INDEXA SEIKI

Instructions for SELF REVERSING TAPPERS

Models available:

IND-144-8040K

M2 to M7 with morse taper shank 1 & 3.

IND-144-8050K

 $$\operatorname{M4}$ to M12 with morse taper shank 3 & 4.

IND-144-8060K

M8 to M20 with morse taper shank 3 & 4.



Adjustable torque control protects against tap breakage/overload. Auto-reverse withdraws the tap without reversing the machine spindle.

Each set is supplied complete with two rubber-flex collets, two morse arbors, kick bar and wrenches.

Suitable for use with ISO, DIN and ANSI taps.

Additional Information:

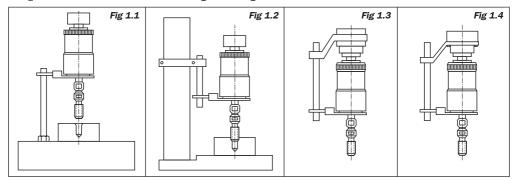
Product Code IND-144	Recommended Max. Speed	Reverse Ratio	Body Diameter	Overall Length	Clockwise Compression	Expansion	Clockwise Expansion
-8040K	1500 RPM	1:1.6	52mm	130mm	5.0mm	3.5mm	10.0mm
-8050K	1000 RPM	1:1.75	75mm	156mm	5.0mm	4.5mm	14.0mm
-8060K	600 RPM	1:1.7	90mm	205mm	6.0mm	6.0mm	14.0mm

Spares Available

Product Code IND-144	Replacement Collet Set	Reverse Replacement Clutch	Arbors		
-8040K	IND-140-9600K	IND-140-9660K	KEN-442-9160K	1MT x 6JT	
			KEN-442-9260K	2MT x 6JT	
			KEN-442-9360K	3MT x 6JT	
			KEN-442-9460K	4MT x 6JT	
-8050K	IND-140-9610K	IND-140-9662K	KEN-442-9160K	1MT x 6JT	
			KEN-442-9260K	2MT x 6JT	
			KEN-442-9360K	3MT x 6JT	
			KEN-442-9460K	4MT x 6JT	
-8060K	IND-140-9620K	IND-140-9664K	IND-140-9430K	3MT x M20 x 2.5	
			IND-140-9440K	4MT x M20 x 2.5	

Always read instructions before use!

A stop bar stop should be mounted to the machine to prevent the kick bar from rotating with the spindle, using one of the methods illustrated in **Fig 1.1** to **Fig 1.4**.



- 1. Assembly and mounting of tapper: Ensure mating tapers are clean and free from dirt and grease. Engage selected morse taper shank into back of tapper then engage the morse taper shank into the machine spindle.
- 2. Select the correct Rubber-Flex collet to suit the tap to be used. Remove collet lock nut and ensuring all mating parts are clean, locate collet into tapered bore of tapper. Replace collet lock nut and screw on loosely. Insert tap shank through collet and engage the tap shank square into the adjustable tap driver block behind the collet. Using a hexagon wrench lock the screw on the adjustable tap driver block onto the tap square. Using the wrenches provided tighten the collet onto tap shank, ensuring tap is sitting true in the tapper. The use of any wrench extension is NOT recommended.
- 3. Insert the kick bar into the locating hole in the kick bar plate and lock in place with the screw in the side of the block. To stop the kick bar rotating use a suitable stop bar as shown in *Fig 1.1* to *Fig 1.4*.
- **4.** The torque setting may be adjusted by loosening the tightening screw in the torque adjustment ring (located at the top of the tapper) and setting the torque as required. The higher the number the higher the torque. Higher torques are required for bigger taps and/or higher tensile materials.
- **5.** The work piece should be mounted on the machine table, with the hole to be tapped co-axial to the machine spindle centre line. This avoids tapping problems associated with mis-alignment.
- **6.** Select a suitable spindle speed to run the tap at.
- 7. Turn the spindle on, bring down the spindle quill to just above the hole. Fig 2.1
- 8. Continue quill movement to engage tap in hole and commence cut. Tap will pull itself into the hole by means of the thread lead. Follow the tap down with the quill allowing the tap to pull the tapper nose out slightly. Fig 2.2
- When the desired depth of thread is achieved, take the quill back until the rotation in the tapper is reversed. Fig 2.3 & 2.4
- 10. Maintain the quill movement at the same rate as the out feed of the tap, until the tap is out of the hole. Fig 2.5
- **11.** The tapper will return to the original mode of rotation. *Fig 2.6*

