

# OLYMPUS

Your Vision, Our Future

## EXPECT MORE FROM YOUR PARTNER IN ENT

**A selection of our best solutions.**



## INTRODUCING THE COMPLETE PORTFOLIO

For exceptional diagnosis and treatment for all ENT procedures, you need a medical technology partner who covers it all: power and energy solutions, flexible and rigid endoscopy, biocompatible materials, instruments and service.

The combination of Olympus' leading imaging technology with patented minimally invasive therapy products gives you unparalleled procedure solutions for ENT. Our "See and Treat" approach provides you with a complete solution for all ENT specialisms. Innovations in diagnosis such as NBI in laryngology or patented RFITT technology for therapy of sleep-related breathing disorders are just a few examples of our excellent ENT solutions.

In this brochure, you will find a selection of our best solutions for otology, rhinology and laryngology as well as for head and neck surgery, treatment of sleep disordered breathing and pediatric ENT procedures.

Otology



Rhinology

Laryngology

## OUTSTANDING IMAGE QUALITY FOR ENT

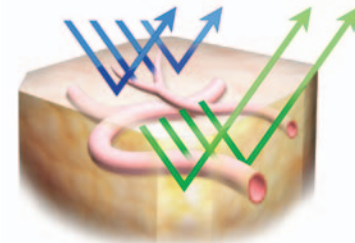
Olympus offers a range of imaging systems across ENT specialties, including the latest high-definition full HDTV VISERA Elite, providing unparalleled image quality. One of the most convincing innovations is Narrow Band Imaging (NBI), an optical filter technology that radically improves diagnostic capabilities.

- Revolutionary optical filter technology
- Significantly improves the visibility of capillaries, veins and other subtle tissue structures
- Proven results for early detection of cancer
- Identify suspicious areas more accurately



## WHAT IS NARROW BAND IMAGING (NBI)?

NBI is an optical image enhancement technology that enhances the visibility of vessels and other tissue on the mucosal surface. Narrow band illumination, which is strongly absorbed by haemoglobin and penetrates only the surface of tissue, is ideal for enhancing the contrast between the two. As a result, under narrow band illumination, capillaries on the mucosal surface are displayed in brown on the monitor, and veins in the submucosa are displayed in cyan.



### Publications:

Watanabe A et al. (2006): Laryngoscopic Detection of Pharyngeal Carcinoma in Situ with Narrowband Imaging, *Laryngoscope*, Vol. 116, pp. 650–654

Watanabe A et al. (2008): The Value of Narrow Band Imaging Endoscope for Early Head and Neck Cancers, *Otolaryngology – Head and Neck Surgery*, Vol. 138, pp. 446–451

Leong J-L, Mark H W (2008): Use of Narrow Band Imaging (NBI) Technique for the Detection of Nasopharyngeal Carcinoma (NPC), Oral Presentation at AAOHNS 2008

Nonaka S, Saito Y (2008): Endoscopic diagnosis of pharyngeal carcinoma by NBI, *Endoscopy*, Vol. 40, pp. 347–351

Piazza C et al. (2008): Narrow-band imaging: a new tool for evaluation of head and neck squamous cell carcinomas. Review of the literature, *ACTA otorhinolaryngologica italiana*, Vol. 28, pp. 49–54

Narrow band imaging and high definition television in the assessment of laryngeal cancer: a prospective study on 279 patients, Cesare Piazza et al. *Eur Arch Otorhinolaryngol*, December 2009

## COMPACT, FLEXIBLE AND UNIVERSAL – VIDEO PLATFORMS FOR ENT

From office video endoscopy to the most advanced OR – Olympus offers the right video system solution for all your ENT requirements.

### OTV-SI

- Compact design of the video system
- Integrated light source
- Efficient use of limited office space
- Delivering high-quality imaging



### VISERA Elite

- Equipped with high-resolution HDTV imaging capability to provide excellent image quality for flexible and rigid endoscopes – improved NBI (20% brighter than previous model)
- Compatible with a wide range of endoscopes and camera heads, both for office and OR
- Convenient digital-to-digital recording of still images into portable memory



- Scope ID function for easier endoscopy management
- User-preset custom buttons for easier operation
- Noise-reduction capability for exceptional image quality

## ENF-VH – HDTV QUALITY IN 3.6 MM DIAMETER FOR MORE DETAILED IMAGES

### Wide field of view

- The ENF-VH has a viewing angle of 110°. And with HD resolution and exceptional illumination, every corner of the field can be thoroughly inspected

### Pre-freeze function

- The scope continuously captures still images even before you push the pre-freeze button. When you press the button, the system automatically selects the sharpest image among several
- HD
- Wide angle
- Exceptional illumination field
- Pre-freeze function



## ENF-V3 – OUTSTANDING IMAGE QUALITY IN SURPRISINGLY SLIM DIAMETER

Olympus leads the world in endoscopes. Over and over, ENT physicians have made two comments that particularly resonated with us. “We want to make every diagnosis more accurate” and “We want smoother treatments for our patients”.

### Our new offer: ENF-V3

The scope delivers crisp, high-resolution images with a distal end diameter of only 2.6 mm.

### Excellent image in Ø 2.6 mm

The distal end of the ENF-V3 scope is only 2.6 mm in diameter. This makes insertion into tight nasal passages much easier. And with the CCD chip's improvement, even this slim scope delivers exceptional image quality.

### Exceptional luminosity

Although it has a small diameter, the scope still illuminates a broad area, providing a detailed image of any lesions within the field of view, which is especially useful when observing with NBI.



- Distal end outer diameter 2.6 mm
- High image quality
- Exceptional illumination field
- Pre-freeze function

## ENF-VQ – FULL SCREEN AHEAD

It was a big step from fibre to video. Now, the full-screen video image of the new ENF-VQ brings a new dimension to video endoscopy in ENT.

### Full-screen images

- Detect minute details in every corner

### High resolution

- The chip-on-the-tip technology delivers clear and bright images
- Supporting Narrow Band Imaging (NBI)
- Homogenous
- No fibres
- No black dots
- No wear-out



Conventional videoscope image



ENF-VQ full-screen image



## FIBRESCOPIES AND VIDEOSCOPIES – FOR ALL APPLICATIONS IN ENT

The Olympus fibrescopes and videoscopes are state-of-the-art instruments and provide exceptional performance in ENT.

### ENF-VT2 – Observation and reliable treatment

- High-quality imaging
- Close focus for accuracy
- 2.0 mm channel for treatment



### ENF-GP – High performance to go

- Versatility – thanks to an integrated miniature light source
- Fully immersible waterproof design
- Portable and reliable

### ENF-V2 – Slimmer design for gentler insertion

- High-quality imaging
- Smooth insertion with 3.2 mm diameter

### ENF-XP – For narrow upper airway passages

- Ultra-slim 2.2 mm insertion tube diameter
- Wide angulation range – 130° up and down



## HD LARYNGOSCOPE – HIGH DEFINITION AND HIGH DURABILITY

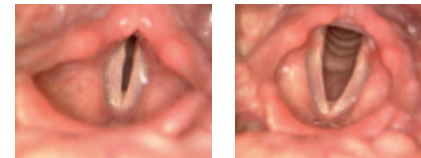
The HD Laryngoscope is a masterpiece of imaging technology and durable design. The unique optical system provides the highest level of contrast and colour reproduction. Thanks to the innovative design, lens breakage is reduced to a minimum.

### High depth of field

- No refocusing required during procedures

### Patient comfort

- Reduced distance between optics and distal end

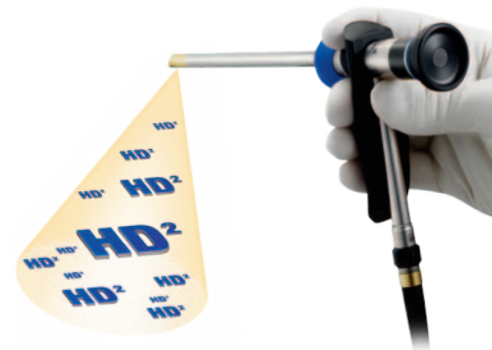


### Efficient reprocessing

- Autoclavable plus automated cleaning and disinfection

### High durability

- Long lifetime



## HD SINUSCOPE – BRILLIANT IN ALL RESPECTS

The HD Sinuscope combines image quality, durability and convenience. The true-colour HD lens system provides crystal-clear images throughout the entire endoscopic field and the three-tube construction significantly increases durability.

### Virtually distortion-free

- Fish-eye effect is eliminated

### Efficient reprocessing

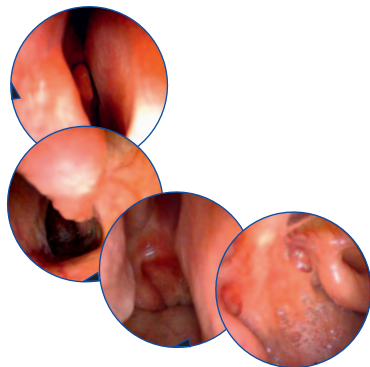
- Autoclavable plus automated cleaning and disinfection

### Eco-friendly

- No hazardous materials used

### High durability

- Long lifetime



## RFITT: BIPOLAR RADIOFREQUENCY-INDUCED THERMOTHERAPY

CelonLab ENT offers innovative methods of treatment and provides enormous potential for the ENT specialist. RFITT enables specialists to perform a number of conventional clinical procedures in a minimally invasive manner and on an outpatient basis.

### Applications

- Multi-level treatment of sleep-related breathing disorders, such as habitual snoring, mild cases of OSAS, blocked nose:
  - Enlargement/relaxation of the soft palate
  - Excess mucous membrane at the palatine arches (webbing)
  - Uvula hypertrophy
  - Enlargement/relaxation of the tongue base
  - Turbinate and palatine tonsil hypertrophy
- Treatment of head-neck tumours
- Treatment in the region of the larynx, e.g. spasmodic dysphonia, polyps and oedema



## THE ONE AND ONLY TOOL FOR DISSECTION AND HAEMOSTASIS

Superior dissection, ergonomic comfort and bipolar haemostasis in one device: PK diego features a revolving nosecone, true straight-through suction, reduced cord clutter and an ergonomic shape. It is the ultimate tool for ENT doctors because it was designed by ENT doctors.

### Fast and easy

- Setup and change blades quickly and efficiently

### 360° rotating nose cone

- Orient the blade window with a simple twist

### Versatile

- Aggressive and non-aggressive blade edgeforms available



PK TECHNOLOGY

## DIEGO DISTAL SUCTION BLADES FOR SINUS SURGERY SPECIFICALLY DESIGNED TO REDUCE CLOGGING

### Distal suction hole

- Increases blade utility
- Fewer instrument changes
- Improves visualisation
- Continuous airflow through lumen reduces clogs
- Simplified de-clog action

### Modified cutting window

- Made smaller vertically
- More precise bite
- Takes less tissue per cut
- Creates a blunt tip



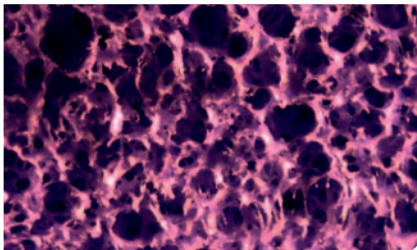
DIEGO<sup>®</sup>  
SYSTEM



## ADVANCED PVA SPONGE TECHNOLOGY – RHINOLOGY PACKING

Blu and Blu Glide sponge products take PVA packing to a new level. Available in all popular sizes for nasal, FESS, epistaxis and even otologic applications, Blu and Blu Glide provide benefits beyond what standard PVA sponge packs can offer. Both products contain a safe, patented, bacteriostatic compound, which inhibits the growth of infection and odour-causing microorganisms on the sponge.

- Biocompatible
- Bacteriostatic
- Hydrophilic
- Micropore surface
- Durable yet impressively soft



*Blu Glide PVA sponge*

## THE FIRST SMART STAPE PISTON

The patented SMart technology provides the first self-crimping piston for perfect fixation in the incus. These outstanding protheses perfectly utilise the shape memory of nitinol.

### Active at 45°

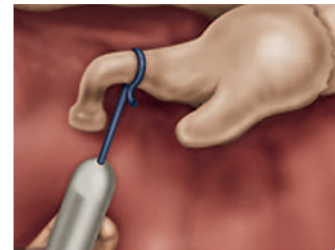
- Low activation temperature reduces thermal stress

### MRT-compatible

- Clear MRT image, no complications

### Biocompatible

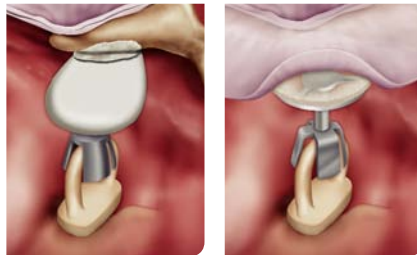
- Proven biocompatibility of nitinol



## OSSICULAR RECONSTRUCTION – COMPLETE SOLUTIONS

Developed in conjunction with premier global otologic surgeons to provide the most unique and innovative solutions for middle ear stability: this complete line of solutions includes Micron Titanium Implants, OtoMimix HA Bone Cement, Explorent's durable German Crafted Instruments, the Dornhoffer Implant System and the Kartush Strut System.

- Fluoroplastics
- Hapex
- Hydroxylapatite
- Micron
- Titanium
- Polyethylene
- Porous polyethylene (Plasti-Pore®)



## VENTILATION TUBES – COMPLETE AND COMPREHENSIVE

The versatile line-up of vent tubes provides the ideal solution for middle-ear ventilation. The patented materials of these outstanding devices set the standard in otology.

### Ultrasil

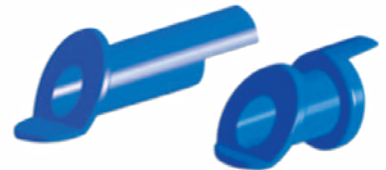
- Minimally bioadhesive material for decreased risk of blockage

### Pacific

- Material for enhanced resistance to bacterial adhesions

### DuraVent

- Highly durable and biocompatible material



## HAND INSTRUMENTS FOR ENT – EXCELLENT AND EXCEPTIONAL

Discover the complete range of gold-standard instruments for ENT applications such as otology, rhinology, micro-laryngoscopy and broncho-oesophagoscopy.

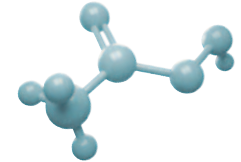
- Extensive range covering standard and special patterns
- Durable design, finest quality materials, made in Germany
- Permanent adaptation to current operational techniques and developments
- Traditional art and precision of workmanship combined with modern technology
- Co-operation with leading hospitals and surgeons worldwide



## MORE CAPACITY THAN EVER – THE ETD3

The innovative and unique new features of the ETD3 set new standards in the automatic reprocessing of flexible endoscopes. Up to four endoscopes can be reprocessed at the same time. The Olympus ETD3 ensures increased efficiency and safety.

- Capacity for up to four flexible ENT scopes
- Fully automated process based on peracetic acid (PAA) process
- User-friendly reprocessing
- Reliable and reproducible reprocessing
- Fully automated documentation
- Traceability of endoscopes
- In line with European regulations



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