II 50	M4–M12 #8–1/2"	Nr. 1	C4	**4150C4QC**	89	0.7	34.6	36.3	35
			C5	**4150C5QC**	90	1.0			
			C6	**4150C6QC**	92	1.2			
			C8	**4150C8QC**	99	2.1			
SFT II 75	M8–M16 1/4"–5/8"	Nr. 1	C5	**4175C5QC**	106	1.2	44.0	45.6	40
			C6	**4175C6QC**	108	1.5			
			C8	**4175C8QC**	115	2.4			
SFT II 100	M16–M30 1/2"–7/8"	Nr. 2	C6	**41100C6QC**	142	2.9	62.0	63.6	59
			C8	**41100C8QC**	149	3.8			

Note: When using Roll Form Taps the tool's capacity must be reduced 25%.
All dimensions are shown in mm. 25.4mm = 1".
For best performance we recommend ER collet adapters shown below.

(C) ER Collet Adapter

Order code with Standard Nut	Adapter	Collets	d1	L1	Order code with seal nut	L1
8208216	Nr. 1	ER16	22	24	**8208216S**	28
8218220	Nr. 1	ER20	28	35	**8218220S**	40
8288225	Nr. 2	ER25	35	38	**8288225S**	43
8288232	Nr. 2	ER32	50	48	**8288232S**	53

Pages 49-51 Page 52

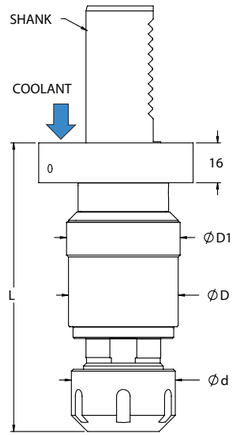
Steel Collets

Sealing Gaskets

Synchronous feed tap holders with VDI shank, with internal coolant system

Features and Advantages
- increase tap life by 100% or more
- improves thread quality
- reduces downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- wide range of sizes
- available with high pressure internal coolant system up to 80 bar. (Balanced Coolant System)

How to Order
Please select the tap holder (A) including the VDI shank, to fit your machine. Please order accessories like collets and sealing gaskets separately as they are not included.



(A) Tap Holder SFT II VDI Shank, ER Collet Chuck, Internal Coolant System

Model	Capacity (steel)	Collets	Shank	Order code (with seal nut)	L	Weight kg	D	D1	d
SFT II 50	M4–M12 #8–1/2"	ER20	VDI 30	**4150VDI3020**	97	1.2	34.6	36.3	34
			VDI 40	**4150VDI4020**	97	2.1			
SFT II 75	M8–M20 1/4"–3/4"	ER25	VDI 30	**4175VDI3025**	116	1.5	44	45.6	42
			VDI 40	**4175VDI4025**	116	2.4			

Note: These internal coolant tools come standard with sealing nut, but tools with standard nuts are also available. Please add N to part number to specify nut without sealing.
When using Roll Form Taps the tool's capacity must be reduced 25%.
All dimensions are shown in mm. 25.4mm = 1"

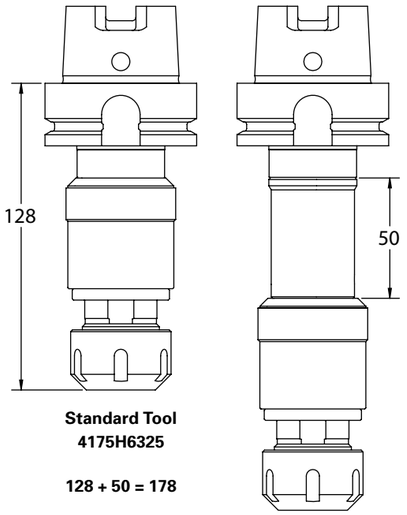
Pages 49-51 Page 52

Steel Collets

Sealing Gaskets

Synchronized Tapping

Synchronous feed tap holders with extended length, with internal coolant



Standard Tool
4175H6325

128 + 50 = 178

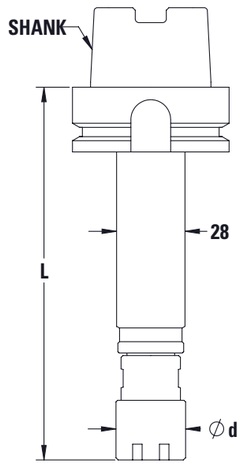
Extended Tool
4175H63L17825

Features and Advantages
- four standard extensions of 50, 100, 150 and 200 mm
- increased tap life of 100% or more
- improved thread quality
- reduced downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- available with internal coolant pressure up to 80 bar

How to Order
Please select the standard length SFT50 or SFT75, including the intregal shank of your choice. Then choose a standard extension of 50, 100, 150 or 200mm. The order code is given as shown in the example drawing at left. Accessories like steel collets and sealing gaskets are not included. Please order these separately.

Special length extensions are also available upon request.

Synchronous feed tap holders with reduced diameter and extended length



Features and Advantages
- special reduced diameter extended length tools for difficult to reach holes
- increased tap life of 100% or more
- improved thread quality
- reduced downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- available with internal coolant pressure up to 50 bar
- available with ER16 or ER20 mini nut collet chuck

How to Order
Please simply let us know the type of shank, length **(L)**, and your preference of the ER16 or ER20 collet chuck. Please note diameter "d" for ER16 mini nut is 22mm and for ER20 it is 26mm. Accessories like steel collets and sealing gaskets are not included. Please order these separately.

Pages 49-51 Page 52

Steel Collets

Sealing Gaskets

Synchronous feed tap holders with integral HSK shank, with MQL, minimum quantity lubrication

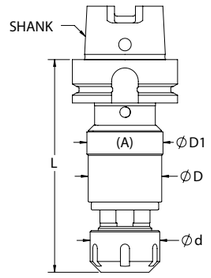
Features and Advantages
- increase tap life by 100% or more
- improves thread quality
- precise lubrication delivery for improved tool life
- reduce coolant and maintenance costs
- environmentally friendly alternative to recirculating coolant
- standard for one channel system, but multi-channel also available

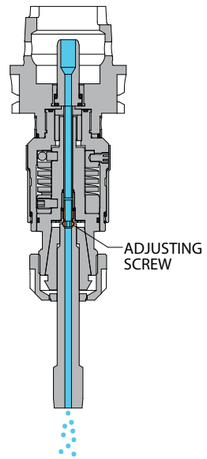
How to Order
Please select the tap holder (A) including the HSK shank, to fit your machine. Please order accessories like collets, adjusting screws and sealing gaskets separately as they are not included.

(A) Tap Holder SFTII HSK Shank, ER Collet Chuck, MQL, minimum quantity lubrication system

Model	Capacity (steel)	Collets	Shank	Order code for MQL version	L	Weight kg	D	D1	d
SFT II 50	M4–M12 #8–1/2"	ER20	HSK63A	**4150H6320M**	108	1.0	34.6	36.3	34
			HSK80A	**4150H8020M**	113	1.9			
			HSK100A	**4150H10020M**	115	2.7			
SFT II 75	M8–M20 1/4"–3/4"	ER25	HSK63A	**4175H6325M**	128	1.6	44.0	45.6	42
			HSK80A	**4175H8025M**	131	2.4			
			HSK100A	**4175H10025M**	133	3.2			

Note: These MQL tools come standard with sealing nut.
When using Roll Form Taps the tool's capacity must be reduced 25%.
All dimensions are shown in mm. 25.4mm = 1"
Other shank sizes are also available

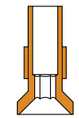




Adjusting Screws

Taps with External Center

ø Tap Shank	SFT50II	SFT75II
6mm, 7mm	810836	
8mm, 9mm	810838	811838
10mm	8108310	8108310
11mm to 16mm		8118311

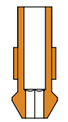


Taps with External Center

Taps with Internal Center

ø Tap Shank	SFT50II	SFT75II
6mm, 7mm	810836IN	
8mm, 9mm	810838IN	811838IN
10mm	8108310IN	8108310IN
11mm to 16mm		8118311IN

Additional sizes available on request.



Taps with Internal Center

Pages 49-51 Page 52

Steel Collets

Sealing Gaskets

Tension / Compression tap chucks for tapping cycles that are not synchronized

For tapping applications on CNC machines where the revolutions per minute and feed rate are not synchronized to the tap pitch, tap holders with tension / compression float are recommended. These tap chucks rely on the machine spindle for reversal, but by providing axial float, the tap is able to follow the correct pitch, producing gage perfect threads.

Tapmatic offers a complete program of tension / compression tap chucks with a wide range of sizes, and three different tap holding options. Rubberflex multi range collets, ER collets, or Quick Change.

SM
Rubberflex Collets

Tension / compression floating tap holders for gage perfect threads with releasable hard start for consistent tapping depth control.

For tap sizes M1.4-M30.

Only two collets needed to cover the capacity of each holder.

SM
ER Collets

All the same features as the rubberflex version but for use with ER square drive collets.

For tap sizes M1.4-M18.

ER GB square drive collets include an internal square drive for securely gripping the tap shank.

TA
Quick Change

In addition to tension/ compression and releasable hard start, the TA series includes front release. A safety feature that releases the quick change tap adapter when the extension float is exceeded.

For tap sizes M1-M49.

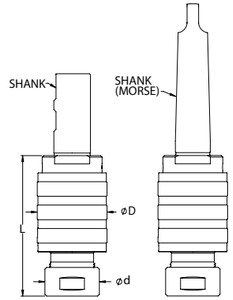
Quick Change for fast tap change without wrenches

TIC
Quick Change

All the same features as the TA series but with the addition of high pressure internal coolant up to 50 bar.

For tap sizes M3-M36.

Tension/Compression tap chucks with modular straight shank and RF collet



Dimensions

Model	D	d	L	Weight kg
SM2	27	19	53	0.2
SM4	38	27	71	0.4
SM6	48	37	96	0.8
SM8	63.5	57	128	2.5

Tapping chuck with increased tension and compression to accommodate tapping cycles that are not synchronized.

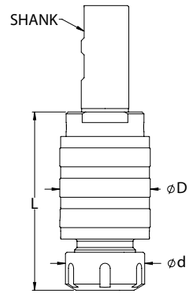
Features and Advantages
- increased tension and compression
- releasable hard start for consistent depth control
- right hand and left hand tapping
- multi-range collets (RF), adjustable back jaw for driving tap square

How to Order
Please select the tap chuck (A) and CAT, SK or BT shank (C), to fit your application. Please order rubber flex collets separately.

Model	Capacity (steel)	Collets Rubber Flex Order Code (Shank Ø)	Shank	Order code	Tension T	Compression H
SM2	M1.4–M7 #0 - 1/4"	21600 (2.5-4.5) 21700 (4.5-6.5)	16mm 5/8" No. 2 Morse	**023216** **023262** **023202**	4.5	6
SM4	M3–M12 #6 - 1/2"	22100 (3.5-6.5) 22200 (6.5-10.0)	20mm 3/4" No. 2 Morse	**023420** **023475** **023402**	7	7
SM6	M5–M18 #10 - 3/4"	24100 (4.5-10.0) 24500 (10.0-15.0)	25mm 1" No. 3 Morse	**023625** **023610** **023603**	11	11
SM8	M10–M30 1/2" - 1 1/8"	26100 (10.0-16.0) 26200 (16.0-23.0)	32mm 1 1/2" No. 3 Morse No. 4 Morse	**023832** **023815** **023803** **023804**	17	17

Note: Additional shanks available. When using roll form taps, the tool capacity must be reduced 25%.

Tension/Compression tap chucks with modular straight shank and ER collet



Dimensions

Model	D	d	L	Weight kg
SM2	27	28	65	0.2
SM4	38	34	74	0.4
SM6	48	42	94	0.8

Tapping chuck with increased tension and compression to accommodate tapping cycles that are not synchronized.

Features and Advantages
- increased tension and compression
- releasable hard start for consistent depth control
- right hand and left hand tapping
- ER steel collet chuck

How to Order
Please select the tap chuck (A) and CAT, SK or BT shank (C), to fit your application. Please order ER steel collets separately.

Model	Capacity (steel)	Collets	Shank	Order code	Tension T	Compression H
SM2	M1.4–M7 #0 - 1/4"	ER16	16mm 5/8"	**023216ER** **023262ER**	4.5	5
SM4	M3–M12 #6 - 1/2"	ER20	20mm 3/4"	**023420ER** **023475ER**	7	7
SM6	M5–M18 #10 - 3/4"	ER25	25mm 1"	**023625ER** **023610ER**	11	11

Page 54 Page 48 Pages 49-51

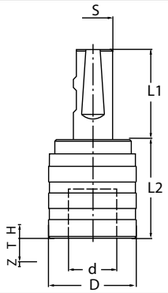
(C)

Interchangeable Steep Tapers


RF Multi-range Collets


Steel collets

Tension/Compression tap chucks with modular straight shank and quick change



TA tapping chuck with tension/compression. With its quick change spindle the taps can be changed in seconds.

Features and Advantages
- tension and compression
- releaseable hard start for consistent depth control
- front release protects against damage if over extended
- right hand and left hand tapping
- short projection

How to Order
Please order the tap chuck (A) and CAT, SK or BT shank (C) to fit your application. Please order tap adapters separately

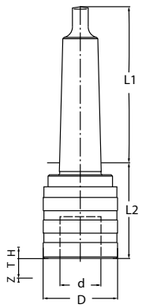
Dimensions

Model	D	d	L1	L2
TA0-016	29	13	48	38.0
TA0-020			50	
TA1-016	39	19	49	39.0
TA1-020			51	
TA1-025			57	
TA2-025	56	31	57	63.0
TA2-032				
TA3-032	81	48	61	124.0
TA4-040	99	60	71	135.5

(A) Model	Capacity (steel)	Adapter	Shank	Order code	Tension T	Compression H	Front release Z
TA0	M1–M10 #0 - 1/4"	Nr. 0	16 mm	**490016**	7.5	5	1.7
			20 mm	**490020**			
TA1	M3–M14 #8 - 9/16"	Nr. 1	16 mm	**491016**	8	5	2.1
			20 mm	**491020**			
			25 mm	**491025**			
TA2	M4.5–M24 5/16" - 7/8"	Nr. 2	25 mm	**492025**	15	8.5	2.8
			32 mm	**492032**			
TA3	M14-M36, 13/16" - 1 3/8"	Nr. 3	32 mm	**493032**	23.5	15	4.1
TA4	M22-M48, 7/8" - 1 7/8"	Nr. 4	40 mm	**494040**	25	16.5	5.7

Note: When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %.

Tension/Compression tap chucks with morse taper and quick change



How to Order
Please select the tap chuck (A) to fit your application. Please order quick change tap adapters separately.

Dimensions

Model	D	d	L1	L2
TA0-MT1	29	13	62.0	43.5
TA0-MT2	29	13	75.0	45.0
TA1-MT2	39	19	75.0	47.0
TA2-MT3	56	31	94.0	71.0
TA3-MT4	81	48	117.5	105.0
TA4-MT5	99	60	149.5	116.5

(A) Model	Capacity (steel)	Tap adapters	Morse taper MT	Order code	Tension T	Compression H	Front release Z
TA0	M1–M10 #0–1/4"	Nr. 0	1	**490MT1**	7.5	5	1.7
			2	**490MT2**			
TA1	M3–M14 #8–9/16"	Nr. 1	2	**491MT2**	8	5	2.1
			3	**491MT3**			
TA2	M4.5–M24 5/16"–7/8"	Nr. 2	3	**492MT3**	15	8.5	2.8
			4	**492MT4**			
			5	**492MT5**			
TA3	M14–M36 13/16"–1 3/8"	Nr. 3	4	**493MT4**	23.5	15	4.1
			5	**493MT5**			
TA4	M22–M48 7/8"–1 7/8"	Nr. 4	5	**494MT5**	25	16.5	5.7
			6	**494MT6**			

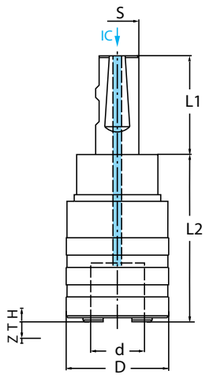
Note: When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %.
All dimensions are shown in mm. 25.4mm = 1"

Page 54 Pages 44-48

(C) Interchangeable Steep Taper

Quick-Change Adapters

Tension/Compression tap chucks with modular straight shank, quick change and internal coolant



Tapping chuck with internal coolant system, tension, compression and quick-change spindle, where the tap can be changed in seconds.

Features and Advantages
- tension and compression
- releaseable hard start for consistent depth control
- front release protects against damage if over extended
- right hand and left hand tapping
- internal coolant system (max. 50 bar)
- short projection

How to Order
Please order the tap chuck (A) and CAT, SK or BT shank (C) to fit your application. Please order tap adapters separately.

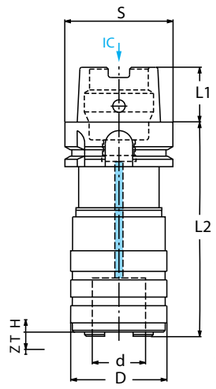
Dimensions

Model	D mm	d mm	L1 mm	L2 mm
TIC1-025	43	19	57	62
TIC2-025	59	31	57	98
TIC3-032	80	48	61	147

(A) Model	Capacity (steel)	Adapter	Shank	Order code	Tension T	Compression H	Front release Z
TIC1	M3–M14, #8 - 9/16"	Nr. 1	25	**49C1025**	7.5	5	2.5
TIC2	M4.5–M24, 5/16" - 7/8"	Nr. 2	25	**49C2025**	10	7	3
TIC3	M14–M36, 13/16" - 1 3/8"	Nr. 3	32	**49C3032**	20	15	5

Note: When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %.

Tension/Compression tap chucks with HSK shank, quick change and internal coolant



How to Order
Please select the tap chuck (A) to fit your application. Please order quick change tap adapters separately.

Dimensions

Model	D	d	L1	L2
TIC1-HSK50A	43	19	25	91
TIC1-HSK63A			32	93
TIC1-HSK80A			40	97
TIC1-HSK100A			50	98
TIC2-HSK50A	59	31	25	140
TIC2-HSK63A			32	130
TIC2-HSK80A			40	133
TIC2-HSK100A			50	135

(A) Model	Capacity (steel)	Adapter	Shank S HSK-A	Order code	Tension T	Compression H	Front release Z
TIC1	M3–M14 #8 - 9/16"	Nr. 1	50	**49C1H50**	7.5	5	2.5
			63	**49C1H63**			
			80	**49C1H80**			
			100	**49C1H100**			
TIC2	M4.5–M24 5/16" - 7/8"	Nr. 2	50	**49C2H50**	10	7	3
			63	**49C2H63**			
			80	**49C2H80**			
			100	**49C2H100**			

Note: When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %.
All dimensions are shown in mm. 25.4mm = 1"

Page 54 Page 44-48

(B) Interchangeable Steep Tapers

(C) Quick-Change Adapters

Tapping attachments for manual tapping applications

Drill-n-Tap
For drilling and tapping with quick change spindle.

RX
Newest series for high production with heavy duty ball clutch.

X
For general tapping with sensitive fiber clutch.

TC/DC
Adjustable self feed for accurate depth control in shallow holes.

SPD
Positive drive for applications where torque control is not desirable. 1 to 1 reverse ratio simplifies adjustment of automatically controlled feed.

SPD-QC
With quick change spindle. Recommended for pipe taps.

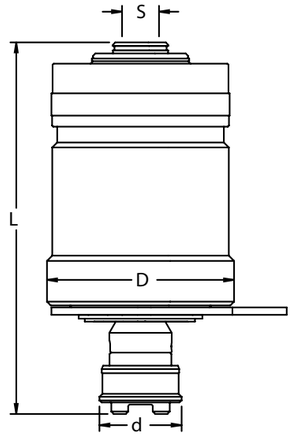
Tapping attachments for drilling and milling machines and pneumatic, hydraulic and electric spindles

Since 1952 Tapmatic has manufactured the world's most popular line of compact self-reversing tapping attachments. Our experience and commitment to quality make these tools an excellent value. Although there are other products available on the market, a Tapmatic head is still the most economical to use. Our customers know they can count on our tools for many, many years of service.

Tapmatic offers a complete program of self-reversing tapping attachments to meet the most difficult requirements. Ruggedly built, these Tapmatic tools provide higher production rates due to:

- decrease in tap breakage
- production of perfect threads
- reduced cycle time through increased 1.75:1 reverse speed
- longer tap life
- accurate depth control
- better thread quality
- consistent trouble free performance
- interchangeable mounts
- left hand versions available on request

Self-reversing tapping attachment for drilling and tapping with high-speed reverse, pre-selective torque control and quick change



- for tapping and drilling
- great for combination drill-tap cutting tools.
- unique design for improved concentricity
- quick change for rapidly changing the cutting tool
- reduced cycle time when tapping thanks to 1.75 to 1 reverse speed
- less tap breakage due to pre-selective torque control
- adjustable self-feed and hard start for accurate depth control

How to Order
Please select the tapping attachment (A) and arbor (C) to fit your application. Choose an arbor to fit the thread or taper mount of the tapping attachment, with Morse Taper, R8 or straight shank to fit your machine. Please order quick change adapters and collets separately. Please order torque bars separately.

Dimensions

(A)

Model	D mm	d mm	Self-feed mm T	Weight kg
Drill-n-Tap 30	60	25	2-4	0.8
Drill-n-Tap 50	80	35	2-5	2.0

Model	Tap Capacity (steel)	Adapter Size	Mounts S		Order code	L	Max. RPM
			Taper mounts	Thread. mounts			
Drill-n-Tap 30	M1.4–M7 #0 - 1/4"	NR. 0	JT6		**014006**	126	2000
			B16		**014016**		
			JT33		**014033**		
				1/2"–20	**014050**		
Drill-n-Tap 50	M3–M12 #6 - 1/2"	NR. 1	JT6		**016006**	159	1500
			B16		**016016**		
			JT33		**016033**		
				1/2"–20	**016050**	154	

Note: When using Roll Form Taps the tool's capacity must be reduced by 25%.
All dimensions are shown in mm. 25.4mm = 1".

Description	d1	d2
Nr. 0, P Type Tap Adapters	22	7
Nr. 1, P Type Tap Adapters	30	7

Order code	Adapter size	Collets Used	Clamping Ø	d1	d2
8138211N	Nr. 0	ER11	2.5-10	19	20-22
8208216	Nr. 1	ER16 (Mini nut)	2.5-10	22	24-27
8218220		ER20 (Mini nut)	2.5-13	28	35-38
8118220N		ER20 (Standard nut)	2.5-13	34	35-38

For tapping, the P type tap adapters may be used. Please order separately by tap size. See Pages 44-45.

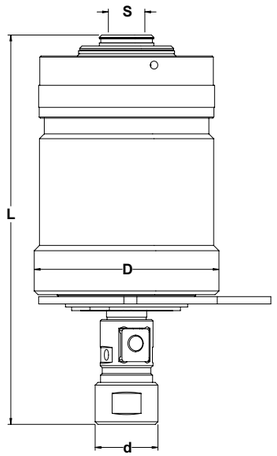
The ER11, ER16 and ER20 quick change adapters use ER collets. They can be used together with ERGB (square drive collets) for tapping and with standard collets for holding center drills and drills.
Please order separately.

Pages 49-51
Steel collets

(C) Page 55
Arbors

Page 53
Torque Bar

High production self-reversing tapping attachments with high-speed reverse and pre-selective torque control



- for high production tapping on drill press, and milling machines.
- unique design for improved concentricity.
- Rubber Flex collet spindle. Only two collets required to cover the full tap capacity.
- reduced cycle time thanks to 1.75 to 1 reverse speed
- less tap breakage due to pre-selective torque control with heavy duty ball clutch
- easy adaptation with multiple interchangeable arbors

How to Order
Please select the tapping attachment (A) and arbor (C) to fit your application. Choose an arbor to fit the thread or taper mount of the tapping attachment, with Morse Taper, R8 or straight shank to fit your machine. Please order rubber flex collets and torque bars separately.

Dimensions

Model	D	d	Self-feed	Weight kg
Rx II 30	60	25	4	0.8
Rx II 50	80	35	5	2.0

(A)

Model	Capacity (steel)	Collets Rubber Flex Order Code (Shank Ø)	Mounts S		Order code	L	Max. RPM
			Taper mounts	Thread. mounts			
Rx II 30	M1.4–M7 #0 - 1/4"	21600 (2.5-4.5) 21700 (4.5-6.5)	JT6		**114006**	109	2000
			B16		**114016**		
			JT33		**114033**		
				1/2"-20	**114050**		
Rx II 50	M3–M12 #6 - 1/2"	22100 (3.5-6.5) 22200 (6.5-10.0)	JT6		**116006**	169	1500
			B16		**116016**		
			JT33		**116033**	164	
				1/2"–20	**116050**		

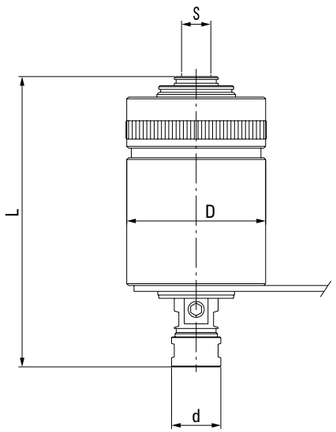
Note: When using Roll Form Taps the tool's capacity must be reduced by 25%.
All dimensions are shown in mm. 25.4mm = 1".

RF Rubber Flex Collets

Tapping Head Capacity	RF Collet Order code	Clamping Capacity (mm)	Tap Capacity Metric Sizes (DIN 371, 374)	Tap Capacity Inch Sizes
M1.4-M7 #0-1/4"	**21600**	2.5-4.5	M1.6-M4	#0-#8
	21700	4.5-6.5	M4-M6	#10-1/4"
M3-M12 #6-1/2"	**22100**	3.5-6.5	M3-M6	#0-1/4"
	22200	6.5-10.0	M7-M12	5/16"-1/2"

Page 48 RF Multi-range Collets
(C) Page 55 Arbors
Page 53 Torque Bar

High production self-reversing tapping attachments with high-speed reverse and pre-selective torque control



- for hard to machine material and high
- torque applications like roll form tapping
- less tap breakage due to pre-selective torque control
- reduced cycle time through increased 1.75:1 reverse speed
- easy handling, compact design
- easy adaptation with multiple interchangeable arbors

How to Order
Please select the tapping attachment (A) and arbor (C) to fit your application. Choose an arbor to fit the thread or taper mount of the tapping attachment, with the Morse Taper, R8 or straight shank to fit your machine. Please order rubber flex collets and torque bars separately .

Dimensions

Model	D mm	d mm	Self-feed mm T	Weight kg
RX30	53	19	3	0.7
RX50	76	27	5	1.8
RX70	88	36	7	3.0

(A)

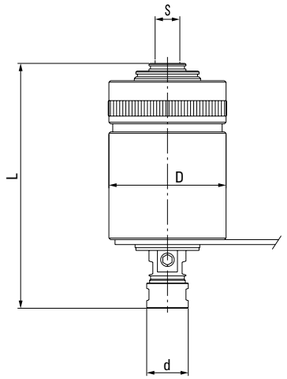
Model	Capacity (steel)	Collets Rubber Flex Order Code (Shank Ø)	Mounts S		Order code	L	Max. RPM
			Taper mounts	Thread. mounts			
RX 30	M1.4–M7 #0 - 1/4"	21600 (2.5-4.5) 21700 (4.5-6.5)	JT6		**013006**	116	2000
			B16		**013016**		
			JT33		**013033**		
				3/8"–24	**013037**		
				1/2"–20	**013050**		
RX 50	M3–M12 #6 - 1/2"	22100 (3.5-6.5) 22200 (6.5-10.0)	JT6		**015006**	157	1500
			B16		**015016**		
			JT33		**015033**		
				1/2"–20	**015050**		
RX 70	M5–M18 #10 - 3/4"	24100 (4.5-10) 24500 (9.0-15.0)	JT3		**017003**	182	1200
				1/2"–20	**017050**		
				7/8"–20	**017087**		

Note: When using Roll Form Taps the tool's tapping capacity must be reduced by 25 %.
Special thread mounts are also available to fit Burgmaster machines.
All dimensions are shown in mm. 25.4mm = 1"

RF Rubber Flex Collets

Tapping Head Capacity	RF Collet Order code	Clamping Capacity (mm)	Tap Capacity Metric Sizes (DIN 371, 374)	Tap Capacity Inch Sizes
M1.4-M7 #0-1/4"	**21600**	2.5-4.5	M1.6-M4	#0-#8
	21700	4.5-6.5	M4-M6	#10-1/4"
M3-M12 #6-1/2"	**22100**	3.5-6.5	M3-M6	#0-1/4"
	22200	6.5-10.0	M7-M12	5/16"-1/2"
M5-M18 #10-3/4"	**24100**	4.5-10.0	M4-M12	#10-1/2"
	24500	9.0-15.0	M10-M18	1/2"-3/4"

Page 48 RF Multi-range Collets
(C) Page 55 Arbors
Page 53 Torque Bar



- easy handling, compact design
- less tap breakage due to pre-selective torque control
- easy adaptation with multiple interchangeable arbors
- reduced cycle time through increased 1.75:1 reverse speed
- only 2 Rubber Flex collets per model required.

How to Order
Please select the tapping attachment (A) and arbor (C) to fit your application. Choose an arbor to fit the thread or taper mount of the tapping attachment, with the Morse Taper, R8 or straight shank to fit your machine. Please order rubber flex collets and torque bars separately .

Note: X models with Quick Change or ER collet chuck are also available on request.

Dimensions

Model	D	d	Self-feed	Weight kg
100XB	33	9	5	0.2
30X	48	19	3.5	0.5
50X	70	27	6	1.4
70X	76	36	9	2.1
90X	105	57	13	5.0

(A)

Model	Capacity (steel)	Collets Rubber Flex Order Code (Shank Ø)	Mounts S		Order code	L	Max. RPM
			Taper mounts	Thread. mounts			
30X	M1.4–M7 #0 - 1/4"	21600 (2.5-4.5) 21700 (4.5-6.5)	JT6		**10306**	113	2000
			B12		**10312**		
			B16		**10316**		
			JT33		**10333**		
				5/16"–24*	**10331**	104	
				3/8"–24	**10337**		
				1/2"–20	**10350**	113	
				5/8"–16*	**10362**		
				3/4"–16*	**10375**		
50X	M3–M12 #6 - 1/2"	22100 (3.5-6.5) 22200 (6.5-10.0)	JT6		**10506**	153	1500
			B16		**10516**		
			JT33		**10533**		
				3/8"–24	**10537**	148	
				1/2"–20	**10550**		
				5/8"–16*	**10562**		
				3/4"–16*	**10575**		
70X	M5–M18 #10 - 5/8"	24100 (4.5-10) 24500 (9.0-15.0)	JT3		**10703**	176	1200
			B18		**10718**		
				1/2"–20	**10750**		
				5/8"–16*	**10762**		
				3/4"–16*	**10775**		
				7/8"–20	**10787**		
90X	M10–M30 1/2" - 1 1/8"	26100 (10.0-16.0) 26200 (16.0-23.0)	JT4		**10904**	219	600
				1.1/2"–18	**10915**		

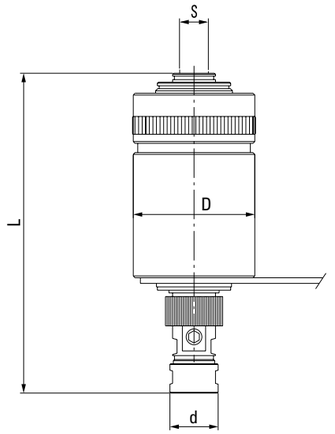
Note: When using Roll Form Taps the tool's tapping capacity must be reduced by 25 %.
* These special thread mounts are only for Burgmaster machines.
All dimensions are shown in mm. 25.4mm = 1"

RF Rubber Flex Collets

Tapping Head Capacity	RF Collet Order code	Clamping Capacity (mm)	Tap Capacity Metric Sizes (DIN 371, 374)	Tap Capacity Inch Sizes
M1.4-M7 #0-1/4"	**21600**	2.5-4.5	M1.6-M4	#0-#8
	21700	4.5-6.5	M4-M6	#10-1/4"
M3-M12 #6-1/2"	**22100**	3.5-6.5	M3-M6	#0-1/4"
	22200	6.5-10.0	M7-M12	5/16"-1/2"
M5-M18 #10-3/4"	**24100**	4.5-10.0	M4-M12	#10-1/2"
	24500	9.0-15.0	M10-M18	1/2"-3/4"
M10-M30 1/2"-1 1/8"	**26100**	10.0-16.0	M10, M14-M20	9/16"-3/4"
	26200	16.0-23.0	M20-M30	13/16"-1 1/8"

Page 48 RF Multi-range Collets
Page 55 Arbors
Page 53 Torque Bar

Self-reversing tapping attachments with high-speed reverse, pre-selective torque control and adjustment for shallow depth tapping



- adjustable depth control for shallow blind hole
- easy handling, compact design
- less tap breakage due to pre-selective torque control
- easy adaption with multiple interchangeable arbors
- reduced cycle time through increased 1.75:1 reverse speed
- only 2 Rubber Flex collets per model required.

How to Order
Please select the tapping attachment (A) and arbor (C) to fit your application. Choose an arbor to fit the thread or taper mount of the tapping attachment, with the Morse Taper, R8 or straight shank to fit your machine. Please order rubber flex collets and torque bars separately .

Dimensions

Model	D	d	Self-feed	Weight kg
30TC/DC	48	19	1.5–3.5	0.5
50TC/DC	70	27	2–6	1.2
70TC/DC	76	36	3–9	2.3

(A)

Model	Capacity (steel)	Collets Rubber Flex Order Code (Shank Ø)	Mounts S		Order code	L	Max. RPM
			Taper mounts	Thread. mounts			
30TC/DC	M1.4–M7 #0 - 1/4"	21600 (2.5-4.5) 21700 (4.5-6.5)	JT6		**14306**	122	2000
			B12		**14312**		
			B16		**14316**		
			JT33		**14333**		
				5/16"–24*	**14331**	113	
				3/8"–24	**14337**		
				1/2"–20	**14350**	122	
				5/8"–16*	**14362**		
50TC/DC	M3–M12 #6 - 1/2"	22100 (3.5-6.5) 22200 (6.4-10.0)	JT6		**14506**	169	1500
			B16		**14516**		
			JT33		**14533**		
				3/8"–24	**14537**		
				1/2"–20	**14550**		
				5/8"–16*	**14562**		
70TC/DC	M5–M18 #10 - 5/8"	24100 (4.5-10) 24500 (9.0-15.0)	JT3		**14703**	191	1200
			B18		**14718**		
				1/2"–20	**14750**		
				5/8"–16*	**14762**		
				7/8"–20	**14787**		

Note: When using Roll Form Taps the tool's tapping capacity must be reduced by 25 %.
* These special thread mounts are only for Burgmaster machines.
All dimensions are shown in mm. 25.4mm = 1"

RF Rubber Flex Collets

Tapping Head Capacity	RF Collet Order code	Clamping Capacity (mm)	Tap Capacity Metric Sizes (DIN 371, 374)	Tap Capacity Inch Sizes
M1.4-M7 #0-1/4"	**21600**	2.5-4.5	M1.6-M4	#0-#8
	21700	4.5-6.5	M4-M6	#10-1/4"
M3-M12 #6-1/2"	**22100**	3.5-6.5	M3-M6	#0-1/4"
	22200	6.5-6.5	M7-M12	5/16"-1/2"
M5-M18 #10-3/4"	**24100**	4.5-10.0	M4-M12	#10-1/2"
	24500	9.0-15.0	M10-M18	1/2"-3/4"

Page 48 RF Multi-range Collets
(C) Page 55 Arbors
Page 53 Torque Bar

Tapping attachments with automatic reversal for conventional machines

Features and Advantages

- rugged design
- short lengths
- 1:1 reverse speed
- for heavy applications like drill tapping or roll form tapping
- SPD QC also recommended for pipe taps

Dimensions

Model	D mm	d mm	Self-feed mm	Weight kg
SPD-3	53	19	3	0.5
SPD-5	69	27	5	1.4
SPD-7	76	36	7	2.1
SPD-9A	103	57	10	5.0
SPD-3 QC	53	28	3	0.5
SPD-5 QC	69	36	5	1.4
SPD-7 QC	76	54	7	2.1
SPD-9A QC	103	76	10	5.0
SPD-11 QC	146	90	13	14.0

Note: When using Roll Form Taps the tool's tapping capacity must be reduced by 25%.
* These special thread mounts are only for Burgmaster machines.
All dimensions are shown in mm. 25.4mm = 1"

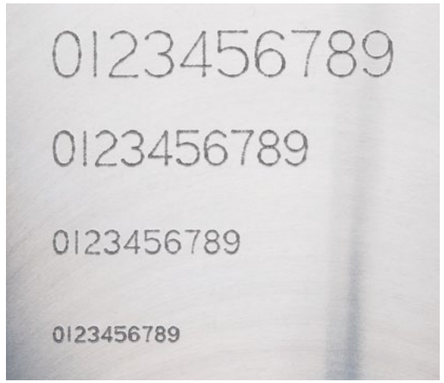
Model	Capacity (steel)	Collets Rubber Flex Order Code (Shank Ø)	Mounts S		Order code	L mm	Max. RPM
			Taper mounts	Thread. mounts			
SPD-3	M1.4–M7 #0 - 1/4"	21600 (2.5-4.5) 21700 (4.5-6.5)	JT6		**18306**	118	2000
			B16		**18316**		
			JT33		**18333**		
				3/8"–24	**18337**	105	
				1/2"–20	**18350**	113	
				5/8"–16*	**18362**		
SPD-5	M3–M12 #6 - 1/2"	22100 3.5-6.5) 22200 (6.5-10.0)	JT6		**18506**	148	1500
			B16		**18516**		
			JT33		**18533**		
				3/8"–24	**18537**	138	
				1/2"–20	**18550**		
				3/4"–16*	**18575**		
				7/8"–20	**18587**	148	
SPD-7	M5–M18 #10 - 5/8"	24100 (4.5-10.0) 24500 (9.0-15.0)	JT3		**18703**	175	1200
				1/2"–20	**18750**	162	
				5/8"–16*	**18762**		
				7/8"–20	**18787**	175	
SPD-9A	M10–M30 1/2" - 1 1/8"	26100 (10.0-16.0) 26200 (16.0-23.0)	JT4		**17904**	228	600
				1 1/2"–18	**17915**	200	
SPD-3 QC	M1.4–M7 #0 - 1/4"	Nr 0	B16		**18216**	109	2000
			JT33		**18233**		
				3/8"–24	**18237**	96	
				1/2"–20	**18250**	104	
				5/8"–16*	**18262**		
				3/4"–16*	**18275**	109	
SPD-5 QC	M3–M12 #6 - 1/2"	Nr 1	B16		**18416**	130	1500
			JT33		**18433**		
				1/2"–20	**18450**	122	
				5/8"–16*	**18462**		
				7/8"–20	**18487**	130	
SPD-7 QC	M5–M18 #10 - 5/8"	Nr 2	JT3		**18603**	159	1200
				1/2"–20	**18650**	147	
				5/8"–16*	**18662**		
				7/8"–20	**18687**	159	
SPD-9 QC	M10–M30 1/2" - 1 1/8"	Nr 3	JT4		**17804**	217	600
				1 1/2"–18	**17815**	189	
SPD-11 QC	M22–M42, 3/4" - 2"	Nr 4		2 1/4"–10	**18100**	236	400

Note: SPD-11 QC Recommended capacity 1 1/2" steel, 2" aluminum

Page 48 RF Multi-range Collets
Page 53 Torque Bar
Page 55 Arbors
Pages 44-48 Quick-Change Adapters

Dot Peen Marking tool for CNC marking

Here are just a few examples...



Character heights shown from 6 mm to 2 mm, using standard engraving software.

Point to point programming for creating characters with defined dot position or 2D Data Matrix codes.

Tapmatic Is Pleased To Introduce An Exciting New Product.... The TAPMATIC TapWriter.

The TapWriter allows you to mark your work piece while you are machining it without the need for a secondary marking operation. Part numbers, date codes, logos and even decorative patterns and artwork can easily be created with this unique dot marking tool.

It can also be used for controlled, consistent shot peening to improve a parts resistance to fatigue. Using the TapWriter for shot peening allows treating specific areas of a part without the need for masking, and no special cleaning is needed afterwards.

Installs easily on Machining Centers or CNC lathes with Live Tooling.

It utilizes standard engraving software, but unlike engraving, dot-peen marking does not require the use of delicate cutting tools and high speed spindles.

You can mark soft plastics or steel as hard as 55 RC.

The durable carbide stylus is thrown against the work piece which allows the marking of uneven or round surfaces.

The TapWriter is Fast. Up to 80 characters per minute or more just depending on the capabilities of your machine.

Dot peen marking is widely used in the aerospace industry because the cross section of the dot has gentle curves, resulting in no significant stress concentration.

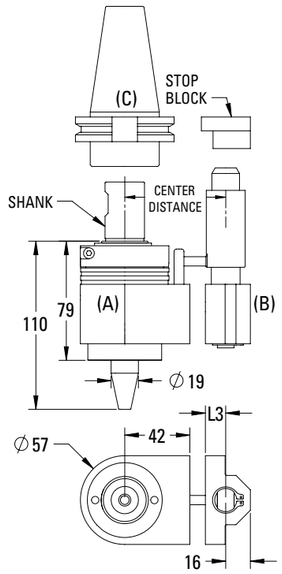
With the TapWriter you have complete control of the mark. The revolutions per minute determines the dots per minute, and the velocity of the carbide stylus when it impacts the work piece. The feed rate controls the distance between dots allowing you to select the apperance of discrete dots or a continuous line.

Mark logos using standard CAD/CAM software for the tool path.

- **Eliminates extra operations**
- **Faster than engraving**
- **Long tool life with replaceable carbide stylus**
- **Mark hard or soft materials**
- **Mark round or uneven surfaces**
- **Simple to install and program**

How to Order
The TapWriter® adapts to machining centers with automatic change, using a locking stop arm, similar to those used with self reversing tapping attachments. Please select the TapWriter® (A), stop arm (B), and CAT, SK, or BT shank (C), to fit your machine. Please order accessories separately.

TapWriter® with Stop Arm Bar and Stop Block Installation



(A) TapWriter® CNC Dot Peen Marking Tool

Model	Order code	Shank	Weight kg
TAPWRITER	**57820**	20 mm	1.7
	57825	25 mm	
	57810	1″	

(B) Stop Arm Assembly

Center Distance (42+L3)	Order code	L3
55	**3925551**	13
65	**3925651**	23
80	**3925801**	38

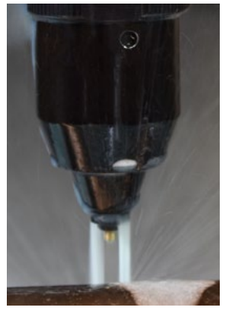
Special stylus points or extended lengths are available on request.

Page 54
(C)
Interchangeable Steep tapers
Page 12
Stop Block
Page 12
Installation

ScribeWriter® Force Π

Marking tool for work piece scribing

With high pressure internal coolant



Mark It While You Make It.

- Scribing tool for CNC machines.
- For marking of different materials up to 62 HRC hardness, and surface variations up to 5mm.
- Fast marking without spindle rotation.
- Simple programming directly at the machine control or from the programmers work station using engraving software.
- Marking force and resulting depth are adjustable by turning the knurled sleeve.
- Easy to read marking force reference scale with high quality magnification lens from Thorlabs.
- Settings 0-7 for gradually increasing force up to setting H for marking the hardest materials. There is no need to change springs.
- With high pressure internal coolant capability for improved stylus lubrication and increased marking force.
- Simple to change, long life, carbide stylus. A 90° and 60° stylus are available.
- New ball point stylus option. The rolling ball creates very smooth lines, but depth is shallower in comparison to scribing points.

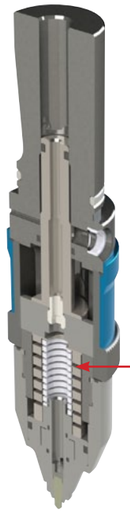
Marking force reference scale.

Turn to increase or decrease marking force.

Easy to exchange long life carbide stylus.

Setting 0-7 for marking all kinds of materials

Setting H for hard materials



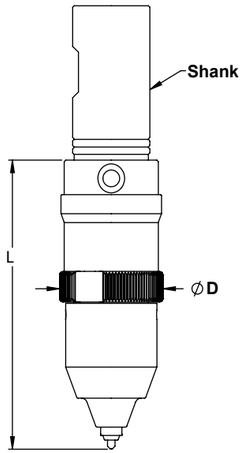
Unique flexure technology for higher marking force without the need to change springs.

ScribeWriter® Force Π
Marking tool for work piece scribing

Example in 4140 pre heat treated material with hardness 28 HRC. Marking at different settings with 1.3 mm compression against the surface.

Example created with new ball point stylus in aluminum material.

Example marking a curved surface programmed at constant marking plane. Material is S7 tool steel heat treated to 60 HRC. Setting 'H' with 2mm compression at closest point on surface.



How to Order

Please select the ScribeWriter® with shank to fit your application. Please order CAT, SK, or BT shanks separately. The Scribewriter® comes with one standard 90° stylus. A 60° stylus is also available.

Order code	Shank	L	Ø D
57601	1"	95	32
57625	25 mm	95	32
57620	20 mm	95	32
57616	16 mm	95	32

Note: To order the ScribeWriter with 60° stylus, please specify by adding "-60" to the above order codes.
To order the ScribeWriter with a ball point stylus please specify by adding "-B" to the above order codes.

Standard Stylus Options

Order code	Stylus Point
7361608	90°
7361611	60°

Ball Point Stylus Options

Order code	Description
73602BN4A	Complete ball point assembly
71735C	2mm carbide ball

Changing the stylus

Simply unscrew the stylus holder to remove it.

Remove the retaining screw.

The stylus can then be removed and changed.

Page 54
Interchangeable Steep tapers

CNC Marking Heads for use with standard type or custom stamps

Tapmatic MH Series Marking Heads

Eliminate the need for expensive secondary marking operations. The Marking Head allows you to mark the work piece during the machining process.

Simple to install on Machining Centers, CNC lathes or even manually controlled conventional machines. Compact in size, they fit easily in the tool magazine or turret without interference.

With the Marking Head, no rotation is required. Simply advance the head against the work piece a short distance to charge the internal impact system and rapid feed away.

The impact force and marking depth can be adjusted by turning the knurled sleeve.

The Marking Heads shock absorbtion system cushions any recoil effect on the machine spindle or turret.

With the Marking Head you can hold standard type or custom made stamps. Mark part numbers, date codes, batch codes, logos or other information.

The marking location and depth are accurate and consistent.

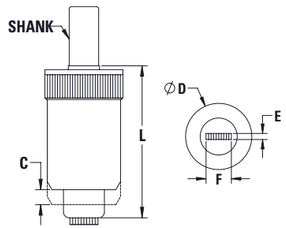
Characters and stamps are securely held and can be changed quickly.

The Marking Head is fast. Stamping the work piece takes less than one second.

CNC Marking Heads for use with standard type or custom stamps

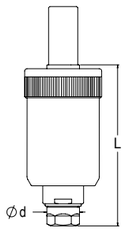
How to Order

Please select the Marking Head with the shank to fit your application. Please order accessories like standard type or custom stamps separately. Please note the Marking Head accepts standard type directly or you can use one of the separate Type Holders for quick replacement of charcters and fast change over.



MH Marking Heads with Type Holder

Model	Order code	Shank	E	F	D	L	Stroke C	Weight kg
MH 1/2	**575020TH**	20 mm	6.4	24.5	62	128	12	1.6
	575025TH	25 mm						
	575075TH	3/4˝						
	575010TH	1"						
	575003TH	No.3 Morse						
MH 3/4	**577525TH**	25mm	6.4	40	86	172	18	3.4
	577510TH	1"						

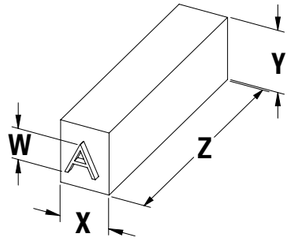


MH Marking Heads with ER Collet Holder

Model	Order code	Shank	Collets	D	d	L	Stroke C	Weight kg
MH 1/2	**57502016**	20 mm	ER16	62	28	138	12	1.6
	57502516	25 mm						
	57507516	3/4˝						
	57501016	1"						
MH 3/4	**57752525**	25mm	ER25	86	42	190	18	3.4
	57751025	1"						

Note: The impact force of each marking head may be adjusted by turning its knurled sleeve. For softer materials like plastic we also have the ability to deliver a Marking Head with lighter springs. Spring sets for greater force are also available. Please just let us know the details about your specific application for a recommendation.

Standard Type Dimensions

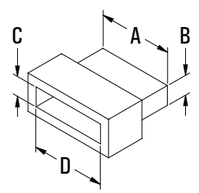


W	X	Y	Z	Order code 26 Letters	Order code 10 Numbers	Order code Blank Spacer
1	1.6	6.4	22.2	**5707111006**	**5707101000**	**5707014002**
1.5	1.6	6.4	22.2	**5707112009**	**5707102003**	**5707014002**
2	2	6.4	22.2	**5707113001**	**5707103006**	**5707015005**
2.5	2.4	6.4	22.2	**5707114004**	**5707104009**	**5707016008**
3	3.2	6.4	22.2	**5707115007**	**5707105001**	**5707017000**
4	4	6.4	22.2	**5707120001**	**5707118008**	**5707021008**
5	4.8	6.4	22.2	**5707117002**	**5707106004**	**5707018003**
6	6.5	9.5	19	**5707950 ***	**5707951 ***	**5707952 ***

Note: To order individual letters or numbers please use the set order code shown above followed by the desired character.
FOR EXAMPLE: "5707111006D" for the letter D character with height of 1mm.
* Only for use with type holder 5775THILG

Type Holders for fast change over

Model	Order code	A	B	C	D
MH 1/2	**5750THI**	24	6.35	6.4	24
MH 3/4	**5775THI**	40	6.35	6.4	40
MH 3/4	**5775THILG**	40	6.35	9.6	40



Custom Stamps Available on Request

Note: Tapmatic can also supply custom stamps to fit the Marking Heads. Please let us know the details of your application and we will be pleased to provide a proposal drawing and quote.

effectivity tools by TAPMATIC

NEW! DeBurr-Z

CNC Deburring Tool with Compression and Extension Float

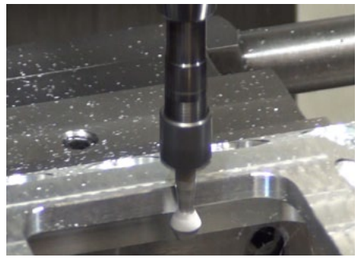
- Deburr parts quickly and consistently on the CNC machine eliminating the need for tedious hand work.
- The Deburr-Z floats in both compression and extension allowing the cutting tool to follow the top edges or underside edges of the work piece, even when these are not clearly defined like in the case of castings and cross holes.
- Adjust the force to increase or decrease the pressure depending on the type of material and desired edge break.
- A wide range of bur cutting tools are available to suit your particular application.
- Also recommended for engraving. The compression float allows a faster approach to the work piece, and marking on curved surfaces.

effectivity tools

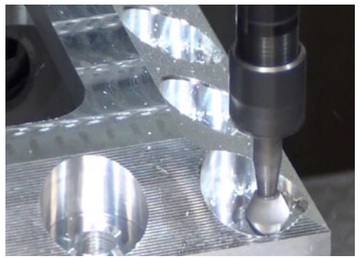
CNC axial floating tool holder for deburring and chamfering. Here are a few example applications.

Deburring Top Edges

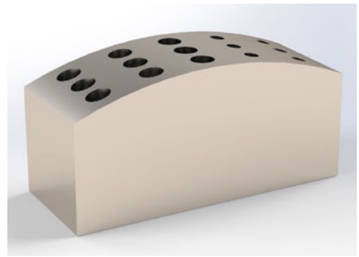
Underside Edges



Intersecting Edges



Chamfering holes on a curved surface presents a problem for conventional methods.

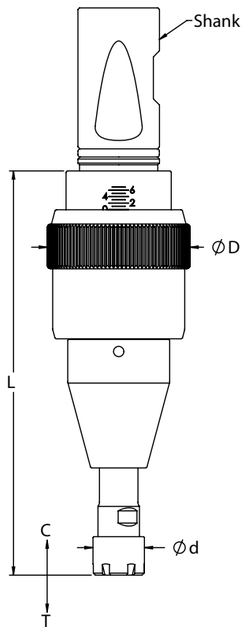


Using a standard countersink tool results in inconsistent edge breaks.

Going around the holes with the axially floating DeBurr-Z produces consistent results.

The DeBurr-Z can also be used for engraving. It allows a faster approach to the work piece and the ability to mark on curved surfaces. We offer combination deburring/engraving cutting tools.

CNC tool holder for deburring and chamfering



- for deburring, and chamfering on CNC machines.
- floats in compression and extension for deburring the topside or underside edges of the work piece.
- the floating holder allows the cutting tool to follow the edges of the work piece even when these are not clearly defined like in the case of castings or cross holes.
- improves the life of cutting tools thanks to the adjustable compression force.
- speeds up the process by allowing faster approach feed rates.
- the compression and extension force can be simultaneously and equally adjusted for increasing or decreasing the pressure of the cutting tool against the work piece.
- ER11 collet holds a wide variety of burr cutting tools.
- easy programming and installation on the CNC machine.

How to Order
Please select the DeBurr-Z (A) and shank (B) to fit your application. Please order ER11 collets and Burrs separately.

(A)

Model	Order code	Shank	Collets (Capacity)	Max. RPM	Compression C	Extension T	d	D	L	Weight kg
DeBurr-Z	**57301**	1"	ER11 (2.5-6.5)	10,000	10	10	16	44	128	0.7
	57320	20 mm								
	57325	25 mm								

Note: All dimensions are shown in mm. 25.4mm = 1".
The above tools all include shanks with weldon flats. We do also offer a 20mm shank without flats, please use Order code 57320CY.
We also offer kits for each of the above tools that include the DeBurr-Z, collet for 6.4mm, and one 12.7mm universal ball shape bur. To specify please add 'K' to the end of the above Order codes.

Page 54

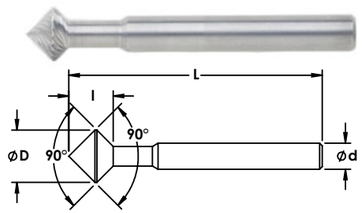
Interchangeable Steep tapers

Pages 51

ER11 Collets

Bur Cutting Tools for use with the DeBurr-Z

We recommend spherical and angular shaped burs. These are available in a variety of sizes, shapes and tooth patterns, from different manufacturers. Below are examples of some of the burs we offer. These are all carbide tools which can be used for a variety of work piece materials including steel, aluminum and cast iron. Please let us know if your application requires a different size or shape. We would be pleased to help.

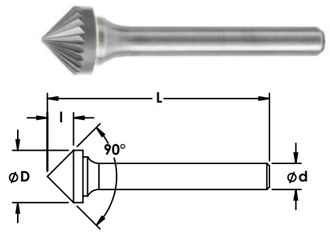


Top edge and underside edge deburring and engraving.

Order code	D	d	L	l
52MM20590W	9.5 (3/8")	6.4	58.5	17
52MM20591W	12.7 (1/2")	6.4	61.5	20

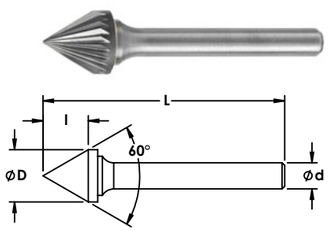
Top edge and underside edge deburring.

52SKN6W	15.9 (5/8")	6.4	60.2	15



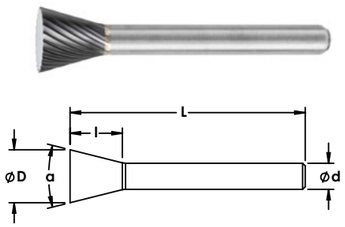
Top edge deburring

Order code	D	d	L	l
52SK3W	9.5 (3/8")	6.4	52.4	4.8
52SK5W	12.7 (1/2")	6.4	54.0	6.4



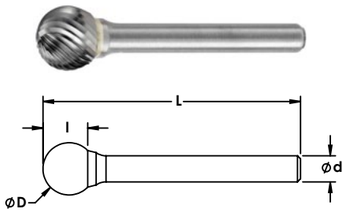
Top edge deburring.

Order code	D	d	L	l
52SJ3W	9.5 (3/8")	6.4	54.0	8.0
52SJ5W	12.7 (1/2")	6.4	58.7	11.0



Underside edge deburring.

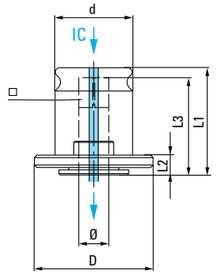
Order code	D	d	L	l	a
52SN5W	12.7 (1/2")	6.4	57.0	12.7	28°



Top edge and underside edge deburring.

Order code	D	d	L	l
52SD2W	6.4 (1/4")	3.2	44.5	5.5
52SD3W	9.5 (3/8")	6.4	52.4	8.0
52SD3WL6	9.5 (3/8")	6.4	160.4	8.0
52SD5W	12.7 (1/2")	6.4	54.0	11.0
52SD5WL6	12.7 (1/2")	6.4	163.5	11.0
52SD6W	15.9 (5/8")	6.4	57.0	14.3
52SD7W	19.0 (3/4")	6.4	63.5	17.5

Quick-change adapters, positive drive *inch sizes*



For quick change tap chucks TA, TIC, NC and SPD QC, with or without internal coolant system.

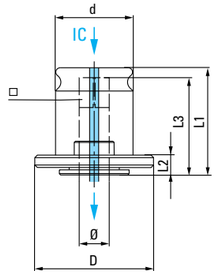
Features and Advantages
- equally appropriate for taps with internal coolant
- no pre-selective torque drive
- suitable for right and left hand tapping

Model	Adapter Size	Dimensions			
		d mm	L1 mm	D mm	L2 mm
P0	0	13	26.5	22	7
P1	1	19	28.5	30	7
P2	2	31	46.5	48	11
P3	3	48	68.5	70	14
P4	4	60	105.0	92	42

Product range – Adapters

Tap	Shank Ø inch	Square inch	Order code P0	Order code P1	Order code P2	Order code P3	Order code P4
#0 - #6	.141	.110	**1001**	**1006**			
#8	.168	.131	**1002**	**1007**			
#10	.194	.152	**1003**	**1008**	**1016**		
#12	.220	.165	**1004**	**1009**			
1/4"	.255	.191	**1005**	**1010**	**1017**		
5/16"	.318	.238		**1012**	**1018**		
3/8"	.381	.286		**1013**	**1019**		
7/16"	.323	.242		**1014**	**1020**		
1/2"	.367	.275		**1015**	**1021**		
9/16"	.429	.322		**10155**	**1022**		
1/8" Pipe	.313	.234		**10166**	**10266**		
1/8" Pipe	.438	.328		**10177**	**10277**		
5/8"	.480	.360			**1023**		
11/16"	.542	.406			**1024**		
3/4"	.590	.442			**1025**		**10392**
13/16"	.652	.489			**1026**	**1031**	
7/8"	.697	.523			**1027**	**1032**	
1/4" Pipe	.562	.421			**10288**		
3/8" Pipe	.700	.531			**10299**	**10386**	
1/2" Pipe	.687	.515			**10300**	**10387**	
15/16"	.760	.570				**1033**	
1"	.800	.600				**1034**	**10391**
1 1/8"	.896	.672				**1035**	**10393**
1 1/4"	1.021	.766				**1036**	**1039**
1 3/8"	1.108	.831				**1037**	**1040**
3/4" Pipe	.906	.679				**10388**	**10440**
1" Pipe	1.125	.843				**10389**	**10442**
1 1/2"	1.233	.925					**1041**
1 5/8"	1.305	.979					**1042**
1 3/4"	1.430	1.072					**1043**
1 7/8"	1.519	1.139					**10435**
1 1/4" Pipe	1.312	.984					**10444**
1 1/2" Pipe	1.500	1.125					**10455**
2"	1.644	1.233					**1044**

Quick-change adapters, positive drive *metric sizes*



For quick change tap chucks TA, TIC, NC and SPD QC with or without internal coolant system.

Features and Advantages
- equally appropriate for taps with internal coolant
- no pre-selective torque drive
- suitable for right and left hand tapping

Model	Adapter Size	Dimensions			
		d mm	L1 mm	D mm	L2 mm
P0	0	13	26.5	22	7
P1	1	19	28.5	30	7
P2	2	31	46.5	48	11
P3	3	48	68.5	70	14
P4	4	60	105.0	92	42

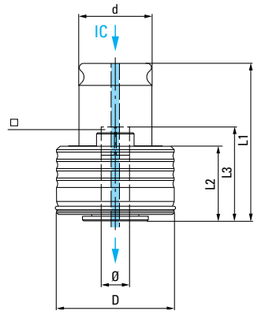
Quick change adapters, positive drive metric sizes

Tap	Shank Ømm	Square mm	Order code P0	Order code P1	Order code P2	Order code P3	Order code P4
M2, M2.5, M4	2.8	2.1	**P0-028021**				
M3, M5	3.5	2.7	**P0-035027**	**P1-035027**			
M3.5	4	3	**P0-040030**	**P1-040030**			
M4	4.5	3.4	**P0-045034**	**P1-045034**			
M4, M4.5	5	4	**P0-050040**	**P1-050040**			
M4.5, M5, M6, M8	6	4.9	**P0-060049**	**P1-060049**	**P2-060049**		
M8	8	6.2	**P0-080062***	**P1-080062**	**P2-080062**		
M7, M9, M10	7	5.5	**P0-070055***	**P1-070055**	**P2-070055**		
M12	9	7		**P1-090070**	**P2-090070**		
M10	10	8		**P1-100080**	**P2-100080**		
M14	11	9		**P1-110090**	**P2-110090**	**P3-110090**	
M16	12	9			**P2-120090**	**P3-120090**	
M18	14	11			**P2-140110**	**P3-140110**	
M20	16	12			**P2-160120**	**P3-160120**	
M22, M24, M25, M26	18	14.5			**P2-180145**	**P3-180145**	**P4-180145**
M27, M28	20	16				**P3-200160**	**P4-200160**
M30, M32	22	18				**P3-220180**	**P4-220180**
M33	25	20				**P3-250200**	**P4-250200**
M34, M35, M36, M38	28	22				**P3-280220**	**P4-280220**
M39, M40, M42	32	24					**P4-320240**
M45, M48, M50	36	29					**P4-360290**

Note: Version with (*) only suitable for light processing

Note: other sizes available on request.

Quick-change adapters, with pre-selective torque drive *inch sizes*



For quick change tap chucks TA, TIC, NC and SPD QC, with or without internal coolant system. A pre-selective torque drive protects the tap from breakage.

Features and Advantages

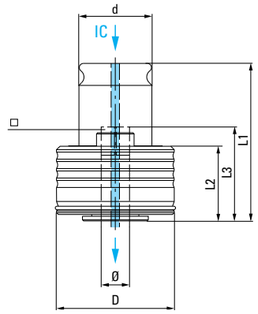
- equally appropriate for taps with internal coolant
- with pre-selective torque drive
- suitable for right and left hand tapping

Model	Adapter Size	Dimensions			
		d mm	L1 mm	D mm	L2 mm
TC0	0	13	40.5	23	21
TC1	1	19	46.5	32	25
TC2	2	31	69	50	34
TC3	3	48	100.5	72	45
TC4	4	60	131	95	68

Product range – Adapters with torque control

Tap	Shank Ø inch	Square inch	Order code TC0	Order code TC1	Order code TC2	Order code TC3	Order code TC 4
#0 - #6	.141	.110	**1046**	**1051**			
#8	.168	.131	**1047**	**1052**			
#10	.194	.152	**1048**	**1053**			
#12	.220	.165	**1049**	**1054**			
1/4"	.255	.191	**1050**	**1055**	**10614**		
5/16"	.318	.238		**1056**	**1062**		
3/8"	.381	.286		**1057**	**1063**		
7/16"	.323	.242		**1058**	**1064**		
1/2"	.367	.275		**1059**	**1065**		
9/16"	.429	.322		**10595**	**1066**		
1/8" Pipe	.313	.234		**10600**			
1/8" Pipe	.438	.328		**10611**			
5/8"	.480	.360			**1067**		
11/16"	.542	.406			**1068**		
3/4"	.590	.442			**1069**	**1074**	
13/16"	.652	.489			**1070**	**1075**	
7/8"	.697	.523			**1071**	**1076**	
1/4" Pipe	.562	.421			**10722**		
3/8" Pipe	.700	.531			**10733**	**1082**	
1/2" Pipe	.687	.515			**10744**	**10821**	
15/16"	.760	.570				**1077**	
1"	.800	.600			**10711**	**1078**	**10835**
1 1/8"	.896	.672				**1079**	**10836**
1 1/4"	1.021	.766				**1080**	**10837**
1 3/8"	1.108	.831				**1081**	**1084**
3/4" Pipe	.906	.679				**10822**	**10880**
1" Pipe	1.125	.843				**10833**	**10882**
1 1/2"	1.233	.925					**1085**
1 5/8"	1.305	.979					**1086**
1 3/4"	1.430	1.072					**1087**
1 7/8"	1.519	1.139					**10875**
1 1/4" Pipe	1.312	.984					**10899**
1 1/2" Pipe	1.500	1.125					**10900**

Quick-change adapters, with pre-selective torque drive *metric sizes*



For quick change tap chucks TA, TIC, NC and SPD QC, with or without internal coolant system. A pre-selective torque drive protects the tap from breakage.

Features and Advantages

- equally appropriate for taps with internal coolant
- with pre-selective torque drive
- suitable for right and left hand tapping

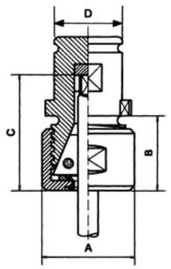
Model	Adapter Size	Dimensions			
		d mm	L1 mm	D mm	L2 mm
TC0	0	13	40.5	23	21
TC1	1	19	46.5	32	25
TC2	2	31	69	50	34
TC3	3	48	100.5	72	45
TC4	4	60	131	95	68

Product range – Adapters with torque control

Tap	Shank Ø mm	Square mm	Order code TC0	Order code TC1	Order code TC2	Order code TC3	Order code TC4
M2, M2.5, M4	2.8	2.1	**TC0-028021**				
M3, M5	3.5	2.7	**TC0-035027**	**TC1-035027**			
M3.5	4	3	**TC0-040030**	**TC1-040030**			
M4	4.5	3.4	**TC0-045034**	**TC1-045034**			
M4, M4.5	5	4	**TC0-050040**	**TC1-050040**			
M4.5, M5, M6, M8	6	4.9	**TC0-060049**	**TC1-060049**	**TC2-060049**		
M8	8	6.2	**TC0-080062***	**TC1-080062**	**TC2-080062**		
M7, M9, M10	7	5.5	**TC0-070055***	**TC1-070055**	**TC2-070055**		
M12	9	7		**TC1-090070**	**TC2-090070**		
M10	10	8		**TC1-100080**	**TC2-100080**		
M14	11	9		**TC1-110090**	**TC2-110090**	**TC3-110090**	
M16	12	9			**TC2-120090**	**TC3-120090**	
M18	14	11			**TC2-140110**	**TC3-140110**	
M20	16	12			**TC2-160120**	**TC3-160120**	
M22, M24, M25, M26	18	14.5			**TC2-180145**	**TC3-180145**	**TC4-180145**
M27, M28	20	16				**TC3-200160**	**TC4-200160**
M30, M32	22	18				**TC3-220180**	**TC4-220180**
M33	25	20				**TC3-250200**	**TC4-250200**
M34, M35, M36, M38	28	22				**TC3-280220**	**TC4-280220**
M39, M40, M42	32	24					**TC4-320240**
M45, M48, M50	36	29					**TC4-360290**

Note: Version with (*) only suitable for light processing

Quick-change collet chuck adapters for rubber flex collets (RF)



Tap holders with various or adjustable back jaws for quick change tap chucks TA and NC. Only 2 multi-range collets (RF) per type necessary to cover capacity.

Delivery
Accessories include wrench and necessary square drives for the specified capacity. Please note that rubber flex collets are also included

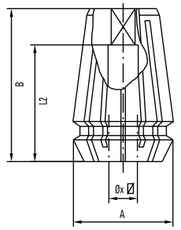
Model	Order code	Tap size	Collets Rubber Flex Included	Dimensions			
				A mm	B mm	C mm	D mm
TF0	**29350**	M1.4–M7	21600 21700	18.6	18.6	21.0	13
TF1	**29351**	M3–M12	22100 22200	27.4	18.6	27.0	19
TF2	**29352**	M5–M18	24100 24500	37.2	24.6	38.1	31
TF3	**29353**	M10–M30	26100 26200	54.0	31.8	50.5	48

Rubber Flex multi-range collets

Rubber Flex collets for TAPMATIC tapping attachments and chucks.

Tapping Head capacity	RF Collet Order code	Clamping Capacity (mm)	Tap Capacity Metric Sizes **(DIN 371, 374)**	Tap Capacity Inch Sizes	Standard or Special Size
M1.4 - M7 #0 - 1/4"	**21500**	1.0–2.5	M1.6	None	Special
	21600	2.5–4.5	M1.6-M4	#0-#8	Standard
	21700	4.5–6.5	M4-M6	#10-1/4"	Standard
M3 - M12 #6 - 1/2"	**22000**	4.5–8.0	M4-M10	#10-1/4"	Special
	22100	3.5–6.5	M3-M6	#0-1/4"	Standard
	22200	6.5–10.0	M7-M12	5/16"-1/2"	Standard
	22300	2.0–4.5	M1.6-M4	#0-#8	Special
M5 - M18 #10 - 3/4"	**24000**	7.0–13.0	M7-M16	5/16"-5/8"	Special
	24100	4.5–10.0	M4-M12	#10-1/2"	Standard
	24300	2.8–7.0	M2-M7	#0-1/4""	Special
	24500	9.0–15.0	M10-M18	1/2"-3/4"	Standard
M10 - M30 1/2" - 1 1/8	**26100**	10.0–16.0	M10, M14-M20	9/16"-3/4"	Standard
	26200	16.0-23.0	M20-M30	13/16"-1 1/8"	Standard

Steel collets ER-GB with inner square *metric sizes*



Collets to DIN 6499B with inner square for positive drive of tap square.

ER11GB

	A = 11.5 mm B = 17.0 mm	
Order code	Shank mm	Square mm
GB111028	2.8	2.1
GB111035	3.5	2.7
GB111045	4.5	3.4
GB111050	5.0	4.0
GB111060	6.0	4.9

ER16GB

	A = 17.0 mm B = 27.5 mm	
Order code	Shank mm	Square mm
GB116040	4.0	3.15/3.2
GB116045	4.5	3.4
GB116050	5.0	4.0
GB116053	5.5	4.3
GB116055	5.5	4.5
GB116065	6.0	4.5
GB116060	6.0	4.9
GB116062	6.2	5.0
GB116063	6.3	5.0
GB116070	7.0	5.5
GB116071	7.1	5.6
GB116080	8.0	6.2/6.3
GB116085	8.5	6.5
GB116090	9.0	7.0/7.1

ER20GB

	A = 21.0 mm B = 31.5 mm	
Order code	Shank mm	Square mm
GB120040	4.0	3.15/3.2
GB120045	4.5	3.4
GB120050	5.0	4.0
GB120053	5.5	4.3
GB120055	5.5	4.5
GB120065	6.0	4.5
GB120060	6.0	4.9
GB120062	6.2	5.0
GB120063	6.3	5.0
GB120070	7.0	5.5
GB120071	7.1	5.6
GB120080	8.0	6.2/6.3
GB120085	8.5	6.5
GB120090	9.0	7.0/7.1
GB120100	10.0	8.0
GB120105	10.5	8.0
GB120110	11.0	9.0
GB120112	11.2	9.0
GB120120	12.0	9.0

ER25GB

	A = 26.0 mm B = 34.0 mm	
Order code	**Shank mm**	**Square mm**
GB125040	4.0	3.15/3.2
GB125045	4.5	3.4
GB125050	5.0	4.0
GB125053	5.5	4.3
GB125055	5.5	4.5
GB125065	6.0	4.5
GB125060	6.0	4.9
GB125062	6.2	5.0
GB125063	6.3	5.0
GB125070	7.0	5.5
GB125071	7.1	5.6
GB125080	8.0	6.2/6.3
GB125085	8.5	6.5
GB125090	9.0	7.0/7.1
GB125100	10.0	8.0
GB125105	10.5	8.0
GB125110	11.0	9.0
GB125112	11.2	9.0
GB125120	12.0	9.0
GB125125	12.5	10.0
GB125140	14.0	11.0/11.2
GB125150	15.0	12.0
GB125160	16.0	12.0

ER32GB

	A = 33.0 mm B = 40.0 mm	
Order code	Shank mm	Square mm
GB132040	4.0	3.15/3.2
GB132045	4.5	3.4
GB132050	5.0	4.0
GB132053	5.5	4.3
GB132055	5.5	4.5
GB132065	6.0	4.5
GB132060	6.0	4.9
GB132062	6.2	5.0
GB132063	6.3	5.0
GB132070	7.0	5.5
GB132071	7.1	5.6
GB132080	8.0	6.2/6.3
GB132085	8.5	6.5
GB132090	9.0	7.0/7.1
GB132100	10.0	8.0
GB132105	10.5	8.0
GB132110	11.0	9.0
GB132112	11.2	9.0
GB132120	12.0	9.0
GB132125	12.5	10.0
GB132140	14.0	11.0/11.2
GB132150	15.0	12.0
GB132160	16.0	12.0
GB132170	17.0	13.0
GB132180	18.0	14.0/14.5
GB132200	20.0	16.0

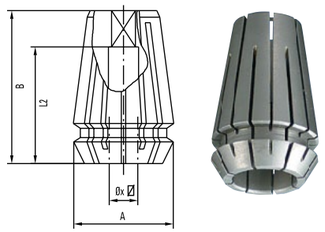
ER40GB

	A = 41.0 mm B = 46.0 mm	
Order code	Shank mm	Square mm
GB140065	6.0	4.5
GB140060	6.0	4.9
GB140062	6.2	5.0
GB140063	6.3	5.0
GB140070	7.0	5.5
GB140071	7.1	5.6
GB140080	8.0	6.2/6.3
GB140085	8.5	6.5
GB140090	9.0	7.0/7.1
GB140100	10.0	8.0
GB140105	10.5	8.0
GB140110	11.0	9.0
GB140112	11.2	9.0
GB140120	12.0	9.0
GB140125	12.5	10.0
GB140140	14.0	11.0/11.2
GB140150	15.0	12.0
GB140160	16.0	12.0
GB140170	17.0	13.0
GB140180	18.0	14.0/14.5
GB141200	20.0	16.0
GB141220	22.0	18.0

ER50GB

	A = 60.0 mm B = 52.0 mm	
Order code	Shank mm	Square mm
GB150220	22.0	18.0
GB150250	25.0	20.0
GB150280	28.0	22.0
GB150320	32.0	24.0

Steel collets ER-GB with inner square *inch sizes*



ER11GB

Order code	Tap size	Shank inch	Square inch	A	B	L2
21000	#0 - #6	.141	.110	.444	.708	.472
21001	#8	.168	.131	.444	.708	.551
21002	#10	.194	.152	.444	.708	.551

ER16GB

Order code	Tap size	Shank inch	Square inch	A	B	L2
21004	#0 - #6	.141	.110	.629	1.083	.709
21005	#8	.168	.131	.629	1.083	.709
21006	#10	.194	.152	.629	1.083	.709
21008	#12	.220	.165	.629	1.083	.709
21010	1/4"	.255	.191	.629	1.083	.709
21012	5/16"	.318	.238	.629	1.083	.866
21014	7/16"	.323	.242	.629	1.083	.866

ER20GB

Order code	Tap size	Shank inch	Square inch	A	B	L2
21019	#8	.168	.131	.787	1.240	.709
21020	#10	.194	.152	.787	1.240	.709
21021	#12	.220	.165	.787	1.240	.709
21022	1/4"	.255	.191	.787	1.240	.709
21023	5/16"	.318	.238	.787	1.240	.866
21024	7/16"	.323	.242	.787	1.240	.866
21025	1/2"	.367	.275	.787	1.240	.866
21026	3/8"	.381	.286	.787	1.240	.866
21027	1/16" Pipe	.3125	.234	.787	1.240	.866

ER25GB

Order code	Tap size	Shank inch	Square inch	A	B	L2
21031	1/4"	.255	.191	.984	1.338	.709
21029	5/16"	.318	.238	.984	1.338	.866
21030	7/16"	.323	.242	.984	1.338	.866
21032	1/2"	.367	.275	.984	1.338	.866
21034	3/8"	.381	.286	.984	1.338	.866
21036	9/16"	.429	.322	.984	1.338	.984
21038	5/8"	.480	.360	.984	1.338	.984
21040	11/16"	.542	.406	.984	1.338	.984
21028	1/8" Pipe	.312	.234	.984	1.338	.866
21037	1/8" Pipe	.437	.328	.984	1.338	.984
21043	1/4" Pipe	.562	.421	.984	1.338	.984
21044	3/4"	.590	.442	.984	1.338	.984

ER32GB

Order code	Tap size	Shank inch	Square inch	A	B	L2
21047	1/4"	.255	.191	1.260	1.575	.709
21048	5/16"	.318	.238	1.260	1.575	.866
21049	7/16"	.323	.242	1.260	1.575	.866
21052	3/8"	.381	.286	1.260	1.575	.866
21050	1/2"	.367	.275	1.260	1.575	.866
21054	9/16"	.429	.322	1.260	1.575	.984
21058	5/8"	.480	.360	1.260	1.575	.984
21060	11/16"	.542	.406	1.260	1.575	.984
21064	3/4"	.590	.442	1.260	1.575	.984
21066	13/16"	.652	.489	1.260	1.575	.984
21068	7/8"	.697	.523	1.260	1.575	.984
21056	1/8" Pipe	.437	.328	1.260	1.575	.984
21062	1/4" Pipe	.562	.421	1.260	1.575	.984
21067	1/2" Pipe	.687	.515	1.260	1.575	.984
21070	1"	.800	.600	1.260	1.575	1.102

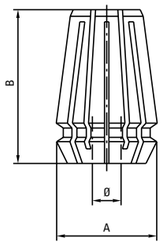
ER40GB

Order code	Tap size	Shank inch	Square inch	A	B	L2
21104	1/2"	.367	.275	1.575	1.811	.866
21105	3/8"	.381	.286	1.575	1.811	.866
21106	9/16"	.429	.322	1.575	1.811	.984
21107	5/8"	.480	.360	1.575	1.811	.984
21108	11/16"	.542	.406	1.575	1.811	.984
21109	3/4"	.590	.442	1.575	1.811	.984
21110	13/16"	.652	.489	1.575	1.811	.984
21111	7/8"	.697	.523	1.575	1.811	.984
21112	15/16"	.760	.570	1.575	1.811	.984
21113	1"	.800	.600	1.575	1.811	1.102
21117	1 1/8"	.896	.672	1.575	1.811	1.102
21114	1/4" Pipe	.562	.421	1.575	1.811	.984
21115	3/8" Pipe	.700	.531	1.575	1.811	.984
21116	1/2" Pipe	.687	.515	1.575	1.811	.984

ER50GB

Order code	Tap size	Shank inch	Square inch
21137	1"	.800	.600
21138	1 1/8"	.896	.672
21139	1 3/16"	1.021	.766
21140	1 5/16"	1.108	.831
21141	1 7/16"	1.233	.925
21170	1/2" Pipe	.687	.515
21171	3/8" Pipe	.700	.531
21172	3/4" Pipe	.906	.679
21136	1" Pipe	1.125	.843

Steel collets ER acc. to DIN 6499B without inner square



ER8
A = 8.5 mm B = 12.0 mm

Order code	Capacity Shank Ø mm
20910	1.5–1.0
20911	2.0–1.5
20912	2.5–2.0
20913	3.0–2.5
20915	3.5–3.0
20916	4.0–3.5
20918	4.5–4.0

ER11
A = 11.5 mm B = 17.0 mm

Order code	Capacity Shank Ø mm
20929	3.0–2.5
20930	3.5–3.0
20931	4.0–3.5
20932	4.5–4.0
20934	5.0–4.5
20933	5.5–5.0
20935	6.0–5.5
20936	6.5–6.0

ER16
A = 17.0 mm B = 27.5 mm

Order code	Capacity Shank Ø mm
20940	4.0–3.0
20943	5.0–4.0
20945	6.0–5.0
20946	7.0–6.0
20949	8.0–7.0
20950	9.0–8.0
20953	10.0–9.0

ER20
A = 21.0 mm B = 31.5 mm

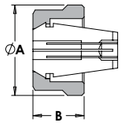
Order code	Capacity Shank Ø mm
20983	4.0–3.0
20984	5.0–4.0
20985	6.0–5.0
20977	7.0–6.0
20986	8.0–7.0
20978	9.0–8.0
20979	10.0–9.0
20980	11.0–10.0
20981	12.0–11.0
20982	13.0–12.0

ER25
A = 26.0 mm B = 34.0 mm

Order code	Capacity Shank Ø mm
20963	5.0–4.0
20965	7.0–6.0
20968	9.0–8.0
20969	10.0–9.0
20970	11.0–10.0
20971	12.0–11.0
20973	13.0–12.0
20974	14.0–13.0
20975	15.0–14.0
20976	16.0–15.0

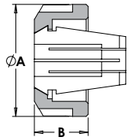
Please note that these collets *do not* include a square drive.
For tapping we recommend the use of ERGB collets, with inner square, whenever possible.
All dimensions are shown in mm. 25.4mm = 1"

Clamping nuts acc. to DIN 6499 standard without internal coolant sealing



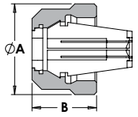
Note: For recommended tightening torque, please see page 56.

Order code	Type	A mm	B mm
69318	ER11	19	11.3
69518	ER16	28	17.5
70018	ER20	34	19.0

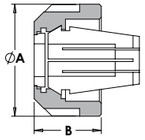


Order code	Type	A mm	B mm
69918	ER25	42	20.0
71118	ER32	50	22.5
71318	ER40	63	25.5
66018	ER50	78	35.3

Clamping nuts to DIN 6499 for internal coolant system, for use with sealing disks



Order code	Type	A mm	B mm
70116	ER16	28	22.5
70120	ER20	34	24.5



Order code	Type	A mm	B mm
70125	ER25	42	25.0
70132	ER32	50	27.5
70140	ER40	63	30.5
66050	ER50	78	42.5

Steel collet seals for use with coolant through steel collet models and sealing disk nuts.

Description **#16 Series Seals**	
Size	Catalog No.
Complete Set	70117
3-3.5mm (.118-.138)	70117-35
3.5-4mm (.138-.157)	70117-40
4-4.5mm (.157-.177)	70117-45
4.5-5mm (.177-.197)	70117-50
5-5.5mm (.197-.217)	70117-55
5.5-6mm (.217-.236)	70117-60
6-6.5mm (.236-.256)	70117-65
6.5-7mm (.256-.276)	70117-70
7-7.5mm (.276-.295)	70117-75
7.5-8mm (.295-.315)	70117-80
8-8.5mm (.315-.335)	70117-85
8.5-9mm (.335-.354)	70117-90
9-9.5mm (.354-.374)	70117-95
9.5-10mm (.374-.394)	70117-100

Description **#20 Series Seals**	
Size	Catalog No.
Complete Set	70121
3-3.5mm (.118-.138)	70121-35
3.5-4mm (.138-.157)	70121-40
4-4.5mm (.157-.177)	70121-45
4.5-5mm (.177-.197)	70121-50
5-5.5mm (.197-.217)	70121-55
5.5-6mm (.217-.236)	70121-60
6-6.5mm (.236-.256)	70121-65
6.5-7mm (.256-.276)	70121-70
7-7.5mm (.276-.295)	70121-75
7.5-8mm (.295-.315)	70121-80
8-8.5mm (.315-.335)	70121-85
8.5-9mm (.335-.354)	70121-90
9-9.5mm (.354-.374)	70121-95
9.5-10mm (.374-.394)	70121-100
10-10.5mm (.394-.413)	70121-105
10.5-11mm (.416-.433)	70121-110
11-11.5mm (.433-.453)	70121-115
11.5-12mm (.453-.472)	70121-120
12-12.5mm (.472-.492)	70121-125

Description **#25 Series Seals**	
Size	Catalog No.
Complete Set	70126
3-3.5mm (.118-.138)	70126-35
3.5-4mm (.138-.157)	70126-40
4-4.5mm (.157-.177)	70126-45
4.5-5mm (.177-.197)	70126-50
5-5.5mm (.197-.217)	70126-55
5.5-6mm (.217-.236)	70126-60
6-6.5mm (.236-.256)	70126-65
6.5-7mm (.256-.276)	70126-70
7-7.5mm (.276-.295)	70126-75
7.5-8mm (.295-.315)	70126-80
8-8.5mm (.315-.335)	70126-85
8.5-9mm (.335-.354)	70126-90
9-9.5mm (.354-.374)	70126-95
9.5-10mm (.374-.394)	70126-100
10-10.5mm (.394-.413)	70126-105
10.5-11mm (.416-.433)	70126-110
11-11.5mm (.433-.453)	70126-115
11.5-12mm (.453-.472)	70126-120
12-12.5mm (.472-.492)	70126-125
12.5-13mm (.492-.512)	70126-130
13-13.5mm (.512-.531)	70126-135
13.5-14mm (.531-.551)	70126-140
14-14.5mm (.551-.571)	70126-145
14.5-15mm (.571-.591)	70126-150
15-15.5mm (.591-.610)	70126-155
15.5-16mm (.610-.630)	70126-160

Description **#32 Series Seals**	
Size	Catalog No.
Complete Set	70133
3-3.5mm (.118-.138)	70133-35
3.5-4mm (.138-.157)	70133-40
4-4.5mm (.157-.177)	70133-45
4.5-5mm (.177-.197)	70133-50
5-5.5mm (.197-.217)	70133-55
5.5-6mm (.217-.236)	70133-60
6-6.5mm (.236-.256)	70133-65
6.5-7mm (.256-.276)	70133-70
7-7.5mm (.276-.295)	70133-75
7.5-8mm (.295-.315)	70133-80
8-8.5mm (.315-.335)	70133-85
8.5-9mm (.335-.354)	70133-90
9-9.5mm (.354-.374)	70133-95
9.5-10mm (.374-.394)	70133-100
10-10.5mm (.394-.413)	70133-105
10.5-11mm (.416-.433)	70133-110
11-11.5mm (.433-.453)	70133-115
11.5-12mm (.453-.472)	70133-120
12-12.5mm (.472-.492)	70133-125
12.5-13mm (.492-.512)	70133-130
13-13.5mm (.512-.531)	70133-135
13.5-14mm (.531-.551)	70133-140
14-14.5mm (.551-.571)	70133-145
14.5-15mm (.571-.591)	70133-150
15-15.5mm (.591-.610)	70133-155
15.5-16mm (.610-.630)	70133-160
16-16.5mm (.630-.650)	70133-165
16.5-17mm (.650-.670)	70133-170
17-17.5mm (.670-.690)	70133-175
17.5-18mm (.690-.710)	70133-180
18-18.5mm (.710-.730)	70133-185
18.5-19mm (.730-.748)	70133-190
19-19.5mm (.749-.767)	70133-195
19.5-20mm (.767-.787)	70133-200

Note: #40 and #50 seals also available on request

Also available, coolant flush disks for directing coolant down the tap shank.

■ **on request**

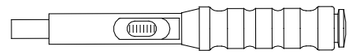
Torque wrenches. For recomended tightening torque, please see page 56

Clamping device for ER collet chuck SFT Tools

For easy and controlled tightening of nuts for collet chuck holders, without damaging the tool. For use with SFT10, 50, 75 and 100.

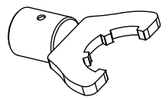
Order code	Length mm
28SFT132	132
28SFT240	240

Holds collet chuck allowing you to tighten collet nut with a torque wrench. See page 56.

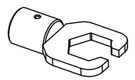


Order code	Model
7150.02025	Torco-Fix 0
7150.05050	Torco-Fix I
7150.20200	Torco-Fix II
7150.60300	Torco-Fix III
7159.09000	TSD 0.9

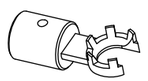
Clip-on wrenches for torque wrench



Order code	Model
7151.16000	A-E 16
7151.20000	A-E 20
7151.25000	A-E 25
7151.32000	A-E 32
7151.40000	A-E 40
7151.50000	A-E 50



Order code	Model
7152.11010	A-E 11 P
7152.16010	A-E 16 P
7152.20010	A-E 20 P



Order code	Model
7153.08000	A-E 8 M
7153.11000	A-E 11 M
7153.16000	A-E 16 M
7153.20000	A-E 20 M
7153.25000	A-E 25 M

Quill Mount Torque Bars – clamp around quill of machine for use with Manual Tapping Attachments

Order code V-Typ	Diameter	Capacity
29099	38–60 mm 1 1/2"–2 3/8"	M16 1/2"
290991	60–114 mm 2 3/8"–4 1/2"	M18 3/4"

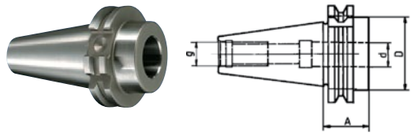
Always mount a torque bar to hold the tapping attachment's stop arm from rotating. The stop arm should not be installed permanently, not under any circumstances be held by hand or fastened with wire. The torque bar must be mounted securely to the table or quill of your machine. The torque bar installation must be stronger than the largest tap in the capacity range of your tapping attachment. Please order Tapmatic torque bars shown.

Table Mount Torque Bars – mount to the «T» slots of table

Order code	Tap capacity
29096	M33 1 3/4"

Order code	Tap capacity
29097	M18 3/4"

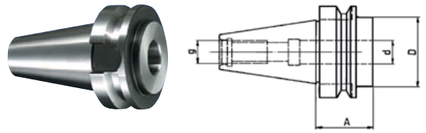
NC shanks DIN 69871A/D and CAT



Order code DIN 69871	Shank	Bore d mm	Dimensions mm D	A	g	Weight kg
S-241	SK40	20	45	35	M16	0.9
S-242	SK40	25	45	35	M16	0.8
S-244	SK40	40	90	122	M16	2.6
S-251	SK50	20	72	35	M24	2.9
S-252	SK50	25	72	35	M24	2.8
S-254	SK50	40	90	112	M24	4.9

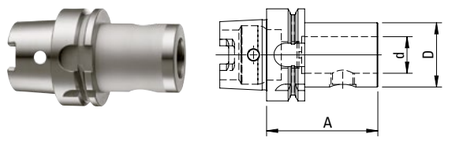
Order code CAT	Shank	Bore d mm	Dimension D	A	g	Weight kg
23951	CAT40	1"	1.75"	1.38"	5/8"-11	0.7
23947	CAT40	25mm	45mm	35mm	5/8"-11	0.7
23954	CAT45	1"	2.25"	1.38"	3/4"-10	1.6
23953	CAT50	1"	2.75"	1.38"	1"-8	2.7
23948	CAT50	25mm	70mm	35mm	1"-8	2.7
23957	CAT50	1 1/2"	2.75"	2.00"	1"-8	2.7
23964	CAT50	40mm	70mm	75mm	1"-8	4.9

NC shanks MAS-BT



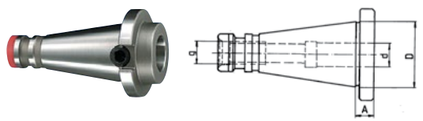
Order code BT	Arbors	Bore d	Dimensions mm D	A	g	Weight kg
23949	BT30	1"	1.81"	1.50"	M12	0.4
23958	BT35	1"	1.50"	1.38"	M16	0.4
23943	BT40	25mm	45mm	35mm	M16	0.8
23952	BT40	1"	1.75"	1.38"	M16	0.8
23955	BT50	1"	2.75"	1.88"	M24	3.6
23945	BT50	25mm	70mm	48mm	M24	3.6
S-354	BT50	40mm	90mm	110mm	M24	5.3

Modular NC shanks HSK-A



Order code	Shank HSK-A	Bore d mm	Dimensions mm D	A	Weight kg
S-451	HSK50	25	44	76	0.8
S-461	HSK63	25	44	76	1.0
S-463	HSK63A	40	72	120	2.6
S-481	HSK80	25	65	100	2.7
S-411	HSK100	25	65	100	3.5
S-413	HSK100A	40	80	105	4.7

NC shanks DIN 2080 and NMTB



Order code DIN 2080	Shank	Bore d mm	Dimensions mm D	A	g	Weight kg
S-141	SK40	20	44	24	M16	0.7
S-142	SK40	25	44	24	M16	0.6
S-151	SK50	20	65	34	M24	2.5
S-152	SK50	25	65	34	M24	2.4

Order code NMTB	Shank	Bore d	Dimensions D	A	g	Weight kg
23950	NMTB40	1"	1.75"	.039"	5/8"-11	0.5

NMTB with threaded mount

Order code	NMTB	Thread
23050	NMTB-30	1/2-20
24050	NMTB-40	1/2-20
23087	NMTB-30	7/8-20
24087	NMTB-40	7/8-20
23015	NMTB-30	1 1/2-18
24015	NMTB-40	1 1/2-18
25015	NMTB-50	1 1/2-18
29106	NMTB-50	2 1/4-10

Reducing sleeve

Order code	Outside Ø	Inside Ø
23921	1"	3/4"

R8 arbors to Jacobs taper

Order code	R8	Jacobs Taper
20833	R-8 Bridgeport	#33 J.T.
20803	R-8 Bridgeport	#3 J.T.
20804	R-8 Bridgeport	#4 J.T.

R8 arbors with threaded mount

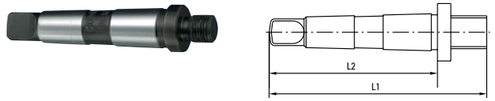
Order code	R8	Thread
20887	R-8 Bridgeport	7/8"-20
20815	R-8 Bridgeport	1 1/2"-18

Morse taper arbors to JACOBS taper

Order code	Morse taper	DIN Taper	Length mm L1	L2
20112	MK1	B12	91	22
20116	MK1	B16	98	29
20212	MT2	B12	107	22
20216	MK2	B16	114	29
20218	MK2	B18	122	37
20312	MK3	B12	126	22
20316	MK3	B16	133	29
20318	MK3	B18	141	37
20416	MK4	B16	160	29
20418	MK4	B18	168	37

Order code	Morse taper	JACOBS taper	Length mm L1	L2
20101	MT1	1	86	18
20133	MT1	33	96	26
20206	MT2	6	96	26
20201	MT2	1	103	18
20233	MT2	33	111	26
20203	MT2	3	117	32
20306	MT3	6	117	43
20301	MT3	1	122	18
20333	MT3	33	130	26
20303	MT3	3	136	32
20304	MT3	4	147	43
20433	MT4	33	157	26
20403	MT4	3	162	32
20404	MT4	4	173	43
20504	MT5	4	205	43

Morse taper arbors with threaded mount



Order code	Morse taper	Thread	Length mm L1	L2
20150	MT1	1/2–20	87	65.5
20250	MT2	1/2–20	103	80
20287	MT2	7/8–20	100	80
20387	MT3	7/8–20	116	99
20315	MT3	1 1/2–18	118	99
20487	MT4	7/8–20	142	124
20415	MT4	1 1/2–18	118	99
29104	MT4	2 1/4-10		
20515	MT5	1 1/2–18		
29105	MT5	2 1/4-10		

Straight shank arbors to JACOBS taper

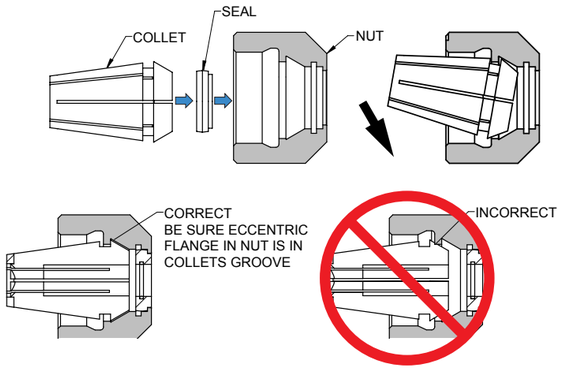
Order code	Straight shank Ø mm	JACOBS taper	Length mm L1	L2
10-33	10	33	64	35
12-33	12	33	64	35
16-33	16	33	64	35

Order code	Straight shank Ø inch	JACOBS taper		
25001	1/2"	1		
25006	1/2"	6		
25033	1/2"	33		
25003	1/2"	3		
26233	5/8"	33		
26203	5/8"	3		
27533	3/4"	33		
27503	3/4"	3		
20003	1"	3		

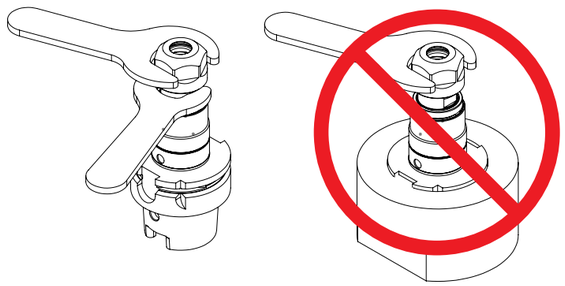
Straight shank arbors with threaded mount

Order code	Straight shank Ø inch	Thread
25037	1/2" S.S.	3/8-24
25050	1/2" S.S.	1/2-20
25087	1/2" S.S.	7/8-20
26287	5/8" S.S.	7/8-20
27587	3/4" S.S.	7/8-20
28787	7/8" S.S.	7/8-20
20087	1" S.S.	7/8-20

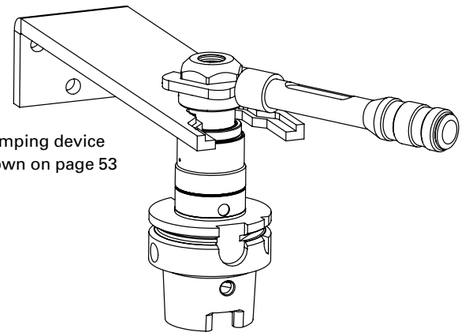
Installing Collet in Nut



Tightening



Using a Torque Wrench



Clamping device
shown on page 53

Recommended clamping torque in Nm for collets

GB Tap Collets (With Square) 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	1.0 - 2.9 (.039 - .098)	8	8
Hi-Q	3.0 - 7.0 (.118 - .256")	16	24
ER 16	4.0 - 4.5 (.157 - .177")	40	Not Recommended
Hi-Q/ER C	5.0 - 10.0 (.197 - .394")	44	Not Recommended
ER 20	1.5 - 6.5 (.059 - .256")	32	Not Recommended
Hi-Q/ER C	7.0 - 13.0 (.276 - .512")	35	Not Recommended
ER 25	5.0 - 7.5 (.196 - .295")	80	Not Recommended
Hi-Q/ER C	8.0 - 17.0 (.315 - .669")	80	Not Recommended
ER 32	8.0 - 22.0 (.315 - .787")	136	Not Recommended
Hi-Q/ER C			
ER 40	6.0 - 26.0 (.236 - 1.023")	176	Not Recommended
Hi-Q/ER C			
ER 50	6.0 - 36.0 (.236 - 1.417")	300	See Note 2
Hi-Q/ER C			

Note 1: Maximum torque must not be more than 25% higher than above values
Note 2: For large taps with 36mm shank, a collet without square is used. There is a 29mm socket inside holder

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 Unit 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 fixation:** Never hold the work piece or the vise it is held in, by hand. Never fasten it with wire or anything similar! The work piece must be clamped firmly to the table of the machine so that it cannot move, rotate or lift.

- **4. On machining centers:** The same rule for stop arm and stop block installation applies «Always be sure that the installation is stronger than the largest tap.» Automatic tool changes should only be made on enclosed machines.

- **5.** The tapping attachment housing, drive spindle and tap itself can become hot to the touch after operation. Use caution when removing the attachment from the machine or handling.

- **6.** 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.

- **7. 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 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 releases in neutral rather than bottoming in work piece or fixture?
7. Is drilled hole the correct size?
8. Is clearance between the drilled hole and tap sufficient at start position to allow the tap to clear the hole upon retraction?
9. Is the stop arm of the tapping attachment held rigidly against rotation. Stop Arm installation must be stronger than largest tap.
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?
12. Is the correct Tapmatic model for the specific job requirement being used? (Capacity should be reduced by 25% for roll form taps.)

TAPMATIC Warranty Policy

Tapmatic Corporation warrants to original equipment manufacturers, distributors and industrial users of its products, that each new product manufactured or supplied by Tapmatic Corporation shall be free from defects in material and workmanship. Tapmatic Corporation's obligation under this warranty is limited to repairing any product which shall, within one year from the date of sale, be returned freight prepaid to Tapmatic Corporation, Post Falls, Idaho.

Any product returned for inspection for warranty repair consideration must be returned complete with chuck nut, back jaw and if the tool is a reversing unit, stop arm, as well as, complete information as to operating conditions, machine set up and application of cutting fluid.

The provision of this warranty shall not apply to any parts of a Tapmatic product subject to conditions, machine setup or application of cutting fluid or which has been repaired or altered if such repair or alteration, which in the judgement of Tapmatic Corporation, would adversely affect the performance of the product.

This warranty is in lieu of all other warranties, express or implied, including any implied warranty of merchantability or fitness for particular purpose. Tapmatic Corporation shall have no liability or responsibility on any claim of any kind, whether in contract, tort, or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, delivery or use of any products sold hereunder in excess of the cost of repair as provided herein. In no event shall Tapmatic Corporation be liable for any special, incedental, or consequential damages.

Tapmatic Corporation makes no other warranties, express or implied, except as set forth above and Tapmatic Corporation neither assumes nor authorizes any other person or entity to assume for it any other obligation or liability in connection with any of its products.

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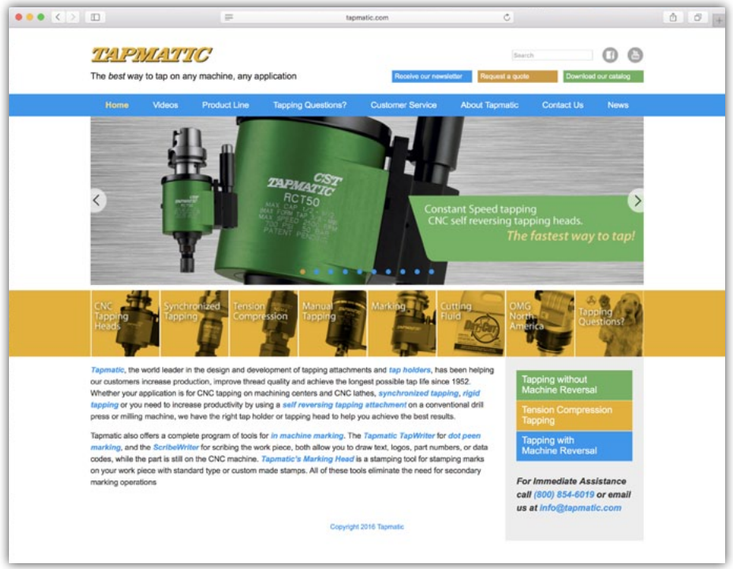

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Our websites are a giant database with many useful features like:

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- the newest applications and innovations
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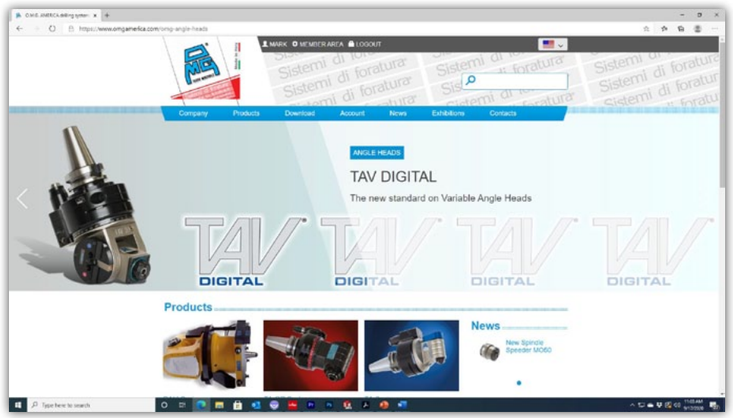

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Customer: Date:

Contact person: Department:

Address:

City: State: Postal Code:

Phone: E-Mail:

Machine:

Model/Description:

☐ vertical ☐ horizontal

Shank type: TAPMATIC Model:

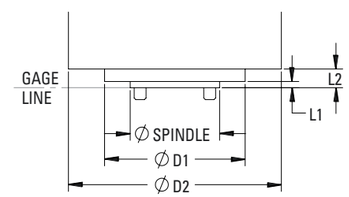
Thread: ☐ forming ☐ cutting

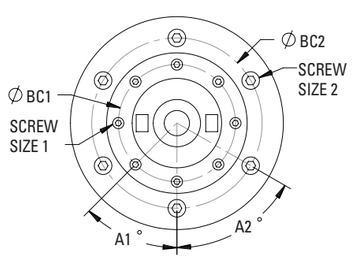
Quantity: ☐ through hole ☐ bottom hole

Drill depth: Tap Depth: RPM: Feed:

Material: Internal coolant: ☐ Yes ☐ No

Remarks:





Machine Manufacturer	
Machine Model	
Machine Spindle Type	
Ø-Spindle	
Ø D1	
L1	
Ø BC1	
Screw Size 1	
Angle A1°	
Only if Applicable	
Ø D2	
L2	
Ø BC2	
Screw Size 2	
Angle A2°	

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Headquarters:

TAPMATIC Corporation
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