



Neurosurgery with ultrasonic technology by Söring: accurate preparation and effective aspiration.





## → The Söring Micro-Handpieces: for neurosurgery.

Meanwhile the tissue-selective removal of cranial and spinal tumours using ultrasonic technology has become gold standard. The ultrasonic dissectors by Söring allow the surgeon to proceed precisely and efficiently without traumatising the surrounding tissue. They are suited to hard, medium-hard and soft tumours and are safe to handle.

Söring offers a great repertoire of instruments with different working lengths, sonotrode diameters and

with or without intregrated aspiration for the most varying anatomical conditions. The choice of the instrument depends on the localisation, size and consistency of the tumour as well as on personal preferences of the surgeon.

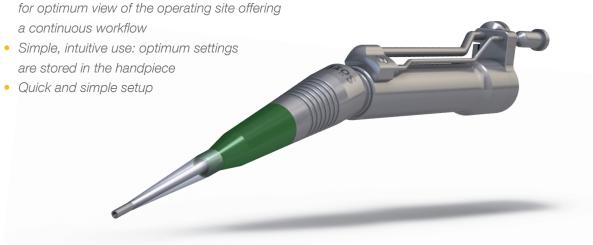
All Söring Micro-handpieces excel with an extremely robust, highly ergonomic design made from medical grade titanium. They are fully reusable and exceptionally long-lasting.

· Availability of three different types plus an endoscopic handpiece offers

maximum flexibility

### Powerful Micro-Handpieces with integrated aspiration: 92 series.

- · Low weight for highly comfortable working
- Ergonomic design
- Highly efficient integrated aspiration system for optimum view of the operating site offering



Working length	Weight	Sonotrode tip (outer)	Sonotrode tip (inner)	Irrigation
35 mm	81 g	2.0 mm	1.4 mm	Outside
96.5 mm	82 g	2.0 mm	1.4 mm	Outside
107.5 mm	83 g	2.3 mm	1.7 mm	Outside



# Ultrasonic aspirator for endoscopic neurosurgery: 92 series (Micro-Handpiece model Gaab).

· Minimially invasive tumour aspiration to the cranium

Access to specific areas of the brain without damaging critical structures

· Low weight for highly comfortable working

 Applicable in combination with the neuroendoscope model Gaab (Karl Storz GmbH)

 Particularly suitable for the removal of e.g. pituitary tumours



Working length	Weight	Sonotrode tip (outer)	Sonotrode tip (inner)	Irrigation
213.5 mm (ENP, for 3mm trocar)	105 g	2.2 mm	1.4 mm	Via endo- scope

The most delicate and lightest ultrasonic handpieces used with external aspiration: 91 series.

- Smallest and at just 47 g working weight lightest ultrasonic handpiece worldwide for delicate preparation und maximum comfort
- Ergonomic design
- Sophisticated construction allows access to the highly sensitive areas of the brain
- Removal of soft to hard brain tumours whilst preserving the surrounding structures
- Particularly suitable for the dissection of superficial brain tumours
- · Available in two different working lengths



Working length	Weight	Sonotrode tip (outer)	Sonotrode tip (inner)	Irrigation
43.5 mm	47 g	1.4 mm	0.9 mm	Inside
121 mm	52.5 g	1.4 mm	0.9 mm	Inside



## Overview: the application areas.

Tissue-selective aspiration and resection of cranial and spinal tumours of different origin:

- Neuroepithelial tumours
- Mesodermal tumours
- Ectodermal tumours

# At a glance: the essential benefits.

- Precise, efficient reduction of tumour tissue
- Suited to various tissue structures
- No traumatisation of the surrounding tissue
- Safe handling
- Large repertoire for the most varying applications

### Order information: Micro-handpieces, 92 series

All Söring Micro-handpieces are compatible with: Sonoca 300, Sonoca 400

Brief overview		Item no.	Packaging unit
Handpiece	Micro-handpiece, short, angled (working length: 35 mm)	92-020	1
	Micro-handpiece, long, angled (working length: 96.5 mm)	92-021	1
	Micro-handpiece, long, angled (working length: 107.5 mm)	92-112	1
	Micro-handpiece (model Gaab), long, straight (working length: 213.5 mm (ENP for 3 mm Trocar))	92-030	1
+ Instrument cable	Instrument cable, straight,	240K0095	1
	or instrument cable, angled	240K0195	1
+ Hose set	Disposable hose set, double lumen	700S0316	12
+ Cover	Disposable cover (for 92-020)	612K0037-10	10
		612K0037-50	50
	Disposable cover (for 92-021)	612K0038-10	10
		612K0038-50	50
	Disposable cover (for 92-112)	612K0039-10	10
		612K0039-50	50

### Order information: Micro-handpieces, 91 series

All Söring Micro-handpieces are compatible with: Sonoca 300, Sonoca 400

Brief overview		Item no.	Packaging unit
Handpiece	Micro-handpiece, short, angled (working length: 43.5 mm)	91-020	1
	Micro-handpiece, long, angled (working length: 121 mm)	91-021	1
+ Instrument cable	Instrument cable, straight,	240K0095	1
	or instrument cable, angled	240K0195	1
+ Hose set	Disposable hose set, single lumen	700S0310	12



## Perfect symbiosis of technologies: cleverly combined.

From the opening till the closure of the wound - Söring supports the surgeon during the complete procedure. As a pioneer in ultrasonic technology and provider of innovative high-frequency and plasma coagulation devices Söring offers trusted quality and performance making surgeon's life easier day by day. The combination of the **ultrasonic generator Sonoca 300** and the **CPC 3000 cold plasma coagulator** is just one of multiple options perfectly suited for use in neurosurgery. While the Sonoca 300 is the reliable partner for all Micro-handpieces, the CPC 3000 offers beside cold plasma coagulation the full range of classic monopolar and bipolar high-frequency functions.

### An overview of the benefits:

- · Accurate preparation and effective aspiration of tumours with ultrasound
- Gentle non-contact coagulation of resection surfaces with cold plasma technology (CPC):
  - Low penetration depth of the thermal effect into the tissue
  - Safe application even within sensitive areas
- · Classic monopolar and bipolar high-frequency functions for maximum flexibility

## The ultrasonic generator: **Sonoca 300.**

The Sonoca 300 is the high-performance specialist delivering electrical energy that is converted by piezoelectric material within the handpiece into ultrasonic vibration.

#### The Sonoca 300 excels by:

- Simple, intuitive use
- Self-check during start-up
- Automatic instrument recognition and instrument check
- Automatic setting of appropriate working parameters
- Extremely quick set-up



5-000 Sonoca 300

## The high-frequency generator: **CPC 3000.**

The CPC 3000 connects two worlds to one another: classic electrosurgery with the benefits of contactless cold plasma coagulation – a technology using medical helium gas without current flow through the body.

#### The CPC 3000 excels by:

- Automatic CPC instruments recognition, instrument check and working parameter settings
- Compatible to many monopolar and bipolar instruments with standard 3- or 2-pin-plugs
- Maximum flexibility
- 10 user programs for saving personally preferred settings



C300-000

**CPC 3000** 



Outstandingly well-suited to neurosurgery.