Breathtaking

CataRhex 3®

oerHi®
SWITZERLAND
CataRhex®
No Limits
Maintaining and restoring eyesight is the noble task of ophthalmological surgery. Millions of people are waiting for it. It is therefore our goal to make cutting-edge, tested and proven cataract surgical equipment accessible to everyone everywhere. With CataRhex 3® we are tremendously close to achieving our mission! CataRhex 3® gives you independence and you remain in control of costs at all times.
Breathtaking and Unique
Simplicity is the first striking feature you notice about CataRhex 3® – but never underestimate its power! Requiring remarkably little space, CataRhex 3® is incredibly reliable.
Newly Designed Without Compromising Our Proven Track Record

15 years of operating and market experience, combined with insights from thousands of surgeons throughout the world provide the background to this 3rd generation CataRhex device.
A device which requires very little space is an advantage to surgeons! It offers functions expected from a cutting-edge cataract surgical device – without compromise.

CataRhex 3® is attached to the IV pole! This means that CataRhex 3® can easily be moved and, thanks to connection and control elements accessible from the front, it can also be placed in an optimal way. CataRhex 3® can be combined with all Oertli® surgical instruments, including the TITANO® line, and all sterile single-use products.

**The Simpler Solution – Very Convincing**
CataRhex 3® is easy to operate. The fluidics system makes bottle height adjustments superfluous.

**A More Intelligent Concept**
Weighing as little as 11 lbs, CataRhex 3® is small and compact. Being small and light provides extra mobility and flexibility. When transporting the device, the device, including pedal and instruments, easily fits into a pilot case. During operation, it can be attached to an IV pole. At the same time, it is robust and works with voltages from 100 to 240 V.
Intelligent Technology

CataRhex 3® works with direct processor control. The physical concepts of the fluidics system enable work even at very high settings. The device is controlled by DirectAccess®: the small cassette with integrated pressure sensor enables total sterility.

The CataRhex 3® is the third generation by Oertli® and it has been improved yet again. The entire processor and electronic technology is even faster and more efficient, the control panel is larger and provides more information and the flow control has been made even more precise. The innovative CortexMode™ allows cortex removal and capsule cleaning. The CataRhex 3® is an anterior segment device of the latest generation which includes the following functions:

- Irrigation/aspiration
- Continuous irrigation
- CortexMode™
- easyPhaco® technology
- Multimode phaco
- Occlusion mode phaco
- CMP Cool Micropulse Phaco
- Sub2 mm Microincision surgery
- Anterior vitrectomy surgery
- Bipolar diathermy
- RF capsulotomy
- Femto lens aspiration

Fantastic Fluidics

Fluidics is the secret for both the precision and power of the CataRhex 3® device with I/A (CortexMode™), easyPhaco® and anterior vitrectomy. Flow can be controlled in steps of 0.1 ml. In CortexMode™, vacuum can be built up and flow can be controlled. And the vacuum sensor that has been integrated into the tubing system monitors everything without delay.

Patent-registered sensor principle
Thanks to “embedded technology” CataRhex 3® needs no windows or PC operating system. The integrated USB interface enables device updates at any time. Efficient processors survey and control the device functions hundreds of times per second in accordance with the commands and instructions given!

Programmable in No Time, Ready at Once
The entire scope of performance of the CataRhex 3® device is individually at the disposal of 20 different surgeons. Everyone has their own memories and can determine their own pre-settings in the background by means of ParaProg®. All surgical steps can thus be individually adjusted and can be retrieved by pressing the button. This means that CataRhex® is ready without lengthy start-up and / or setting procedures.

• DirectAccess® operating surface with immediate access to all functions
• Value setting by pressing the button during operation
• Retrieving multi-mode programs by pressing the button or the pedal
• A clearly presented control panel ensures fast handling

Anterior Vitrectomy
The Twinac cutter works from a single cut up to 1200 cuts per minute, precisely in accordance with pedal commands. A pressure air connection is not required!

20G, 23G and 25G are at your disposal; sterile, for single-use application.
For Comfortable Handling

Light displays radiate through the dark glass of the control panel providing information on operating values and settings. Adjust your settings with command keys that have a pleasant feel to them. The DirectAccess® surface makes menu navigation superfluous. One precise click and CataRhex® is in the required operation mode. There is a gentle, light and precise feel to the multifunctional pedal. Move it with your foot to execute a number of different commands.

- All instruments are plugged in from the front
- The sterile tubing set is inserted from the front
- The surgeon can move the pedal into optimal position
- The deflectable control panel allows good visibility for both surgeon and OR nurses
- Switching between operations requires very little time and movements

Each of the easily recognizable control panel keys are allocated to the same function, which is immediately activated by a click on the key. This is the principle of DirectAccess®. Various functions are individually stored for up to twenty surgeons and their operating techniques in the ParaProg® background program. The surgeons or their assistants can store their preferred settings at any time by pressing the button.
CataRhex 3® Control Pedal

There are four scopes of movement for linear control of all instruments, for retrieving information from the memories and for switching functions on and off. The pedal is waterproof, requires very little space, weighs only 5.7 lbs and can be moved with the foot.

The CataRhex 3® multifunctional pedal enables comprehensive control with simple foot movements.
Discover the Magic of easyPhaco®!

Fluidics on! Let the elaborate fluidics concept of the Oertli® system work for you. The intelligent fluidics properties of the easyPaco® Technology brings the following advantages for you:

- concentrated axial ultrasound energy delivery
- a capillary aspiration path
**easyPhaco®**

*easy*Phaco® is a development of Oertli R&D in scientific cooperation with Prof. Rupert Menapace, Vienna.

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**easyTip® CO-MICS**

For 1.6-1.8 mm incisions.
Astigmatism-neutral sub2mm surgery. Work with a vacuum of 350 mmHg and 30 ml flow.

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**easyTip® 2.2 mm**

For 2.2-2.4 mm incisions.
Turn the vacuum on to 600 mmHg and 50 ml flow.

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**easyTip® 2.8 mm**

For 2.8-3.2 mm incisions.
easyPhaco® Technology

1. Less Turbulence
The high vacuum setting of easyPhaco® and a wide infusion path create a strong, axially directed flow.

2. Less Repulsion
The high vacuum setting of easyPhaco® and the optimized bevel of the easyTip® lock fragments firmly to the tip mouth.

3. Less Laterally Radiating Energy
US energy is applied axially.

4. Emulsification
High vacuum locking and optimized tip design provide superb coupling of US energy to the core material. Energy transfer to the core material is increased by a factor of 6*.

5. Fragment Aspiration
Emulsified nuclear particles are aspirated by high vacuum through the capillary aspiration channel.

6. Less Surge
Upon occlusion break, the capillary aspiration channel resists a sudden liquid flow while the wide infusion path provides constant IOP. The infusion capacity is 7 times higher than the aspiration volume*.

*Data available upon request.
Phaco Modulation
Catarhlex 3® offers four different performance modulation types that can be used in combination with easyPhaco® or any other phaco technique. Even with the traditional linear control, very short phaco time duration can be achieved.

Continuous Linear
The surgeons get to adjust the power output themselves. The phaco power output corresponds to the pedal deflection.

PULSE Modulation*
Reduces the ultrasound energy, compared to continuous. Pulse frequency (up to 40 Hz) and cooling factor can be selected as desired and independently of the pedal setting. Pulse output corresponds to the pedal position.

Femto Aspiration
The femto laser promises to take over a number of operational steps in cataract surgery in the future. There is only one exception: aspiration of nucleus and cortex and polishing the capsule. This is where Catarhlex 3® is at its best! easyPhaco® high fluidics settings and burst mode make phaco energy for the aspiration of pre-fragmented nuclei go down to zero, they provide tremendous speed and keep the capsule low.

Catarhlex 3® is a great partner for every femto laser!

* PULSE modulation is recommended for lowest energy consumption.
Bipolar Functions: More than Simply Diathermy

Microincision surgery also requires a modern bipolar function. Oertli® has been a pioneer in this field since 1973. CataRhex 3® offers the latest developments:

- Linear macro-haemostasis
- Coaptation of the conjunctiva
- RF capsulotomy

Klöti RF Capsulotomy

Few talk about it, many use it! Despite capsulorhexis and means of capsule staining, the Klöti RF capsulotomy is always a welcome method that has proven its efficiency in hundreds of thousands of cases since 1991. For RF capsulotomy melts the capsular bag. There is no tearing with forceps or needles. Simply gliding over the tissues with the capsulotomy tip is enough. Even under the iris!
Module Build-up

Fluidics System
- Peristaltic pump system
- Tubing system with integrated enclosed pressure sensor
- Auto venting
- Back flow can be limited

Operation
- Control panel with glass cover, transparent illuminating displays and silicone keys
- Linear multifunctional pedal
- Individual programming with ParaProg® for 20 surgeons
- Self-test and preop function
- Audio signal

I/A Function
- 2 programme memories with DirectAccess®
- Vacuum-override function
- Continuous irrigation
- CortexMode™

Phaco Function
- 3 programme memories with DirectAccess®
- Ultrasound phaco with auto tuning
- Hexadisq® handpiece with 6 piezo plates
- Linear, PULSE, BURST and panel mode
- Occlusion mode
- easyPhaco®, CO-MICS and MICS technology

Anterior Segment Vitrectomy
- 3 programme memories
- Twinac guillotine cutter
- 20G, 23G, 25G
- Linear 30 to 1200 cuts/minute
- Single cut
- Irrigation/aspiration/cut
- Irrigation/cut/aspiration

Bipolar functions
- Macro-diathermy
- Conjunctiva coaptation
- RF capsulotomy
Disclaimer
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