Vibrant Soundbridge Vibroplasty™ Couplers
The Vibrant Soundbridge has proven to be an effective and reliable middle ear implant over many years. The system consists of an internal and an external component.

The external component, the Amadé audio processor, offers the latest hearing technology combined with enhanced features. The internal implant contains the innovative patented technology of the FMT which can be used in a very flexible way to optimally compensate different kinds of hearing loss.

A feature unique to the Vibrant Soundbridge is the single point attachment of the FMT. This means that the FMT is only attached to the structure of the middle ear which it is stimulating. It is not fixed to the mastoid. 

**Vibroplasty**

This versatility of the FMT has led to successful surgical applications, called Vibroplasty. Vibroplasty is the treatment of hearing loss via vibratory stimulation in the middle ear. For mild to severe sensorineural hearing loss as well as for conductive and mixed hearing losses, the different treatments have proven to be safe, effective and reliable in various complicated middle ear conditions.

Alongside the existing and very successful ways of placing the FMT, such as the Incus or the Round Window Vibroplasty, Vibroplasty Couplers¹ now offer additional ways of attaching the FMT in the middle ear. This allows even more surgical flexibility in a variety of conditions and anatomies. Vibroplasty Couplers are attached to the FMT and couple the FMT stimulation to various middle ear structures.

¹Vibroplasty Couplers were developed together with Prof. K.-B. Hütenbrink from Cologne and Kurz GmbH, Germany
Vibroplasty™ Couplers

ROUND WINDOW
When the anatomy does not allow for a perpendicular placement of the FMT to the round window membrane, a Vibroplasty-RW-Coupler can be used as an alternative coupling aid.

Advantages:
• More flexibility in Round Window Vibroplasty
• Adapts to fit smaller round window diameters
• Less drilling in many cases

*Cartilage to give pre-stress.

OVAL WINDOW
When there is no stapes super structure, a Vibroplasty-OW-Coupler can be placed directly onto the stapes footplate.

*Cartilage in OW niche to stabilize assembly.

HEAD OF THE STAPES
Alternative coupling aids for the FMT attachment to the head of the stapes are available in Vibroplasty-ClIP-Coupler and Vibroplasty-Bell-Coupler design.

Advantages:
• Standardized procedure in the oval window region
• Uses natural pathway of sound
• Available in different sizes

*Cartilage in OW niche to stabilize assembly.
Clinical experience & Technical Data

First clinical experience is available from Prof. K.-B. Hüttenbrink in Cologne, Germany. Graphs below show audiometric results with Vibroplasty-OW-Coupler and Vibroplasty-CliP-Coupler.

*Adapted from Prof. K.-B. Hüttenbrink et al., TORP-vibroplasty: a new alternative for the chronically disabled middle ear Otol Neurotol. 2008

Vibroplasty-OW-Coupler*  Vibroplasty-CliP-Coupler*  Vibroplasty-Bell-Coupler*  Vibroplasty-RW-Coupler

*other sizes on request

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