

Ingenieurbüro Benedikt Schemmer Where Technology is Grown.





Ingenieurbüro Benedikt Schemmer

medm_ems ultrasonic systems

Dorling drive systems

all ultrasonics. all medical. all the time.



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"Amy": 10.9cm (4.3") Systems for Dental Applications



"Claire": 17,8 cm (7") Systems for Wound Debridement





medm_ems ultrasonic systems We provide for a fast and clear path from the early design stages to the finished ultrasonic system - whatever your application may be.

From experience we know that the development of ultrasonic systems can be difficult, time consuming and error-prone.

That's why we give you a head start with our know-how and ultrasonic components plus selected components from reliable suppliers.

Whether you are already developing ultrasonics or are just in the planning stages, we can help you review or plan your system. This helps to avoid errors others have already made and saves you valuable development time.

To further increase your productivity we have developed and pre-selected components for easy integration into new systems. They serve as building blocks for your device. As such they are designed to

be re-targetable to a variety of applications.

We will help you to design the complete system using our tested components and pre-configured systems (shown above) to give you a running start in the marketplace.

This includes all components such as sonotrodes, piezo-ceramics, connectors, enclosures etc.

So you save the time and effort to find out what works. And what doesn't ...

As a truly fab-less company we can then easily find the right manufacturer for your budget and quality requirements as well as volume in the final stages of production.

At the same time we can rapidly manufacture prototypes to keep your development process fast and easy.

Consulting Services:

- Sonotrodes: Design and Prototypes
- Piezo Ceramics: Testing, Selection and Qualification
- Components: (Connectors, Cabling, Semiconductors, Fluidics, etc.)
 Testing, Selection and Qualification Supply Chain Management
- Electronics and Software: Design, Review and Prototypes
- Enclosures etc.: Design and Prototypes
- Documentation
- Research
- Design for Manufacturing

Complete Systems:

Almost ready to run, requiring little effort for adaptation to your specific needs.

Available from spring 2011 starting with the smaller system "Amy" targeted at entry level dental applications such as scaling.

Possible Applications:

Dental Scaling Dental Surgery

Wound Debridement Liposuction

Liver Surgery Neuro Surgery

Treatment of Ischemic Stroke Phacoemulsification

Ultrasonic Options:

Frequency: 25, 28, 30, 35, 40, 45, 55 and 65 kHz Power: from 1 Watt to approx. 50 Watts Resonance and power controlled Voltages: 300 Vpp to 1kVpp (from 0 or 50% to 100% in steps or continuous)

Handpiece / Sonotrode Options:

- smaller handpieces for lower power and dental applications
- larger and longer handpieces & sonotrodes for minimally invasive surgery

User Options:

A variety of interfaces is available to supply user specific components with power and control signals. The integrated software can accommodate your specific user interface design.

Features:

Internal wide range power supply (85 to 264V) HD Video capability for Devices from 12.1"

Display Options (on request):

(3.2") 4.3"

7"

10.6"

(12.1")

15.3"

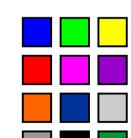
Fluid Options:

- Internal membrane pump
- peristaltic pump
- syringe pump
- water inlet (pressure controlled)
- sterile

Depth / Design Options:

- adaptable front and back to accommodate your button, display and connector arrangement
- adaptable depth to accommodate larger components or provide sleeker design

Standard Color Options (Frame):



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