

### IsoStrand®

IsoStrand® is designed to provide reliable fixation within prostate tissue.

The IsoStrand® Cutting Fixture is helpful to perform manual strand cutting under radiation protection.

#### I-125 Seed Chain

The IsoStrand® seed chain consists of 10 IsoSeeds with standard seed-spacer configuration and a 1.0 cm center-to-center spacing. It can accommodate either IsoSeed® I25.S06 or IsoSeed® I25.S17plus.

#### Good Visibility

IsoStrand® is available with either I25.S06 or I25.S17plus source model designs. Both seed types are visible under X-ray, fluoroscopy, CT and MR and additionally show good ultrasound visibility.

- IsoSeed® I25.S17plus features a full size silver marker and has been designed for visibility under X-ray and fluoroscopic imaging. In addition, it enables MR imaging and opens new perspectives for postoperative planning.
- IsoSeed® I25.S06 contains a thin gold marker within a ceramic carrier, diminishing artifacts and providing good visibility in CT imaging.

#### Low Migration Rates

One advantage of strands is their low migration rate. IsoStrand® is specially designed to reduce the migration rates still further. IsoStrand® consists of seeds and hourglass-shaped spacers which are embedded in a braided monofilament suture. This special design enables reliable fixation within prostate tissue and helps to reduce seed migration.

#### IsoStrand® Accessories

Accessories include:

- The needle rack to provide safe storage of loaded needles and reduced radiation exposure.
- The transfer tube for needle post-loading.

#### Short Delivery Time

Our production processes and intelligent stock management, with facilities centrally located in Europe, ensure fast and reliable delivery times. IsoStrand® can generally be delivered worldwide, allowing flexible patient scheduling.

#### Measurement

The activity of IsoStrand® can very quickly and easily be measured. This is of particular importance for clinics assaying 100% of seeds.

#### Calibration to NIST and PTB

The certified source strength of IsoSeed® is based on air kerma measurements. The source strength of IsoSeed® I25.S17plus is calibrated traceable to the primary  $S_{K,N99}$  standard of the NIST (National Institute of Standards and Technology). The source strength of IsoSeed® I25.S06 is calibrated traceable to the primary standard of the National Metrology Institute of Germany (PTB).

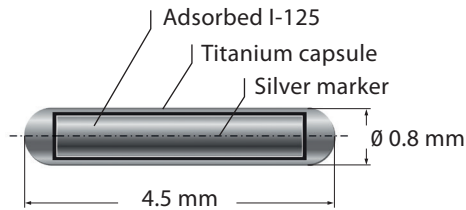
#### Guaranteed Biocompatibility

The titanium capsule of IsoSeed® is made of implant grade material. The finished products have been tested for biocompatibility.

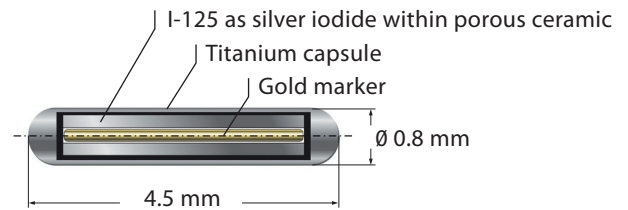
#### "Made in Germany" Quality

The production of IsoStrand® is performed at the manufacturing facility in Berlin, Germany, operating under strict quality and regulatory standards. Eckert & Ziegler BEBIG is certified according to ISO 13485.

## Two Types of Seeds – Good Visibility



IsoSeed® I25.S17plus features a full size silver marker for fluoroscopy and MR imaging



IsoSeed® I25.S06 contains a thin gold marker specifically designed for visibility in CT imaging

Class number	Air kerma strength in $\mu\text{Gy m}^2/\text{h}$	Apparent activity in mCi	Apparent activity in MBq
1	0.391 – 0.423	0.308 – 0.333	11.40 – 12.32
2	0.424 – 0.459	0.334 – 0.361	12.36 – 13.36
3	0.460 – 0.498	0.362 – 0.392	13.39 – 14.50
4	0.499 – 0.540	0.393 – 0.425	14.54 – 15.73
5	0.541 – 0.586	0.426 – 0.461	15.76 – 17.06
6	0.587 – 0.637	0.462 – 0.501	17.09 – 18.54
7	0.638 – 0.690	0.502 – 0.543	18.57 – 20.09
8	0.691 – 0.749	0.544 – 0.590	20.13 – 21.83
9	0.750 – 0.813	0.591 – 0.640	21.87 – 23.68
10	0.814 – 0.882	0.641 – 0.694	23.72 – 25.68
11	0.883 – 0.958	0.695 – 0.754	25.72 – 27.90
12	0.959 – 1.039	0.755 – 0.818	27.94 – 30.27
13	1.040 – 1.127	0.819 – 0.887	30.30 – 32.82
14	1.128 – 1.223	0.888 – 0.963	32.86 – 35.63

Activity classes IsoSeed® I25.S17plus for Prostate Cancer Treatment

The activity of IsoSeeds within IsoStrand® decreases by one class every week. The reference day for the declaration of the certified apparent activity is always a Monday.

Class number	Air kerma strength in $\mu\text{Gy m}^2/\text{h}$	Apparent activity in mCi	Apparent activity in MBq
1	0.357 – 0.386	0.281 – 0.304	10.38 – 11.26
2	0.387 – 0.419	0.305 – 0.330	11.27 – 12.21
3	0.420 – 0.455	0.331 – 0.358	12.22 – 13.25
4	0.456 – 0.493	0.359 – 0.388	13.26 – 14.38
5	0.494 – 0.535	0.389 – 0.421	14.39 – 15.61
6	0.536 – 0.581	0.422 – 0.457	15.62 – 16.94
7	0.582 – 0.630	0.458 – 0.496	16.95 – 18.38
8	0.631 – 0.684	0.497 – 0.539	18.39 – 19.94
9	0.685 – 0.742	0.540 – 0.584	19.95 – 21.64
10	0.743 – 0.806	0.585 – 0.634	21.65 – 23.48
11	0.807 – 0.874	0.635 – 0.688	23.49 – 25.48
12	0.875 – 0.949	0.689 – 0.747	25.49 – 27.65
13	0.950 – 1.029	0.748 – 0.811	27.66 – 30.00
14	1.030 – 1.117	0.812 – 0.880	30.01 – 32.56

Activity classes IsoSeed® I25.S06 for Prostate Cancer Treatment

## Components and Accessories

Qty.	Item	Part number
1	IsoStrand® Cutting Fixture	ICF.101
1	IsoCord® Waste Container for Seeds	NLZ.102
1	IsoCord® Tweezers	NLZ.103
1	IsoCord® Scissor	NLZ.104
1	IsoCord® Needle Rack	NLZ.107
1	IsoCord® Transfer Tube	NLZ.112

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### Manufacturer:

**Eckert & Ziegler  
BEBIG GmbH**  
Robert-Rössle-Str. 10  
13125 Berlin  
Germany

Phone +49 30 94 10 84 130  
Fax +49 30 94 10 84 112  
info@bebig.com

### Regional Sales, Marketing and Service:

Europe, Middle East, Africa,  
Latin America, Asia Pacific

**Eckert & Ziegler  
BEBIG GmbH**  
Robert-Rössle-Str. 10  
13125 Berlin  
Germany

Phone +49 30 94 10 84 130  
Fax +49 30 94 10 84 112  
info@bebig.com

North America

**Mick Radio-Nuclear Instruments, Inc.  
An Eckert & Ziegler BEBIG Company**  
521 Homestead Avenue  
Mount Vernon, NY 10550  
USA

Phone +1 914 667 3999  
Fax +1 914 665 8834  
sales@micknuclear.com