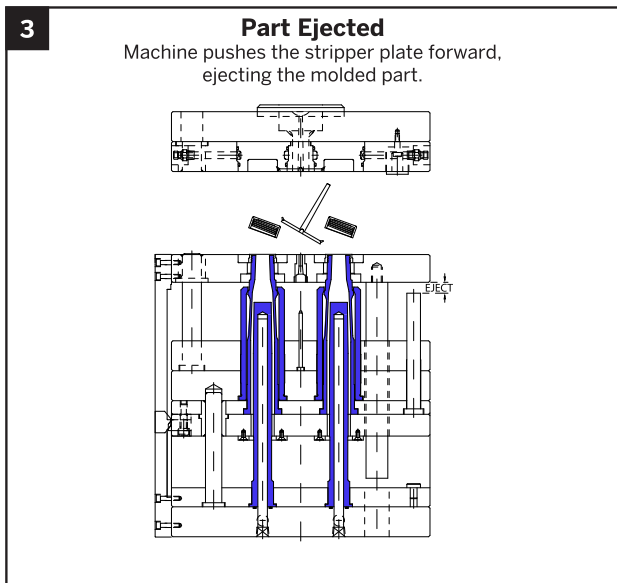
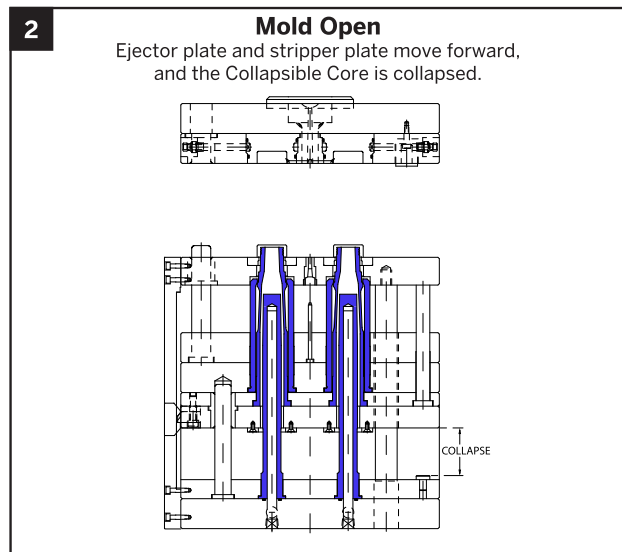
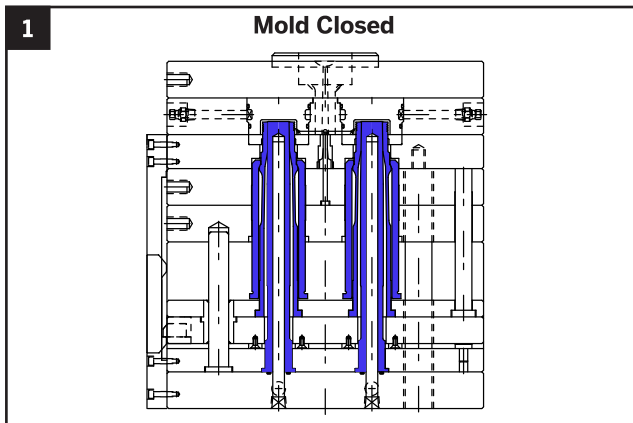


## COLLAPSIBLE CORES RT SERIES

The RT Series Collapsible Cores (RT) are available in sizes to fit most inside detail applications. Whether molding threads or complex details, these cores can simplify design and production. Collapsible Cores allow for smaller molds to run faster cycles with less moving parts.

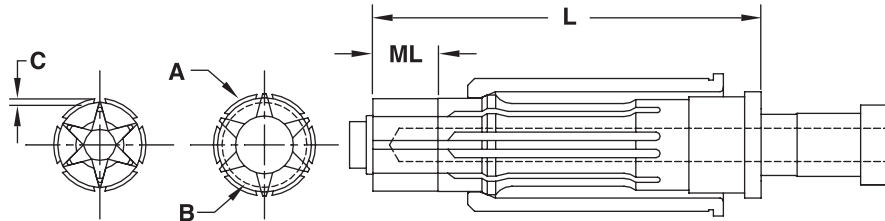
Made from premium tool steels and heat treated using proprietary heat treating methods.

Standard diameters range from 13mm to 105mm.



Roehr Tool can provide Collapsible Cores with details machined complete. Contact an engineer at [information@roehrtool.com](mailto:information@roehrtool.com) for an application review and quotation.

## COLLAPSIBLE CORES RT SERIES



CATALOG NUMBER	A Maximum Outer Diameter		B Minimum Inner Diameter		Center Pin Diameter (At top of Collapsible Core)		ML Max. Molded Length (Including Mold Shut-Off)		C Collapse per Side at Top of Core** (Range Shown)				L Length of Collapsible Core	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
CC-125-PC	.720	18.29	.620	15.75	.485	12.32	.800	20.32	.027	.69	.032	.81	5.605	142.37
CC-150-PC	.850	21.59	.700	17.78	.580	14.73	1.000	25.40	.037	.94	.042	1.07	6.615	168.02
CC-175-PC	.970	24.64	.760	19.30	.640	16.25	1.000	25.40	.043	1.09	.048	1.21	6.615	168.02
CC-200-PC	1.270	32.25	.910	23.11	.785	19.93	1.150	29.21	.043	1.09	.048	1.21	7.315	185.80
CC-250-PC	1.270	32.25	.910	23.11	.785	19.93	1.150	29.21	.043	1.09	.048	1.21	5.440	138.17
CC-202-PC	1.390	35.30	1.010	25.65	.885	22.47	1.150	29.21	.055	1.39	.064	1.62	7.315	185.80
CC-252-PC	1.390	35.30	1.010	25.65	.885	22.47	1.150	29.21	.055	1.39	.064	1.62	5.440	138.17
CC-302-PC	1.740	44.19	1.270	32.25	1.105	28.06	1.400	35.56	.068	1.72	.083	2.10	7.315	185.80
CC-352-PC	1.740	44.19	1.270	32.25	1.105	28.06	1.400	35.56	.068	1.72	.083	2.10	6.065	154.05
CC-402-PC	2.182	55.42	1.593	40.46	1.388	35.25	1.700	43.18	.090	2.28	.103	2.61	7.815	198.50
CC-502-PC	2.800	71.12	2.060	52.32	1.750	44.45	1.900	48.26	.115	2.92	.125	3.17	9.625	244.47
CC-602-PC	3.535	89.78	2.610	66.29	2.175	55.24	2.400	60.96	.140	3.55	.148	3.75	11.250	285.75
CC-652-PC	3.800	96.52	2.890	73.41	2.450	62.23	2.400	60.96	.150	3.81	.160	4.06	11.250	285.75
CC-702-PC	4.225	107.31	3.350	85.09	2.790	70.86	2.400	60.96	.165	4.19	.170	4.32	11.250	285.75

## COLLAPSIBLE CORES RT SERIES GRINDING RINGS

Grinding Rings for Collapsible Cores securely hold the core segments in place against the center pin when grinding, high speed machining or EDM'ing details.

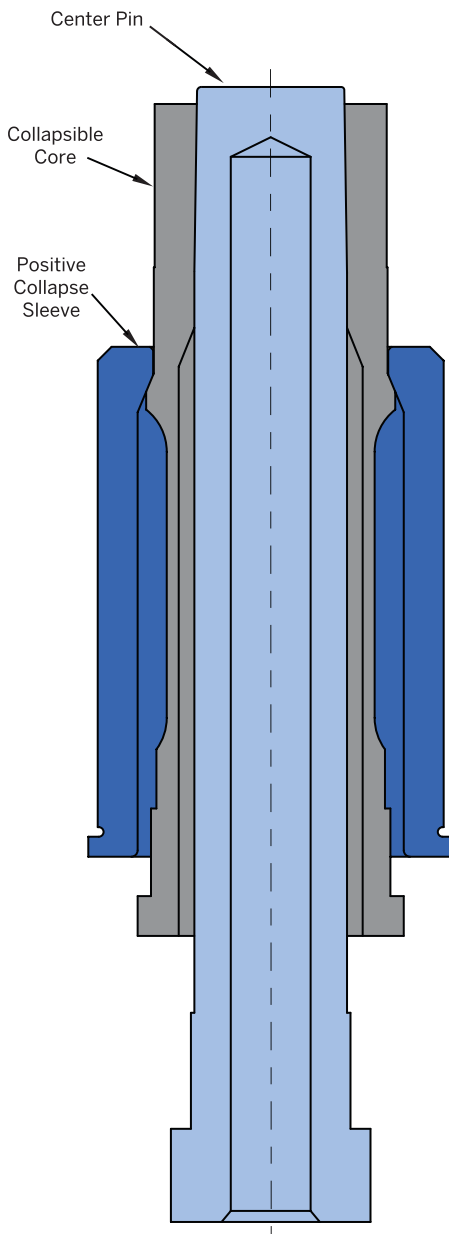


RT CORE GRINDING RINGS	
CATALOG NUMBER	CORE SIZE (PREFIX CC)
RTGR125	125
RTGR150	150/175
RTGR200	175/200/202/250/252
RTGR300	302/352
RTGR400	402
RTGR500	502
RTGR600	602
RTGR650	652
RTGR700	702

## COLLAPSIBLE CORES RT & MINICORE® SERIES CONSTRUCTION

### Description of Components and Basic Operation

Both styles of the Collapsible Cores (Standard and MiniCores®) are three-part assemblies, designed for simplicity of installation, reliability in operation, and long life. The three parts include a Collapsible Core, a Positive Collapse Sleeve, and a Center Pin.



#### Collapsible Core

**M** A-2 **H** 54-57 HRC

- Designed to collapse independently when the center pin is withdrawn.
- The fit between segments is controlled to permit flash-free molding.

#### Positive Collapse Sleeve

**M** 52100 **H** 54-57 HRC

- Designed to function if the Collapsible Core should fail to collapse independently. In normal operation, the PC Sleeve is not functioning. It is essential to have such a unit for maximum safety and reliability in automatic and semi-automatic operation.

#### Center Pin

**M** D-2 **H** 60-62 HRC

- Serves to expand the segments of the Collapsible Core to their molding position.
- The pin must protrude beyond the face of the collapsing core segments, and it must have a radius around its top edge to operate properly.

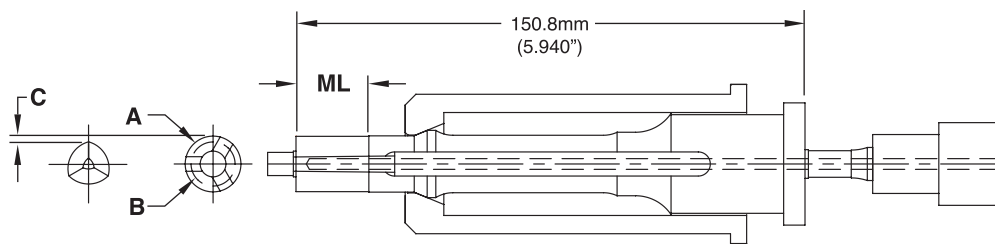
#### Application Guidelines

- Standard Collapsible Cores have a Max. OD ("A") of thread or configuration ranging from .720" (18.29mm) - 4.225" (107.31mm) and offer complete 360° thread or undercut geometry.
- MiniCores have a Max. OD of thread or configuration ranging from .645" (16.38mm) - .965" (24.51mm) and offer up to 70% full thread or undercut geometry. (Internal geometry is interrupted in three places to allow core segments to collapse.)
- Molded parts do not need to be closed at one end. They can be partially or completely open. Also, undercuts do not need to be continuous.
- Cores are capable of operating without benefit of lubrication, however, treating the Collapsible Core with an additional treatment for wear reduction or corrosion resistance is beneficial.
- Custom cores with size requirements that fall outside of the standard Collapsible Core and MiniCore ranges are available. In addition, finished cores with machined, EDM'd, or ground details can be supplied. Contact Roehr Tool at [information@roehrtool.com](mailto:information@roehrtool.com) for an application review and quotation.

## MINICORES MINICORE® SERIES

Roehr's MiniCores broaden the applications of collapsible core molds to parts as small as 0.425 inches. Due to the smaller diameters involved, these MiniCores employ three larger collapsing segments combined with three narrow, non-collapsing blades which are part of the center pin. As a result, the internal undercut geometry is not 360 degrees around but instead interrupted in three places. The 3-blade design allows for more collapse which means a deeper undercut feature can be released.

In addition to threads, other configurations such as dimples, cut-outs or protrusions beyond the capabilities of unscrewing molds can be successfully molded. Three standard sizes of MiniCores are available with diameters from 0.425 to 0.965 inches.



CATALOG NUMBER	For Closure Diameter Range	A Maximum Outer Diameter		B Minimum Inner Diameter		Center Pin Dia. (At top of Collapsible Core)		Width of (3) Non-Collapsing Center Pin Blades (At Top of Core)		ML Max. Molded Length (Including Mold Shut-Off)		C Collapse per Side at Top of Core	
		mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
CCM-0001	13-16	.645	16.38	.425	10.80	.300	7.62	.170	4.32	.850	21.59	.052	1.32
CCM-0002	17-20	.805	20.45	.560	14.22	.420	10.67	.190	4.83	.850	21.59	.057	1.45
CCM-0003	21-24	.965	24.51	.710	18.03	.560	14.22	.200	5.08	1.000	25.40	.059	1.50

