### Heraeus





# TORQUE COILS

# CAPABILITIES AND TECHNOLOGIES TO KEEP YOU MOVING AHEAD

Heraeus Medevio uses patented technology and world-class engineering to produce torque coils that can be customized for a variety of applications. Every torque coil offers uncompromising flexibility and torque transmission, including customizable wall thickness and a high 1:1 torque ratio. The result is higher quality performance for a variety of procedures, including structural heart and CRM delivery systems (minimal whipping, 1:1 torque ratio, and pushability).

# YOUR PARTNER IN BRINGING BETTER MEDICAL DEVICES TO MARKET.

Heraeus Medevio acts as a flexible, tailored, end-to-end extension of your engineering and product development teams. With expertise from materials, development, and pilot production to high volume manufacturing including unmatched clinical and technical expertise, Heraeus device experts will also help you efficiently manage global regulatory and submission requirements.

#### PRODUCT DESIGN & DEVELOPMENT

Global collaboration hubs committed to design and development with dedicated pilot production lines that can be mirrored in production

#### MANUFACTURING EXPERTISE

Proven manufacturing technology excellence and superior engineering know-how to solve complex challenges

#### COMMITTED TO QUALITY

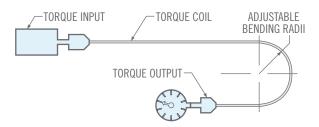
170-year history in materials science and trusted quality

#### SUPPLY CHAIN OPTIMIZATION

Vertically integrated from concept to completion to simplify your supply chain



With a tailored approach and capabilities from development to manufacturing ramp-up, work with Heraeus Medevio to simplify your supply chain, reduce risk and speed your time to market.



## UNCOMPROMISING TORQUE RESPONSE, FLEXIBILITY AND CONTROL

#### DESIGN CONSIDERATIONS

- Torque transmission
- · Proximal to distal positioning
- Flexibility requirements
- Anatomical delivery requirements

#### HIGH PERFORMANCE, CUSTOM-DESIGNED SOLUTIONS

- High-flexibility, high-torque transmission
- 2-layer coil, single directional torque response
- 3-layer coil, dual directional torque response
- Precise 1:1 torque response
- Outer and inner diameter (OD and ID)
- Wide range of value-add processes to build the optimal subassembly solution

SPECIFICATION	CAPABILITY	STANDARD TOLERANCE
LENGTH	85" / 2160mm max.	± 0.150" / 3.80 mm or less
OUTER DIAMETER (OD)	0.017"-0.200" / 0.43mm-5.10mm	± 0.002" / 0.05 mm or less
INNER DIAMETER (ID)	0.015"-0.38mm min.	± 0.003" / 0.80 mm or less
BEND RADIUS	Most designs can achieve a bend radius of < 0.5" / 13 mm	
WIRE MATERIAL	304V, 316, MP35N and man others	
WIRE SIZE	Flat and round wire from 0.001" / 0.025 mm and up	