

# CRYO-PRO

liquid nitrogen cryosurgery



**CORTEX TECHNOLOGY**

# CryoPro® M

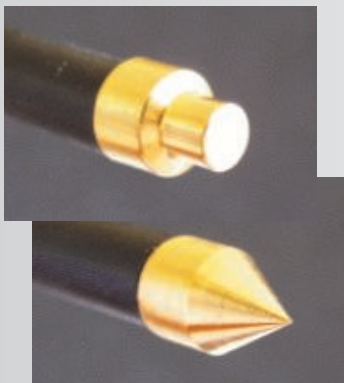
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Two sizes: 0.35 l & 0.5 l



High precision trigger detail



Contact probes, up to 30 mm



CryoPro® Mini, 0.35 l LN<sub>2</sub>

## GB

As the leading European supplier of liquid nitrogen cryosurgical equipment Cortex Technology offers a complete range of treatment units, accessories and storage tanks.

Combining our extensive experience with the most up-to-date design features we proudly present the CryoPro® series of cryosurgical treatment units providing outstanding performance in terms of safety, ease of operation and reliability. Further, the CryoPro® offers full compatibility with other popular liquid nitrogen units, i.e. spray apertures and contact probes for other systems may be used with the CryoPro® units as well.

## Method

Simplicity, high cure rate and reliability are keywords for liquid nitrogen cryosurgery as a well established and preferred treatment for various skin lesions. The treatment is associated with minimal pain, and none or minimal anaesthesia is needed.

In cryosurgery a number of other coolants such as nitrous oxide, carbon dioxide and dimethyl ether / propane are used. However, these coolants do not reach temperatures below minus 90°C and can only be used for contact freezing.

Further, some are environmentally unfriendly and introduce safety hazards.

Liquid nitrogen provides superior efficacy at minus 196°C and offers both spray and contact freezing. Also, liquid nitrogen is safe, friendly to the environment, and readily available from gas suppliers.

The low temperature, the variety of accessories and the high cure rate combined with excellent cosmetic results and ease of operation makes CryoPro® liquid nitrogen cryosurgery the most versatile cryosurgical treatment available at a very low cost per treatment.

## Apparatus

The CryoPro® is available in two sizes: **CryoPro® Maxi** with 500 ml capacity (20 - 24 hrs. static holding time) and **CryoPro® Mini** offering a 350 ml capacity (12 - 14 hrs. static holding time).

Each unit comes with a set of spray applicators for most common lesions (e.g. warts, small tumors etc.). Optionally, contact probes are available in various sizes. These probes are particularly useful to control the lateral spread of the freeze (e.g. near the eye or in the oral cavity). Contact probes are selected to fit the actual lesion, and they offer a deep freeze with minimal lateral spread.

## Applications

Cryosurgery using liquid nitrogen is the treatment of choice or an alternate method of treatment for many skin lesions as well as cervical erosions. More information can be found in published literature of which some are referenced on the reverse page.

## Warranty & Approvals

CryoPro® units are covered by a worldwide three year guarantee against material and manufacturing defects.

Cortex Technology has obtained the FDA 510(k) under 21CFR878.4350 and the CE -mark acc. to Council Directive 93/42/EEC.



# Mini/Maxi

State-of-the-art cryosurgery



*Open spray aperture*



*Relief valve detail*



*Soft spray tip*



*CryoPro® Maxi , 0.5 l LN<sub>2</sub>*



# ACCESSORIES

## Storage containers

Liquid nitrogen is stored in special superinsulated tanks, so-called dewars. Cortex Technology supplies such dewars in sizes from 5 - 60 l capacity and static holding time up to 350 days.



To transfer liquid from the dewar to the CryoPro<sup>®</sup> unit the use of a **withdrawal device** is highly recommended.

Our withdrawal devices are detachable, which means no excess evaporation from the dewar, when the withdrawal device is not in use. Not only does this provide the most economical and safe extraction of liquid from the storage tank, the withdrawal device also provides a filter to prevent ice crystals in the dewar from being transferred to the CryoPro<sup>®</sup> unit ensuring trouble-free operation.

The withdrawal devices are fully adjustable and fit dewars of 10 l capacity and up.

Transportation of dewars is facilitated by an optional **roller base** available for dewars of 20 - 60 l capacity.

## Literature

Kuflik, E.G. and Gage, A.A.: Cryosurgical treatment for skin cancer. Igaku-Shoin 1990, ISBN 0-89640-157-X.  
• Torre, D: Cutaneous cryosurgery: Current state of the art. J. Dermatol. Surg. Oncol. 11:3 March 1985. • Graham, G.F.: Statistical data on malignant tumors in cryosurgery: 1982. J. Dermatol. Surg. Oncol. 9:3 March 1983.  
• Dawber, R.; Colver, G. and Jackson, A.: Cutaneous cryosurgery, principles and clinical practice. Martin Dunitz Ltd. 1992, ISBN 1-85317-082-8.

