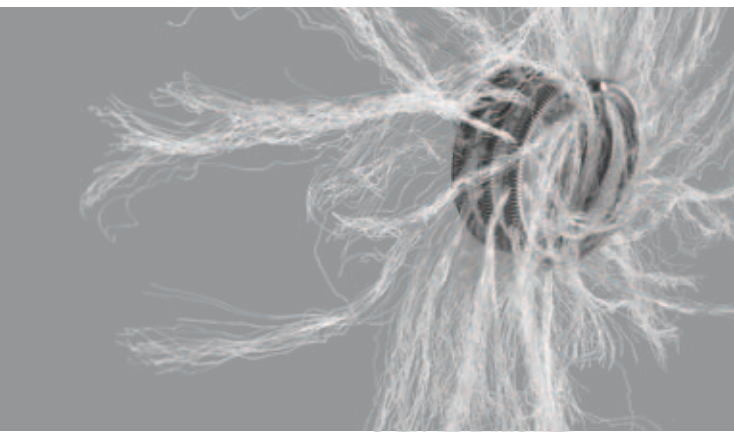
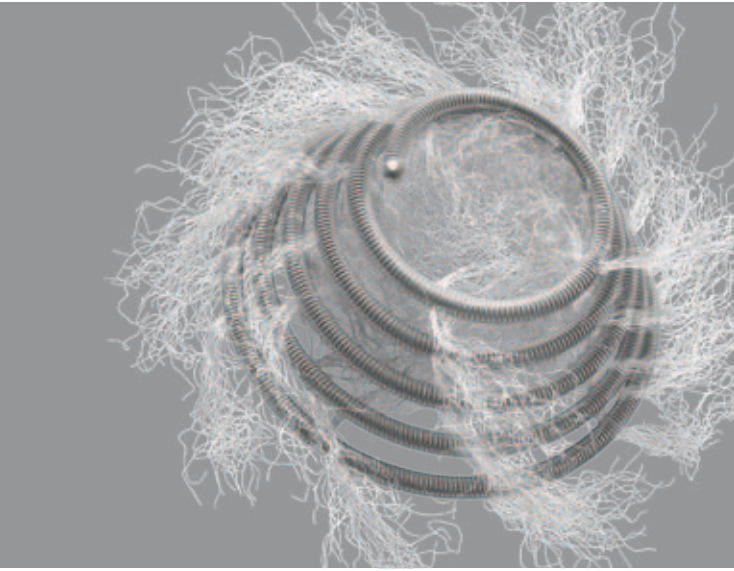




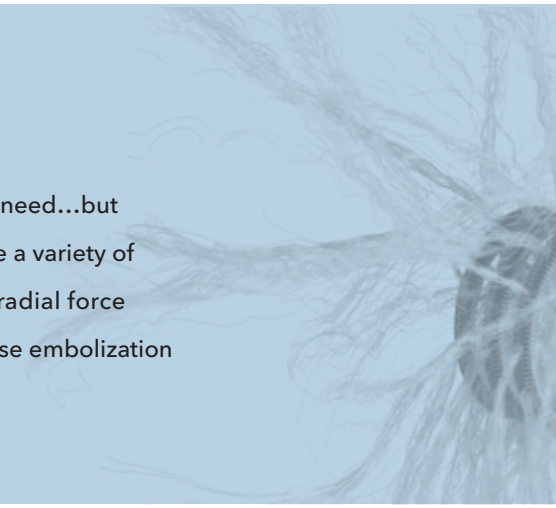
EMBOLIC THERAPY PRODUCTS



Occlude a wider range of vessel sizes with today's most comprehensive selection of embolization devices.

There's nothing simple about embolization.

Some say that their embolization coil or device is the only one you will ever need...but we know it is rarely that easy. Embolization can be complicated and can take a variety of devices to accomplish. Why is Cook the only company that offers a high radial force MR-conditional coil in both a pushable and detachable form? Maybe because embolization is a little more complex than others would have you believe.





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Platinum coil with synthetic fibers used for arterial and venous embolization.

- Ideally suited for occlusion of most vessels.
- Soft coil conforms within vessel for tight occluding mass.
- Coil's synthetic fibers help promote clot formation.
- Platinum coil provides enhanced radiopacity and allows the coil to be MR conditional up to 3 T.
- .018 inch MicroNester[®] Platinum Microcoils[™] are designed for placement through a catheter with an inner diameter (ID) between .018 and .025 inch.
- .035 inch Nester platinum coils are designed for placement through a catheter with a tip tapered to .035 inch.



Order Number	Reference Part Number	Recommended Catheter ID/End Hole Diameter inch	Extended Embolus Length cm	Coiled Embolus Diameter mm	Approximate Number of Loops
.018 inch Microcoils[™]					
G52731	MWCE-18-3-2-NESTER	.018	3	2	4.8
G52732	MWCE-18-3-3-NESTER	.018	3	3	3.2
G52733	MWCE-18-5-2-NESTER	.018	5	2	8.0
G52734	MWCE-18-5-3-NESTER	.018	5	3	5.3
G52735	MWCE-18-7-2-NESTER	.018	7	2	11.1
G52736	MWCE-18-7-3-NESTER	.018	7	3	7.4
G52737	MWCE-18-7-4-NESTER	.018	7	4	5.6
G52738	MWCE-18-7-6-NESTER	.018	7	6	3.7
G52739	MWCE-18-7-8-NESTER	.018	7	8	2.8
G52741	MWCE-18-7-10-NESTER	.018	7	10	2.2
G26987	MWCE-18-14-3-NESTER	.018	14	3	14.9
G26988	MWCE-18-14-4-NESTER	.018	14	4	11.1
G26989	MWCE-18-14-6-NESTER	.018	14	6	7.4
G26990	MWCE-18-14-8-NESTER	.018	14	8	5.6
G26986	MWCE-18-14-10-NESTER	.018	14	10	4.5

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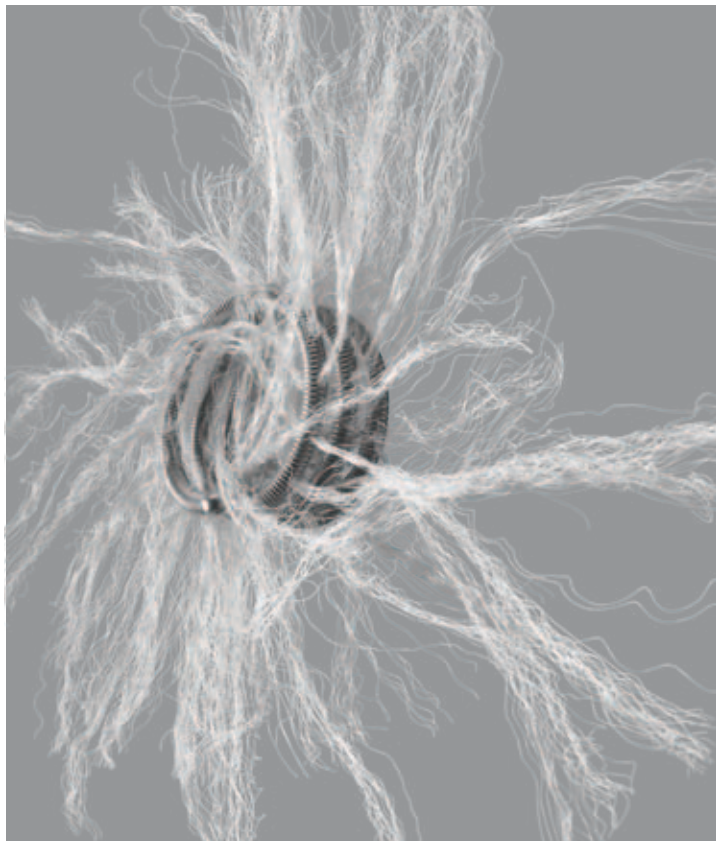
Order Number	Reference Part Number	Recommended Catheter ID/End Hole Diameter inch	Extended Embolus Length cm	Coiled Embolus Diameter mm	Approximate Number of Loops
.035 inch Coils					
G52742	MWCE-35-7-4-NESTER	.035	7	4	5.6
G52743	MWCE-35-7-6-NESTER	.035	7	6	3.7
G52744	MWCE-35-7-8-NESTER	.035	7	8	2.8
G52745	MWCE-35-7-10-NESTER	.035	7	10	2.2
G52746	MWCE-35-7-12-NESTER	.035	7	12	1.9
G52747	MWCE-35-7-14-NESTER	.035	7	14	1.6
G52748	MWCE-35-7-16-NESTER	.035	7	16	1.4
G52749	MWCE-35-7-18-NESTER	.035	7	18	1.2
G52750	MWCE-35-7-20-NESTER	.035	7	20	1.1
G26993	MWCE-35-14-4-NESTER	.035	14	4	11.1
G26994	MWCE-35-14-6-NESTER	.035	14	6	7.4
G26995	MWCE-35-14-8-NESTER	.035	14	8	5.6
G26991	MWCE-35-14-10-NESTER	.035	14	10	4.5
G26992	MWCE-35-14-12-NESTER	.035	14	12	3.7
G52751	MWCE-35-14-14-NESTER	.035	14	14	3.2
G52752	MWCE-35-14-16-NESTER	.035	14	16	2.8
G52753	MWCE-35-14-18-NESTER	.035	14	18	2.5
G52754	MWCE-35-14-20-NESTER	.035	14	20	2.2
G52755	MWCE-35-20-18-NESTER	.035	20	18	3.5
G52756	MWCE-35-20-20-NESTER	.035	20	20	3.2

Supplied sterile in peel-open packages, one per package. Intended for one-time use.

Not all part numbers shown may be approved for sale in all regulatory jurisdictions. Consult with your local Cook representative or customer service center for details.

Inconel[®] coil with synthetic fibers used for peripheral arterial and venous vessel embolization.

- Maintains greater radial force than platinum varieties.
- MR conditional up to 3 T.
- Available for delivery through a catheter having a .035 or .038 inch end hole.



Order Number	Reference Part Number	Recommended Catheter ID/End Hole Diameter inch	Extended Embolus Length cm	Coiled Embolus Diameter mm	Approximate Number of Loops
.035 inch					
G42406	IMWCE-35-2-3	.035	2	3	2.1
G47900	IMWCE-35-3-2	.035	3	2	4.8
G42408	IMWCE-35-3-3	.035	3	3	3.1
G42409	IMWCE-35-3-4	.035	3	4	2.4
G42410	IMWCE-35-3-5	.035	3	5	1.9
G42414	IMWCE-35-4-3	.035	4	3	4.2
G42419	IMWCE-35-5-3	.035	5	3	5.3
G36405	IMWCE-35-5-5	.035	5	5	3.1
G20291	IMWCE-35-5-6	.035	5	6	2.7
G19907	IMWCE-35-5-7	.035	5	7	2.3
G42423	IMWCE-35-5-8	.035	5	8	2.0
G19908	IMWCE-35-5-10	.035	5	10	1.6
G19957	IMWCE-35-8-5	.035	8	5	5.1
G20948	IMWCE-35-8-8	.035	8	8	3.2
G20207	IMWCE-35-8-10	.035	8	10	2.5

(Continued)

Inconel is a registered trademark of Huntington Alloys Corporation.

Order Number	Reference Part Number	Recommended Catheter ID/End Hole Diameter inch	Extended Embolus Length cm	Coiled Embolus Diameter mm	Approximate Number of Loops
G20452	IMWCE-35-10-8	.035	10	8	4.0
G20035	IMWCE-35-10-10	.035	10	10	3.2
G47887	IMWCE-35-12-10	.035	12	10	3.8
G47894	IMWCE-35-14-8	.035	14	8	5.6
G47890	IMWCE-35-14-12	.035	14	12	3.7
G19929	IMWCE-35-15-10	.035	15	10	4.8
G47895	IMWCE-35-15-12	.035	15	12	4.0
G20055	IMWCE-35-15-15	.035	15	15	3.2
G19949	IMWCE-35-15-20	.035	15	20	2.4

.038 inch

G42448	IMWCE-38-2-3	.038	2	3	2.1
G42451	IMWCE-38-3-5	.038	3	5	1.9
G42454	IMWCE-38-4-3	.038	4	3	4.2
G42458	IMWCE-38-5-3	.038	5	3	5.3
G42460	IMWCE-38-5-5	.038	5	5	3.2
G42463	IMWCE-38-5-8	.038	5	8	2.0
G42465	IMWCE-38-5-10	.038	5	10	1.6
G42466	IMWCE-38-5-12	.038	5	12	1.3
G42467	IMWCE-38-5-15	.038	5	15	1.1
G42472	IMWCE-38-8-5	.038	8	5	5.1
G42475	IMWCE-38-8-10	.038	8	10	2.5
G42477	IMWCE-38-8-15	.038	8	15	1.7
G19920	IMWCE-38-10-10	.038	10	10	3.2
G47914	IMWCE-38-12-10	.038	12	10	3.8
G47917	IMWCE-38-12-14	.038	12	14	2.7
G19886	IMWCE-38-15-10	.038	15	10	4.8
G42486	IMWCE-38-15-12	.038	15	12	4.0
G42487	IMWCE-38-15-15	.038	15	15	3.2
G19887	IMWCE-38-15-20	.038	15	20	2.4
G42489	IMWCE-38-15-25	.038	15	25	1.9

Supplied sterile in peel-open packages, one per package. Intended for one-time use.
Not all part numbers shown may be approved for sale in all regulatory jurisdictions.
Consult with your local Cook representative or customer service center for details.



Flipper® MReye®

DETACHABLE EMBOLIZATION COIL

Inconel® coil with synthetic fibers used for arterial and venous vessel embolization in the peripheral vasculature.

- Detachable-coil system provides controlled delivery of embolization coils when correct positioning is especially critical.
- Maintains greater radial force than platinum varieties.
- MR conditional up to 3 T.
- Available in a wide variety of diameters and lengths.
- Compatible with a 5.0 Fr catheter with a minimum .041 inch end-hole diameter.
- Designed for use with the Flipper® Delivery System (sold separately).



Order Number	Reference Part Number	Recommended Catheter ID/End Hole Diameter inch	Extended Embolus Length cm	Coiled Embolus Diameter mm	Approximate Number of Loops
G48351	IFMWCE-35-3-3	.041	3	3	3
G48352	IFMWCE-35-4-3	.041	4	3	4
G48353	IFMWCE-35-5-3	.041	5	3	5
G48354	IFMWCE-35-5-5	.041	5	5	3
G48355	IFMWCE-35-6-5	.041	6	5	4
G48356	IFMWCE-35-6-6.5	.041	6	6.5	3
G48357	IFMWCE-35-8-5	.041	8	5	5
G48358	IFMWCE-35-8-6.5	.041	8	6.5	4
G48359	IFMWCE-35-8-8	.041	8	8	3
G48360	IFMWCE-35-10-6.5	.041	10	6.5	5
G48361	IFMWCE-35-10-8	.041	10	8	4
G48362	IFMWCE-35-12-8	.041	12	8	5

Supplied sterile in peel-open packages, one per package. Intended for one-time use.

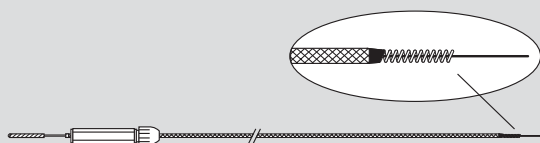
Inconel is a registered trademark of Huntington Alloys Corporation.

Not all part numbers shown may be approved for sale in all regulatory jurisdictions. Consult with your local Cook representative or customer service center for details.

Used to facilitate controlled release of Flipper[®] detachable coils.

- Facilitates manipulation of coil prior to detachment.
- Provides easy detachment of embolization coils.
- Improved torque.
- Improved pushability.

See "Catheter and Wire Guide Recommendations" on page 18.



Order Number	Reference Part Number	Recommended Catheter ID/End Hole Diameter inch	Coil Delivery Wire Diameter inch	Length cm
G12912	FDW-35-80	.041	.035	80
G12913	FDW-35-110	.041	.035	110

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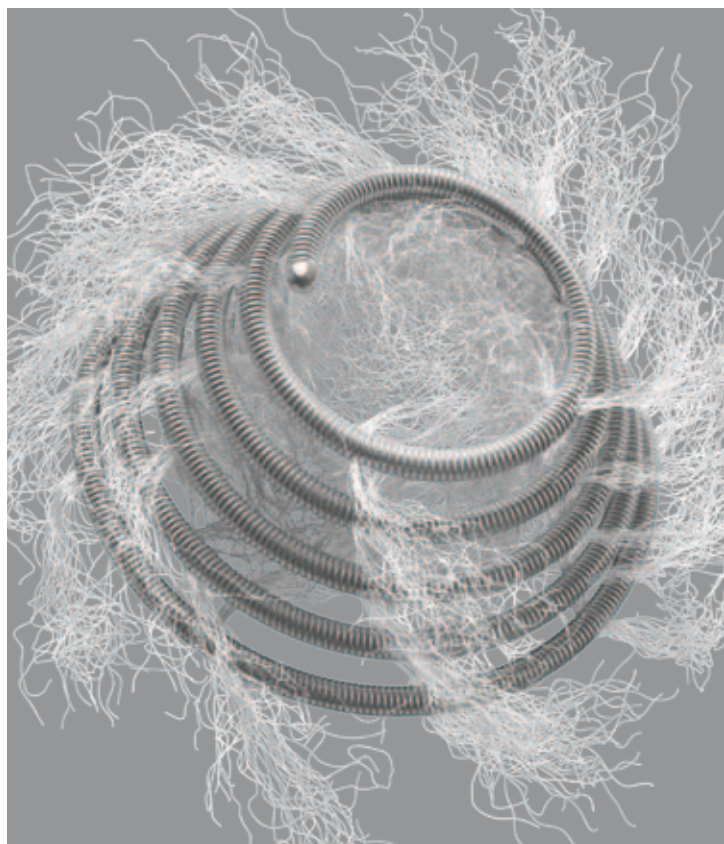


Tornado[®]

EMBOLIZATION COIL

Platinum coil with synthetic fibers used for embolization of selective vessel supply to arteriovenous malformations and other vascular lesions.

- Longer-length coil with tornado-like configuration maximizes coil exposure to cross-section of lumen for disruption of blood flow.
- Ideally suited for tapering-vessel situations.
- Soft platinum coil provides enhanced radiopacity and allows the coil to be MR conditional up to 3 T.
- Available for delivery through a catheter having a .018, .035 or .038 inch end hole.
- Supplied as small end first (standard) and large end first (special order).



Order Number	Reference Part Number	Recommended Catheter ID/End Hole Diameter inch	Coiled Embolus Tapering Diameter Proximal End mm	Coiled Embolus Tapering Diameter Distal End mm
.018 inch Tornado[®] Platinum Microcoils™				
G08261	MWCE-18S-3/2-TORNADO	.018	3	2
G08357	MWCE-18S-4/2-TORNADO	.018	4	2
G08356	MWCE-18S-5/2-TORNADO	.018	5	2
G08259	MWCE-18S-6/2-TORNADO	.018	6	2
G09218	MWCE-18S-7/3-TORNADO	.018	7	3
G09215	MWCE-18S-8/4-TORNADO	.018	8	4
G09217	MWCE-18S-10/4-TORNADO	.018	10	4
.035 inch Tornado Platinum Coils				
G10414	MWCE-35-4/3-TORNADO	.035	4	3
G10415	MWCE-35-5/3-TORNADO	.035	5	3
G10416	MWCE-35-6/3-TORNADO	.035	6	3
G10417	MWCE-35-7/3-TORNADO	.035	7	3
G10411	MWCE-35-8/4-TORNADO	.035	8	4
G10412	MWCE-35-8/5-TORNADO	.035	8	5
G10428	MWCE-35-10/4-TORNADO	.035	10	4
G10413	MWCE-35-10/5-TORNADO	.035	10	5

Delivery technique: Use with appropriate recommended catheter ID (see product insert). Use wire guide pusher for larger sizes.

Supplied sterile in peel-open packages, one per package. Intended for one-time use.

Not all part numbers shown may be approved for sale in all regulatory jurisdictions.

Consult with your local Cook representative or customer service center for details.

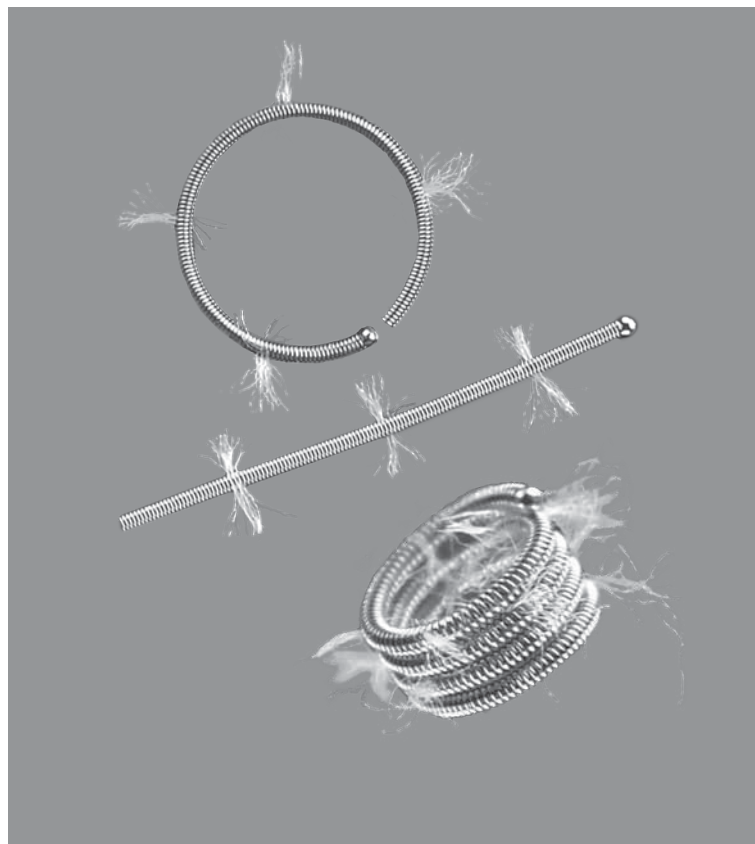


Hilal

EMBOLIZATION MICROCOIL™

Platinum coil with synthetic fibers used for embolization of selective vessel supply to arteriovenous malformations and other vascular lesions of the brain, spinal cord and spine.

- Soft platinum coil provides enhanced radiopacity and allows the coil to be MR conditional up to 3 T.
- Spaced synthetic fibers promote maximum thrombogenicity.
- Available in straight and curled configurations.
- More rigid than other .018 inch embolism coils.



Order Number	Reference Part Number	Recommended Catheter ID/End Hole Diameter inch	Extended Embolus Length cm	Coiled Embolus Diameter mm
.018 inch Straight				
G04524	MWCE-18-0.5-0-HILAL	.018	.5	N/A
G04523	MWCE-18-1.0-0-HILAL	.018	1	N/A
.018 inch Single-Curled				
G04622	MWCE-18-1.0-3-HILAL	.018	1	3
.018 inch Multi-Curled				
G07160	MWCE-18-2.0-2-HILAL	.018	2	2
G07158	MWCE-18-3.0-3-HILAL	.018	3	3

Supplied sterile in peel-open packages, two per package. Intended for one-time use.

Not all part numbers shown may be approved for sale in all regulatory jurisdictions.

Consult with your local Cook representative or customer service center for details.

Used for permanent embolization of the blood supply to hypervascular tumors and arteriovenous malformations, including use in intracranial embolization.

- A wide variety of particle sizes enables PVA to be used in both small- and large-vessel applications.
- PVA is supplied sterile in sealed bottles, which allows it to be mixed within closed sterile conditions.
- Supplied in 1 mL volumes.



Order Number	Reference Part Number	Particle Size Range* µm
G09662	PVA-100	90-180
G09663	PVA-200	180-300
G09664	PVA-300	300-500
G09665	PVA-500	500-710
G09666	PVA-700	710-1000
G09667	PVA-1000	1,000-1,400
G09668	PVA-1500	1,400-2,000
G09669	PVA-2000	2,000-2,800

Supplied sterile in peel-open packages. Intended for one-time use.

*Sized according to particles passed through graded sieves.

Not all part numbers shown may be approved for sale in all regulatory jurisdictions. Consult with your local Cook representative or customer service center for details.



Cantata™

SUPERSELECTIVE MICROCATETER

For use in small vessel or superselective anatomy for diagnostic and interventional procedures including peripheral or coronary use.

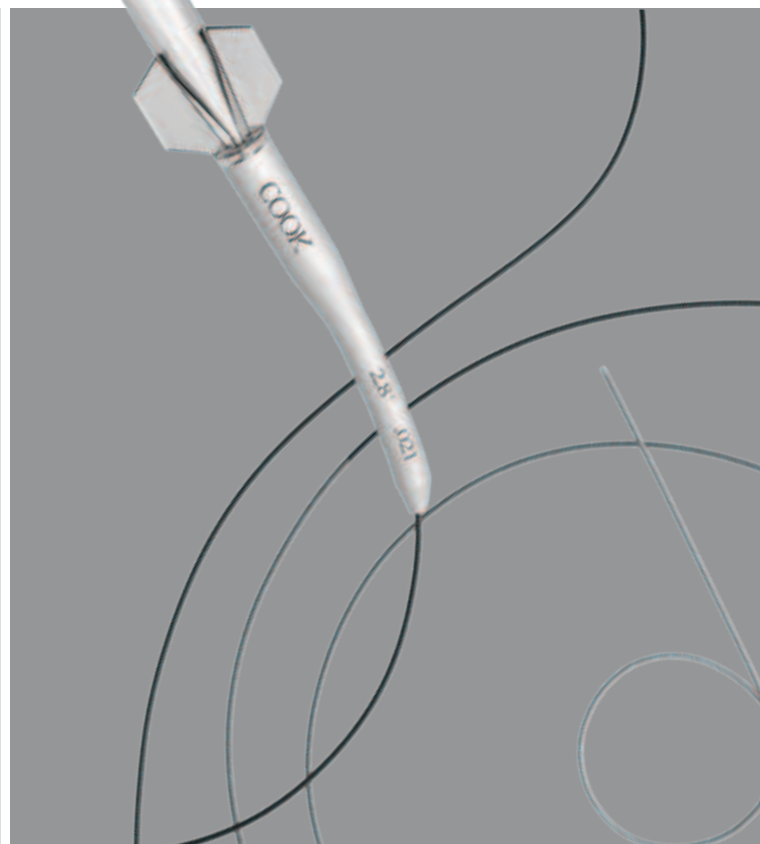
- Five transition zones along the shaft—more than any other microcatheter—provide a distinct yet seamless transition from hub to tip.
- Braided construction allows superior control, trackability and kink resistance.
- Reliable hydrophilic coating facilitates introduction and remains consistent over multiple passes, easing access to target anatomy.
- Lipiodol/DMSO compatibility allows a broader range of applications.

CANTATA® 2.5

- .021 inch inner diameter expedites delivery of Microcoils™, noncompressible particles and spheres up to 500 µm.
- Clinically achievable flow rate of 1.6 mL/sec at maximum pressure of 1,200 psi.

CANTATA 2.8

- Large .025 inch inner diameter expedites delivery of coils, noncompressible particles and spheres up to 700 µm.
- Clinically achievable flow rate of 3.5 mL/sec at a pressure of 900 psi.

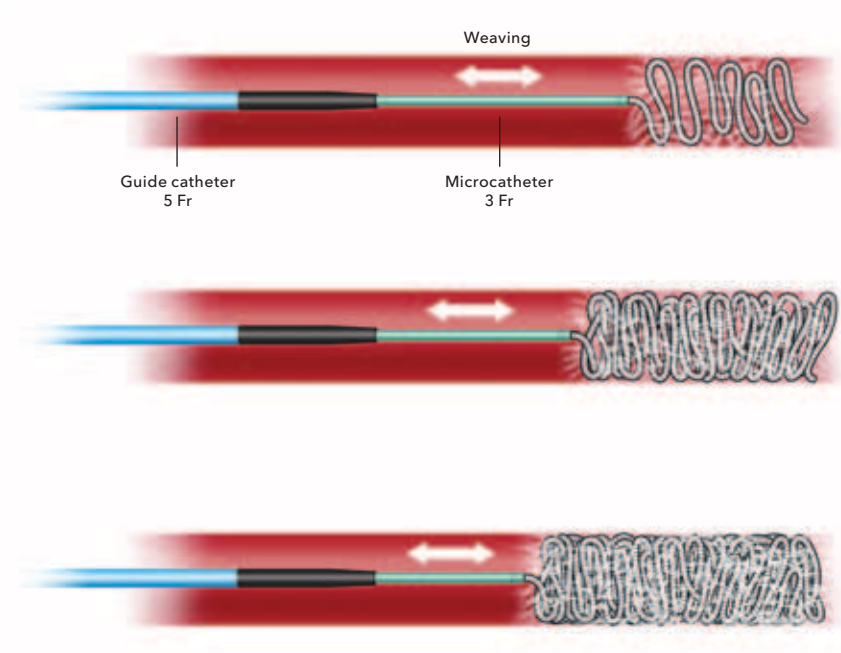


Order Number	Reference Part Number	Fr	ID inch	Length cm
Cantata 2.5				
G54529	MCS-2.5-NT-100-15-HP	2.5	.021	100
G54530	MCS-2.5-NT-110-15-HP	2.5	.021	110
G54531	MCS-2.5-NT-135-15-HP	2.5	.021	135
G54532	MCS-2.5-NT-150-15-HP	2.5	.021	150
Cantata 2.8				
G54533	MCS-2.8-NT-100-15-HP	2.8	.025	100
G54534	MCS-2.8-NT-110-15-HP	2.8	.025	110
G54535	MCS-2.8-NT-135-15-HP	2.8	.025	135
G54536	MCS-2.8-NT-150-15-HP	2.8	.025	150

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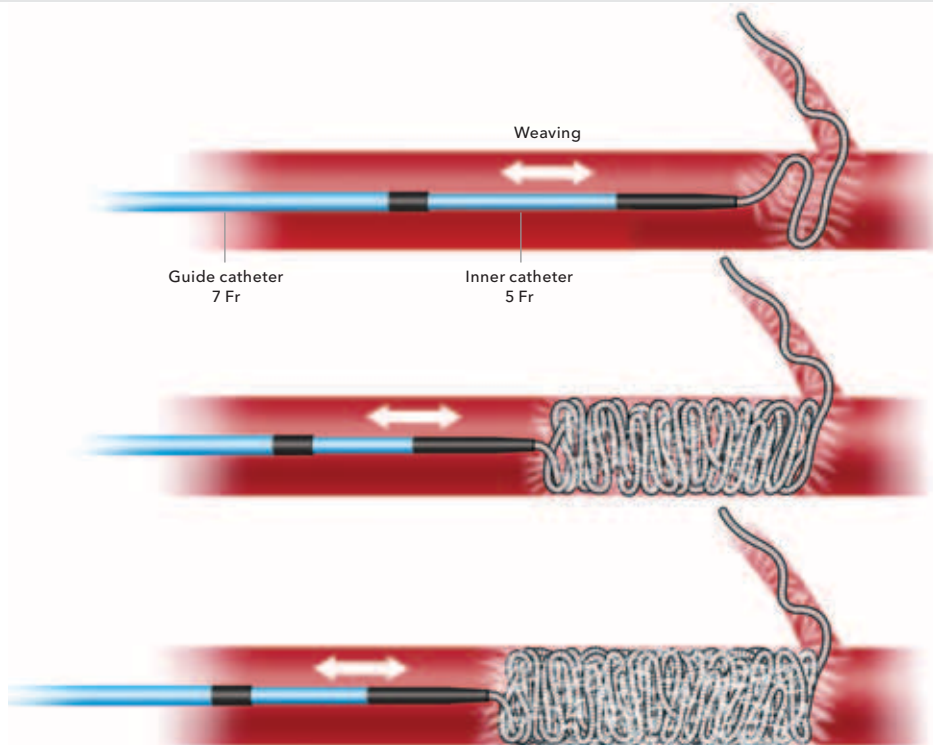
EMBOLIZATION TECHNIQUES AND TIPS

Coaxial Technique to Prevent Coil Elongation

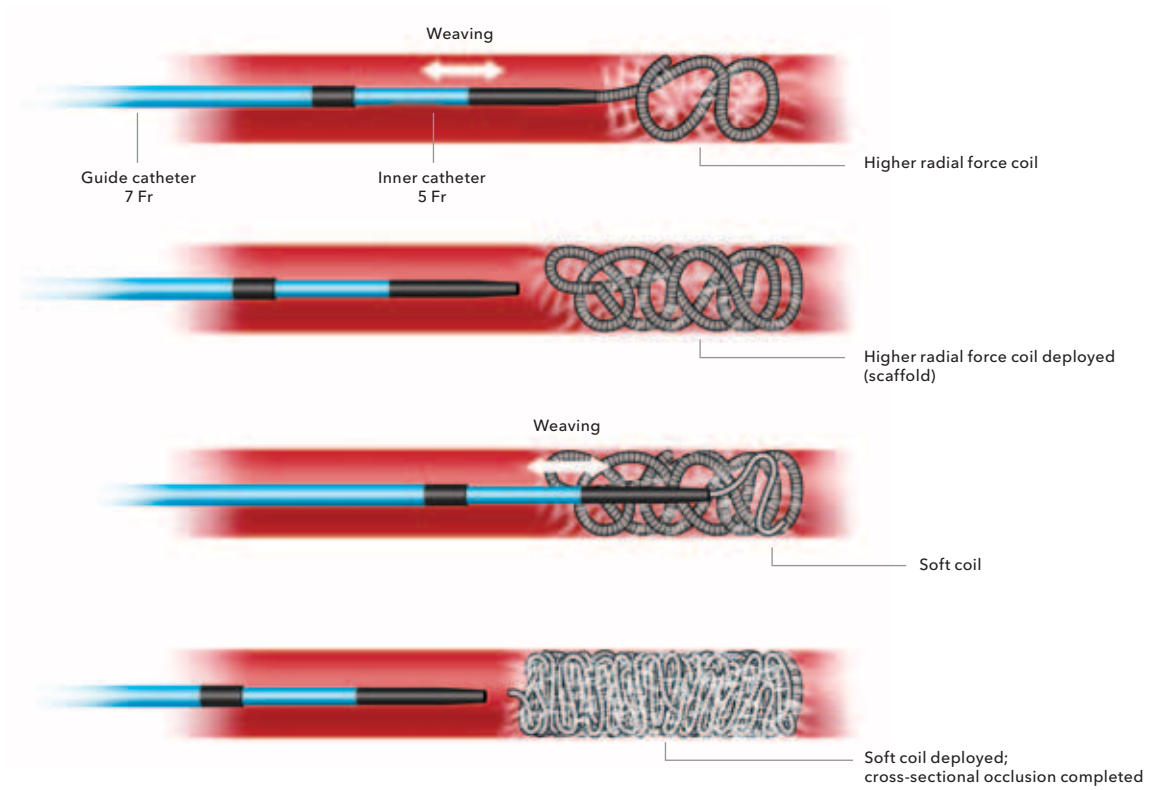


Guide catheter provides support or purchase for delivery of coil into a densely packed coil mass.

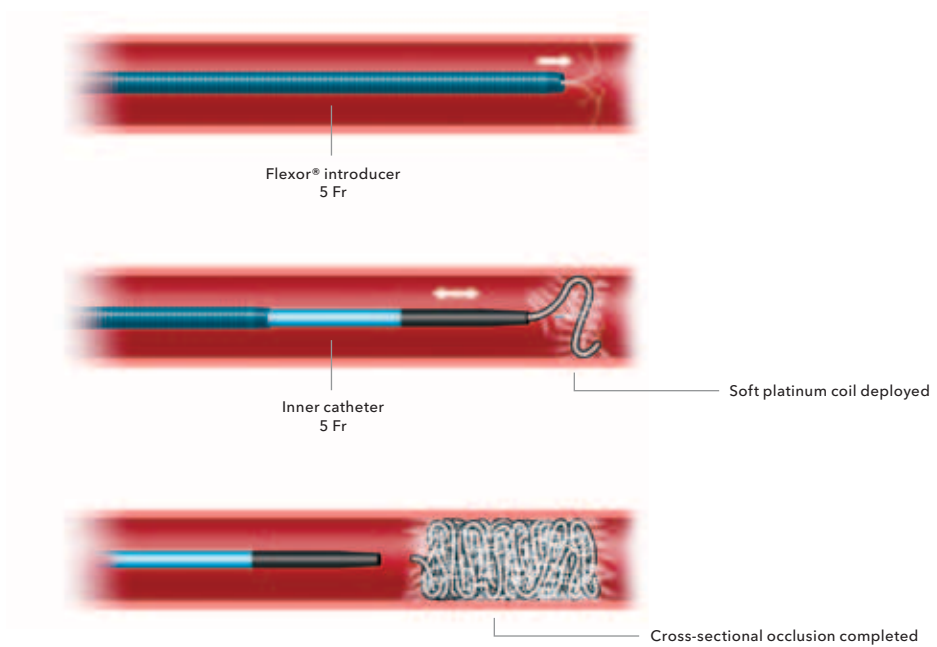
Anchor Technique



Scaffold Technique



Scaffold Technique with Amplatz Vascular Obstruction Device



CATHETER AND WIRE GUIDE RECOMMENDATIONS FOR EMBOLIZATION COILS

Diameter	Catheter Type and Size	Wire Guide Type and Size
Hilal Microcoils™ - Platinum		
.018 inch	SCR3.0B	TPMG-16
	MCS-2.5-NT and MCS-2.8-NT	TSF-18
		TSFB-18
		STF-18
Tornado® Coils - Platinum		
.018 inch	SCR3.0B	TPMG-16
	MCS-2.5-NT and MCS-2.8-NT	TSF-18
		TSFB-18
		STF-18
.035 inch	HNB4.1-35	TSF-35
	HNB5.0-35	TSFB-35
	HNBR5.0-35	TSFBP-35
	SCBR5.0-35	TSFNA-35
		TSFNB-35
Nester® Coils - Platinum		
.018 inch	MCS-2.5-NT and MCS-2.8-NT	TSF-18
		TSFB-18
		STF-18
.035 inch	HNB4.1-35	TSF-35
	HNB5.0-35	TSFB-35
	HNBR5.0-35	TSFBP-35
	SCBR5.0-35	TSFNA-35
		TSFNB-35
MReye® Coils		
.035 inch	HNB4.1-35	TSF-35
	HNB5.0-35	TSFB-35
	HNBR5.0-35	TSFBP-35
	SCBR5.0-35	TSFNA-35
		TSFNB-35
.038 inch	HNB5.0-38	TSF-38
	HNB6.0-38	TSFB-38
	HNBR5.0-38	TSFBP-38
	HNBR6.0-38	TSFNA-38
	SCBR5.0-38	TSFNB-38
Flipper® Detachable Embolization Coils*		
.035 inch	HNB5.0-NT	

*In order to obtain stability during coil introduction, a catheter with a 5.0 Fr or larger nontapered (NT) end hole without sideports is recommended. The catheter must have an ID of .041 inch or larger. For use with the Flipper Delivery System only (reference part number FDW-35).

POSITIONING EMBOLIZATION COILS

Important Note: Cook embolization coils are not recommended for use with polyurethane or polyvinylchloride catheters or catheters with sideports. If a catheter with sideports is used, the embolus may jam in the sideport or pass through it to an unintended location. Use of a polyurethane or polyvinylchloride catheter may also result in jamming of the embolus within the catheter.

Important Note: Gianturco, Wallace and Chuang suggest that the last embolization coil should be positioned with particular care. This embolization coil should not be left too close to the inlet of the artery and should be intermeshed with the previous embolization coils if possible. The final coil should be large enough to wedge against the arterial walls. A minimal but sufficient arterial blood flow should remain to hold this embolization coil against the previous embolization coils or other embolic materials until a solid clot ensures a permanent fixation. The purpose of these suggestions is to minimize the possibility of a loose embolization coil becoming dislodged and obstructing a normal and essential arterial channel.

LOOP NUMBER CALCULATIONS

Loop number calculations are based on the following formula:

$$\text{Loop number} = \frac{\text{Length}}{(\text{diameter}) \times (\pi)}$$

Manufacturing specifications are designed to control coil length and diameter. The distance between loops may vary, affecting the number of complete loops. Therefore, variations in actual loop number may exist for the same coil order number. Use loop number estimates only as a guideline.

MR CONDITIONAL

Through nonclinical testing, embolization coils made of platinum or Inconel have been shown to be MR conditional at static magnetic field strengths of 3.0 tesla or less, a maximum spatial gradient of 330 gauss/cm, and a maximum whole body averaged specific absorption rate (SAR) of 2.0 W/kg for 20 minutes of MR. MReye embolization coils will not migrate in the MR environment. Nonclinical testing has not been performed to rule out the possibility of device migration at static magnetic field strengths higher than 3.0 tesla and a maximum spatial gradient higher than 330 gauss/cm. In this testing, the embolization coils produced a temperature rise of $\leq 0.6^{\circ}\text{C}$ at a maximum whole body averaged specific absorption rate (SAR) of 2.0 W/kg for 20 minutes of MR. The effect of heating in the MR environment for other conditions, multiple coils or overlapping coils is unknown. MR image quality may be compromised if the area of interest is in the same area or relatively close to the position of the embolization coil.



Customer Service Centers

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