

## Installation, target change, maintenance

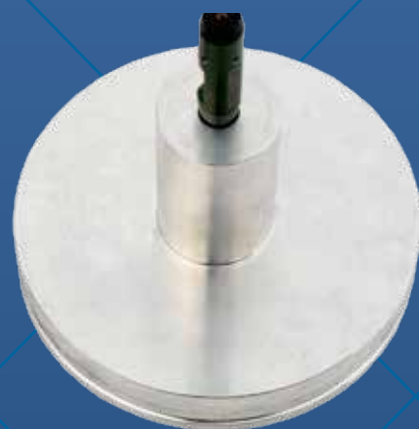
Designed and manufactured by Sputtering Components, end block tools are specific to each end block model.

- Several tools make moving or supporting the end block easier and safer during installation and maintenance tasks
- The laser alignment toolkit is for use when installing the end block with an outboard end support.
- The T-handle torque wrench ensures the drive belt is neither too loose, preventing slippage, nor too tight, preventing premature wear.
- Additional tools are for use every target change to make it easier to install the magnet bar and adjust the magnet bar angle as well as to inspect the bushings on the end support and target end cap.
- Tools for assembly and disassembly make it easier to change the water and vacuum seal or replace the bearings and drive belt. These tools also prevent damage that can occur when using a tool not designed for the task.

For more information, pricing and ordering, please contact Sputtering Components or your local representative.



Now available: Keep all your end block tools together and protect them from damage in a convenient carrying case with a custom foam insert.



# End block maintenance tools



Service your SCI sputtering cathodes faster and easier while minimizing the risk of damage.

While Sputtering Components end blocks require minimum maintenance, when it does come time for servicing—as well as during initial installation and target changes—our custom tools can help.

It's all part of our do-it-yourself maintenance philosophy and the lowest cost of ownership in the industry.



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## Internal-mount end block tools

Tool	Purpose	Part number			
		SC	MC	cMC	TC
Complete kit (Includes all applicable tools listed below)		100958	100949	115993	100967
End block lifting tool	Hold the end block during installation	106407	106638	106638	NA
Laser alignment tool kit (includes target and laser tool)	Align the end block to the outboard assembly during installation; prevents premature part wear	101509	101509	101509	114792
T-handle torque wrench	Tighten the drive belt to the optimum amount to prevent slippage and premature wear	108147	108147	108147	108147
Magnet bar install and removal tool	Insert and remove the magnet bar during target changes	114692	114694	114694	NA
Magnet bar positioning wrench	Align the magnet assembly slot to the key in the end block during target installation	106041	NA	NA	NA
End shield and end cap bushing gauge	Check for excessive wear on the outboard assembly bushing and the target end cap bushing (go/no-go gauge); for use every vent	117342	117342	117342	NA
Magnet bar support bushing tool	Press the bushing into the target end cap; With TC: 1) Press the bearing onto the idler shaft, 2) press the idler shaft assembly onto the magnet bar support, and 3) push the drive shaft into the drive end block	101518	101518	101518	101518
Target end shield bushing tool	Press the bushing in and out of the outboard assembly	101516	101516	101516	NA
Bearing installation tool	1) Press the vacuum seal assembly into the end block, and 2) press the bearings onto the drive shaft	101517	101998	101998	NA
Water seal cartridge tool	1) Pull the water seal cartridge out of the end block, and 2) press the water seal cartridge into the end block	101514	102007	102007	NA
Vacuum and water seal tool	Press the vacuum and water seals into the seal housings	101515	102006	102006	NA
Drive shaft tool	1) Push the drive shaft assembly out of the end block, and 2) pull the drive shaft into the end block	102044	102000	115138	NA
Rotary seal installation tool	1) Press the seals into the seal housings, and 2) press the seal assemblies into the end block	NA	NA	NA	102082
TC disassembly tool	1) Remove the vacuum seal assembly from the drive end block, 2) remove the vacuum-water seal assembly from the power/water end block, 3) remove the idler shaft from the power/water end block, and 4) remove the drive insulator and drive shaft from the drive end block	NA	NA	NA	102083

Additional item for vertically-oriented cathodes sold separately: Target lifting tool (102049) for installing and removing the target.

## External-mount end block tools

Tool	Purpose	Part number			
		SM	MM	CM125	CM80
Complete kit (Includes all applicable tools listed below)		100963	100953	116735	111180
Lifting strap	Move the end block during installation and maintenance	102273	102273	NA	NA
Laser alignment tool kit (includes target and laser tool)	Align the end block to the outboard assembly during installation; prevents premature part wear	101509	101509	101509	111183
Magnet bar install and removal tool	Insert and remove the magnet bar during target changes	114692	114694	114694	114694
Magnet bar positioning wrench	Align the magnet assembly slot to the key in the end block during target installation	106041	NA	NA	NA
Sputter angle wrench	Set the magnet bar sputter angle	102272	102272	102272	102272
End shield and end cap bushing gauge	Check for excessive wear on the outboard assembly bushing and the target end cap bushing (go/no-go gauge); for use every vent	117342	117342	117342	117342
Magnet bar support bushing tool	Press the bushing into the target end cap	101518	101518	101518	101518
Target end shield bushing tool	Press the bushing in and out of the outboard assembly	101516	101516	101516	101999
Vacuum seal cartridge removal and installation tool	Remove and install the vacuum seal assembly	101991	101994	NA	NA
Vacuum and water seal tool	Press the water seals into the seal housing	101515	102006	NA	NA
Drive shaft tool	1) Push the drive shaft assembly out of the end block, and 2) install the drive shaft assembly into the end block	101990	102937	108364	108364
Sleeve tool	1) Remove the bearings from the drive shaft, 2) press the bearings onto the drive shaft, and 3) install the pulley onto the drive shaft	101988	102032	116705	108365
T-handle torque wrench	Tighten the drive belt to the optimum amount to prevent slippage and premature wear	108147	108147	108373	108373
Maintenance stand	Hold and rotate end block during maintenance tasks	100425	100444	108363	108363

Additional item for vertically-oriented cathodes sold separately: End block lifting tool 107153 for moving the end block in place during installation.