MADE FOR THE HEART OF INNOVATION

Design smaller, stronger and more durable medical devices with Spectra® UF BIO UHMWPE fiber

Honeywell

SMALL BUT MIGHTY

Stronger and smaller than polyester or nylon, Spectra® UF BIO UHMWPE fiber is ideal for cardiovascular devices and more.

ADVANCED TECHNOLOGY FOR BETTER PATIENT OUTCOMES

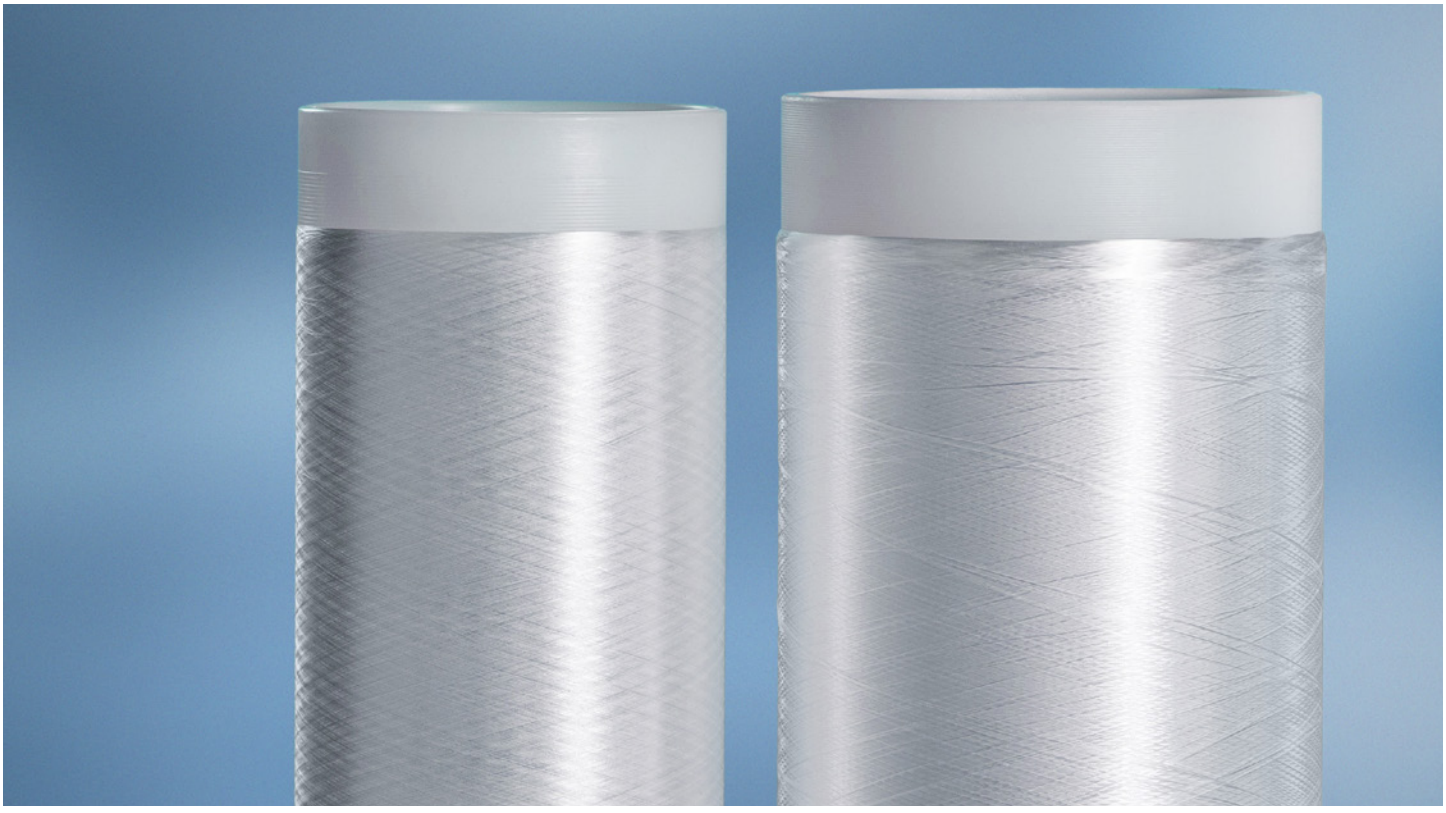
For cardiovascular patients, smaller-profile devices can have a big impact — facilitating less invasive procedures that reduce patient discomfort and recovery time. Honeywell's Spectra UF BIO offers a stronger, thinner solution that's ideal for even the smallest cardiovascular devices. Available from 100 denier down to the newly launched 10 dtex, this nearly 100% ultra-high-molecular-weight polyethylene (UHMWPE) fiber allows for smaller devices that can access smaller anatomical structures other devices can't reach.

DESIGNED FOR A LIFETIME OF DURABILITY

Spectra UF BIO is 15 times stronger than steel by weight and three times stronger than polyester by volume, making it one of the world's strongest and lightest fibers. It's biocompatible, chemically inert, and offers superior resistance to fatigue and abrasion compared to polyester — extending the life of in-body devices compared to those using a polyester fiber. It also has a lower coefficient of friction than polyester, resulting in easier transfer through tissue and enabling lower levels of patient inflammation after surgery.

COMMITTED TO LISTENING AND DELIVERING FOR YOU

Customers have trusted Honeywell to solve their greatest challenges for more than a century, and we're committed to expanding our portfolio to innovate with you. Our lineup of medical-grade fibers continues to grow with products that are produced at our world-class U.S. manufacturing sites and backed by strong technical support.
Find out how Honeywell can help you improve profitability with a simplified contract model and no royalty fees.



IDEAL FOR CARDIOVASCULAR APPLICATIONS

Spectra UF BIO can be shaped into a variety of textile constructions, including braids, woven tubes, and knits, to enhance the design of implantable cardiovascular devices like these:

- Transcatheter Aortic Valve Replacement (TAVR/TAVI) and TAVR delivery systems
- Stent grafts
- Cardio sutures
- Balloon catheters
- Surgical robotics

RIGOROUSLY TESTED TO MEET INDUSTRY STANDARDS

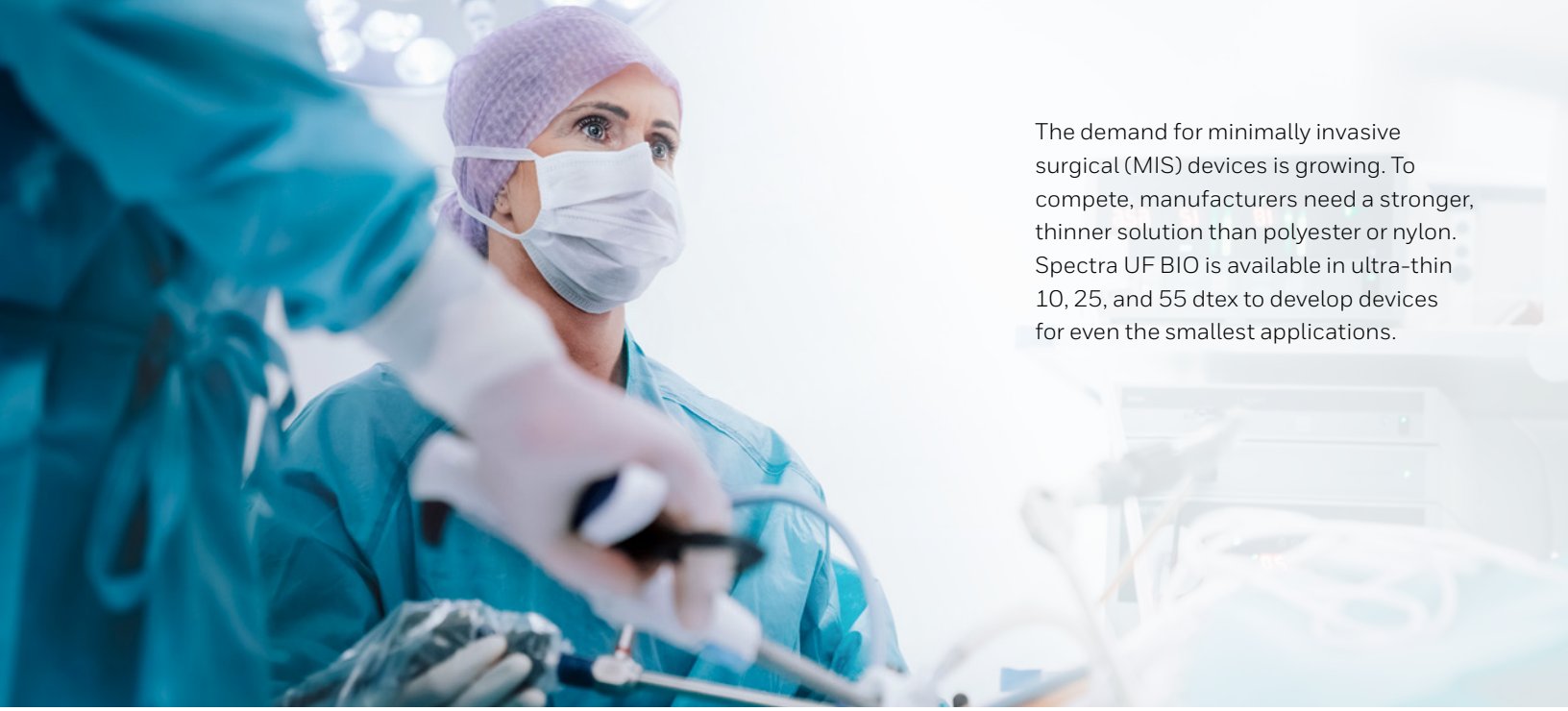
Spectra UF BIO is ISO 13485 compliant, providing accurate traceability information to help meet FDA guidelines.

- ISO 10993: Genotoxicity, Hemolysis, Cytotoxicity, Intracutaneous Injection
- ISO 10993-10: Kligman Maximization and Chemical
- ISO 10993-18: Characterization — Extractables
- ISO 13485 & ISO 9001
- ASTM 2848
- CFR 73.1015

ULTRA STRONG YET ULTRA THIN FOR SMALLER DEVICES

High-quality Spectra UF BIO has an exceptionally high tensile strength that enables manufacturers to design smaller-profile devices without sacrificing durability.

- 100% UHMWPE
- 15 times stronger than steel by weight and three times stronger than polyester by volume
- Lighter weight and lower coefficient of friction than polyester
- Superior resistance to chemicals, fatigue, and abrasion compared to conventional polyethylene fiber
- Biocompatible
- Produced at world-class U.S. manufacturing sites



The demand for minimally invasive surgical (MIS) devices is growing. To compete, manufacturers need a stronger, thinner solution than polyester or nylon. Spectra UF BIO is available in ultra-thin 10, 25, and 55 dtex to develop devices for even the smallest applications.

SPECTRA UF BIO PRODUCT PROPERTIES

PRODUCT	DTEX	DENIER	DENIER/ FILAMENT	TENACITY (G/DEN)	BREAKING STRENGTH (LBS)	MODULUS (G/DEN)	ELONGATION (%)	TWIST (TPI)	CYTOTOXICITY (ISO 10993-5)
Spectra UF BIO10	10	9	1	49.0	1.0	1,800	2.9	10	0
Spectra UF BIO25	25	22.5	1.3	45.5	2.2	1,730	2.9	1	0
Spectra UF BIO50	55	50	1.4	47.0	5.5	1,700	3.0	1	0

REQUEST A SAMPLE OF SPECTRA UF BIO FIBER TODAY.

For more information
lifesciences.honeywell.com/us/en/applications/medical-devices

Honeywell Advanced Materials
115 Tabor Road
Morris Plains, NJ 07950

BRO-23-97-EN | 10/23

THE FUTURE IS WHAT WE MAKE IT

Honeywell