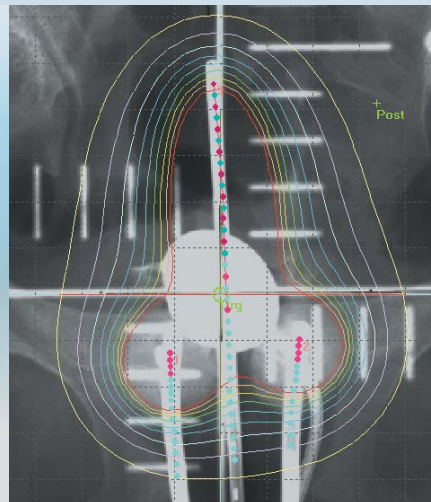
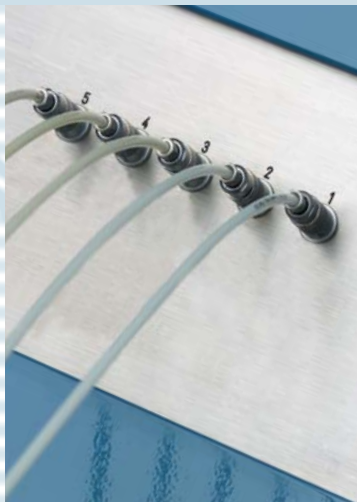


GyneSource®

Cost Efficient Brachytherapy Solution



The GyneSource® HDR afterloader with an integrated treatment planning system is specially designed for fast, effective and cost efficient gynaecological and intraluminal brachytherapy with Co-60.

■ Application

GyneSource® is a five channel afterloader, which has been specially developed for gynaecological applications. A wide range of applicators is available. The system supports intraluminal treatments for oesophageal, bronchus and nasopharyngeal cancer as well.

■ Miniaturised Co-60 Source

BEBIG's proven expertise in the manufacturing of sealed sources has resulted in a miniaturised high activity Co-60 source.

■ Lower Operating Costs

GyneSource®, with the Co-60 source was intentionally developed to provide the clinic with a very cost efficient solution. Due to the long half life of Co-60, operational costs are reduced to approximately one fifth of a conventional Ir-192 HDR afterloading system. Just one source exchange per 10 years of operation is usually required, compared to 35 to 40 source exchanges with conventional Ir-192. This results in a significant reduction in expenses for sources, transport, service and patient treatment.

■ Universal Catheter System

The unique Universal Catheter System is an enclosed catheter, which is inserted directly into the applicators. This solution provides a very easy applicator connection and guarantees a safe and fast emergency procedure, which does not require removing the applicator from the patient.

■ Integrated Treatment Planning System

GyneSource® features the treatment planning system GynePlan. This comprehensive system is directly integrated into the actual treatment console – no need for extra software or computers. GynePlan is designed to perform treatment planning in a very fast, accurate and convenient way. It features an electronic isodose atlas for standardised treatment regimes as well as individual planning with dwell time optimisation.

■ Integrated Treatment Planning System – GynePlan

- Customisable standard isodose atlas including a complete range of predefined plans
- Data base containing applicator data, standard dwell time configurations, applicator dose prescription points and dose prescriptions
- Reconstruction of applicator geometry from X-ray images
- Manual reconstruction of applicator geometry
- Dose optimisation using dose prescription points and geometric optimisation
- Output of dose distribution in orthogonal planes
- Projection of dose distributions on X-ray film
- Dose calculation using TG43 algorithm
- Detailed treatment reporting and documentation
- Patient data management
- Support of max. 100 dwell points for treatment length of 600 mm and minimum stepping distance of 1 mm

■ Co-60 Source Characteristics

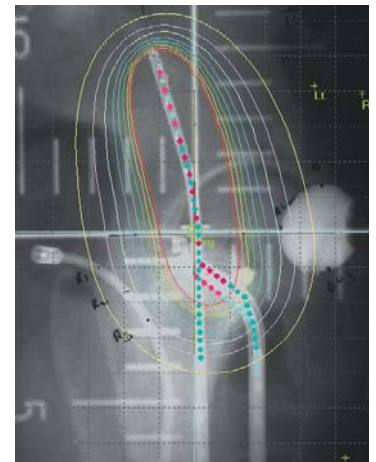
- Proven clinical results – Co-60 sources introduced by Henschke already in 1960
- Miniaturised source for gynaecological, intraluminal or interstitial brachytherapy
- Guarantees constant treatment times due to long half life
- Tested per ISO 2919-80 – classification C65444
- Anisotropic and radial function fitting tested as per PTB standards

■ Safety Features

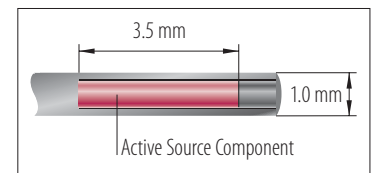
- Double drive system for source and check cable
- Universal Catheter System for safe and convenient treatment
- Integrated calibration system for easy and accurate daily verification
- Battery backup system for safe source retraction in the event of a power failure
- Hand crank for power independent, emergency source retraction
- Two different monitoring systems for treatment time and source position

■ Technical Data

Main Unit	
Dimensions (WxDxH)	710 x 668 x 1140 mm
Weight	270 kg
Standing surface / Base plate	0,47 m ²
Voltage range	95–135 V / 190–264 V, 1/N/PE, 47–63 Hz
Power	460 VA
Recommended fuse value	16 A, characteristic C
Classification	Class I, Type B equipment according to IEC 601-2-17
Working Environment	
Temperature	10 to 40 °C / 50 to 110 °F
Relative air humidity	30–75 %
Air pressure	70 kPa–110 kPa
Radiation Shielding IEC 601-2-17	
Dose rate in 1 m distance for Co-60	< 0.01 mSv/h
Radioactive Source	
74 GBq Co-60	
Active Source Component	
∅ 0,6 x 3,5 mm	



GynePlan



Miniaturised Co-60 Source



Universal Catheter System

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