

# SpeedSurg

Micro Drill- and Shaver System







SpeedSurg – maximum precision and versatility in ENT surgery

# SpeedSurg

Our motorsystem for **HighSpeed** and **LowSpeed applications** allows highest precision and versatility in ENT surgery.

With its safety features SecureLock and Quick-Release, this system sets new standards in terms of security and user comfort.

One **console** for the entire **High-** and **LowSpeed** range. Enjoy the convenience of operating at a HighSpeed of up to 80,000 rpm or a LowSpeed of up to 40,000 rpm, with the same console.



# Versatile user options and two motor connections for maximum comfort

Thanks to its diverse application functions, for driving an electronic motor for drilling and sawing on bones, as well as for shaving treatment in the ENT area or head and neck surgery the SpeedSurg control unit can handle the entire range of ENT applications.

The system automatically detects the connected motors and controls the appropriate modes.

A built-in warning function notifies the operator about the start of the HighSpeed mode, the running direction and most possible system failures.



- 300-80,000 rpm, continuously
- Integrated warning function
- · 8 roller pump

78CU80-EN

# **HighSpeed** Electronic Motor for Micro Drill System

- Compact low-vibration motor with up to 80,000 rpm
- Low heat generation
- Sturdy Design
- · Light weight
- Compatible with all SPIGGLE & THEIS HighSpeed handpieces

78MM08003



# HighSpeed and CI-HighSpeed Drill handpieces

# Supreme control and usability in everyday use

Thanks to their optimized ergonomics and the integrated **SecureLock** and **QuickRelease** systems, the SPIGGLE & THEIS hand-pieces guarantee optimal control and maximum user comfort.



#### **SecureLock**

Acoustic and tactile feedback confirms the correct and safe attachment of the handpiece.

#### QuickRelease

For easy and safe release of rotating instruments. Thanks to the special drill shank and the QuickRelease function, fast drill replacement during surgery becomes child's play.

# Shaft coupling



guarantees secure and easy locking of the rotary instrument.

# HighSpeed and CI-HighSpeed Drill handpieces

#### **Details:**

- Low-vibration
- Integrated safety mechanisms SecureLock and QuickRelease
- Up to 80,000 rpm







# Handpiece for rotary instruments, black

ArtNo.	Length (mm)	Form	Color
78HG1070	70	straight	black
78HW1070	70	angled	black

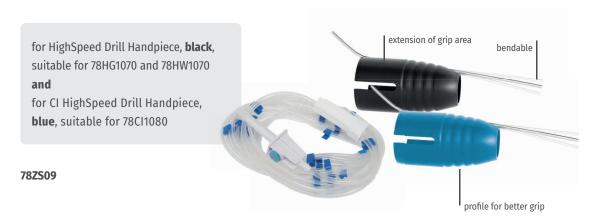


# Cochlear Implant (CI)-Handpiece for rotary instruments, blue

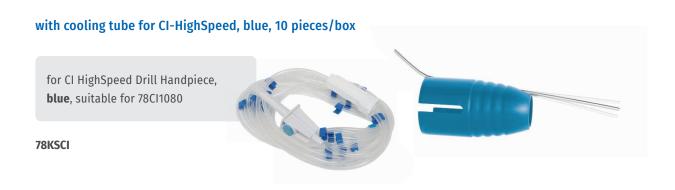
- special CI-handpiece and burs available
- longer, tapered tip for a better sight
- superb concentricity due to advanced bearing design

ArtNo.	Length (mm)	Form	Color
78CI1080	75	angled	blue

# with cooling tube for HighSpeed and CI-Highspeed, 10 pieces/box







# without cooling tube, 10 pieces/box

- Pre-installed clamps on the hose set
- Sterile
- Single-use
- 3300 mm

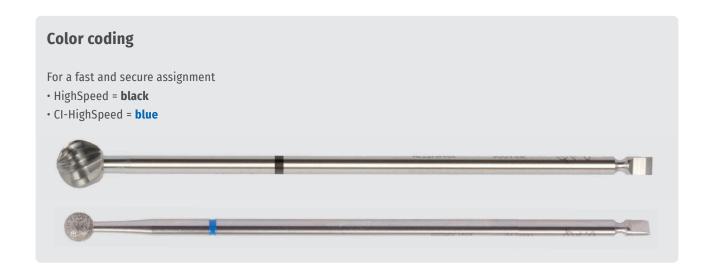
#### 78ZS07



# The spearhead of the SpeedSurg system represent our Rotary Instruments.

Skilled workmanship and inventive design are the driving forces of our rotary instruments. The design guarantees low-vibration drilling and milling work with the highest precision. Different geometries and different diameters allow excellent operative results.

The distinctive cutting geometry of the A-toothing concept makes it unique in its class and enables superior nontraumatic, fast drilling and milling.



All our rotating instruments convince with low Vibration and high concentricity

# Stand for rotating instruments, HighSpeed



- For all offered bur lengths available
- Stainless steel
- For 16 burs
- Sterilizable

#### BS7800116



• Drilling heads with asymmetrical cutting design

#### Carbide

ArtNo.	Blades	Ø (mm)	Length (mm)
HST760605X	6	0.5	76.5
HST760608X	6	8.0	76.5
HST760610X	6	1.0	76.5
HST760614X	6	1.4	76.5
HST760618X	6	1.8	76.5
HST760623X	6	2.3	76.5
HST740831X	8	3.1	74.5
HST741040X	10	4.0	74.5
HST741250X	12	5.0	74.5
HST741460X	14	6.0	74.5



· Atraumatic and fast drilling and milling

#### Steel, A-toothing

ArtNo.	Blades	$\emptyset$ (mm)	Length (mm)
HSSMA7431X	10	3.1	74.5
HSSMA7440X	12	4.0	74.5
HSSMA7450X	14	5.0	74.5
HSSMA7460X	16	6.0	74.5



Dense and uniform diamond distribution for exact grinding behavior

# Diamond, medium grain

ArtNo.	Ø (mm)	Length (mm)
HSDMD7604X	0.4	76.5
HSDMD7606X	0.6	76.5
HSDMD7608X	0.8	76.5
HSDMD7610X	1.0	76.5
HSDMD7614X	1.4	76.5
HSDMD7618X	1.8	76.5
HSDMD7623X	2.3	76.5
HSDMD7431X	3.1	74.5
HSDMD7440X	4.0	74.5
HSDMD7450X	5.0	74.5
HSDMD7460X	6.0	74.5



· Super rough diamond for bone removal and grinding

#### Diamond, super coarse grain

ArtNo.	Ø (mm)	Length (mm)
HSDR27623X	2.3	76.5
HSDR27431X	3.1	74.5
HSDR27440X	4.0	74.5
HSDR27450X	5.0	74.5
HSDR27460X	6.0	74.5

Length I: head diameter up to 3.0 mm - overall length 76.5 mm / head diameter from 3.0 mm - overall length 74.5 mm



• Drilling heads with asymmetrical cutting design

#### Carbide

ArtNo.	Blades	$\emptyset$ (mm)	Length(mm)
HSTCI760605X	6	0.5	79.5
HSTCI760608X	6	0.8	79.5
HSTCI760610X	6	1.0	79.5
HSTCI760614X	6	1.4	79.5
HSTCI760618X	6	1.8	79.5
HSTC1760623X	6	2.3	79.5
HSTCI1431X	8	3.1	79.5
HSTCI1440X	10	4.0	79.5
HSTCI1450X	12	5.0	79.5
HSTCI1460X	14	6.0	79.5



Atraumatic and fast drilling and milling

#### Steel, A-toothing

ArtNo.	Blades	Ø (mm)	Length (mm)
HSSMACI23X	10	2.3	93.0
HSSMACI31X	10	3.1	79.5
HSSMACI40X	12	4.0	79.5
HSSMACI50X	14	5.0	79.5
HSSMACI60X	16	6.0	79.5



- Bottleneck
- Dense and uniform diamond distribution for exact grinding behavior

# Diamond, medium grain

ArtNo.	Ø (mm)	Length (mm)
HSDMDCI7604X	0.4	93.0
HSDMDCI06X	0.6	93.0
HSDMDCI08X	0.8	93.0
HSDMDCI12X	1.2	93.0
HSDMDCI7614X	1.4	93.0
HSDMDCI17X	1.7	93.0
HSDMDCI23X	2.3	93.0
HSDMDCI27X	2.7	79.5
HSDMDCI31X	3.1	79.5
HSDMDCI40X	4.0	79.5
HSDMDCI7450X	5.0	79.5
HSDMDCI7460X	6.0	79.5



• Super rough diamond for bone removal and grinding

#### Diamond, super coarse grain

ArtNo.	Ø (mm)	Length (mm)
HSDRCI27623X	2.3	93.0
HSDSGCI31X	3.1	79.5
HSDSGCI40X	4.0	79.5
HSDSGCI50X	5.0	79.5
HSDRCI27460X	6.0	79.5



HSDMZCI06X 0.6 93.0

# Stand for rotating instruments, CI-HighSpeed



- Length CI + CI93
- Stainless steel
- For 16 burs
- Sterilizable

#### BS78CI016

Customized lettering possible on request.

# Control unit in **LowSpeed** applications



# LowSpeed Electronic motor for drilling, sawing and shaving





# LowSpeed drilling handpieces, angled\*

Machine cleaning possible

ArtNo.	Bur (mm)
77HW001	70
77HW002	95
77HW003	125

\* cooling tube included



# LowSpeed dirlling handpieces, straight\*

Machine cleaning possible

ArtNo.	Bur (mm)
77HG001	44,5
77HG002	70,0

\* cooling tube included



# Spare parts - cooling tubes for LowSpeed handpieces, 1 piece

- · Short spray nozzle
- · Constant flow

#### 77ZZS03 for handpiece 77HG002 and 77HW001

- Long spray nozzle
- Droplet irrigation

# 77ZZS06 for handpiece 77HG002 and 77HW001

- Long spray nozzle
- Droplet irrigation
- Flexible

# 77ZZS06-B

# Irrigation set without cooling tubes, 10 pieces/box

- pre-installed fixing clips on hose set
- sterile
- single use
- 3300 mm

#### 78**Z**S07



# for LowSpeed applications, non-sterile, reusable, length 70 mm, 1 piece/box



• Drilling heads with asymmetrical cutting design

#### Carbide

ArtNo.	Blades	Ø (mm)	Length (mm)
CR070010506	6	0.5	70
CR070010806	6	0.8	70
CR070011006	6	1.0	70
CR070011206	6	1.2	70
CR070011406	6	1.4	70
CR070011606	6	1.6	70
CR070011806	6	1.8	70
CR070012106	6	2.1	70
CR070012306	6	2.3	70
CR070012708	8	2.7	70
CR070013108	8	3.1	70
CR070013508	8	3.5	70
CR070014010	10	4.0	70
CR070014510	10	4.5	70
CR070015008	8	5.0	70
CR070015012	12	5.0	70
CR070016008	8	6.0	70
CR070016014	14	6.0	70
CR070016508	8	6.5	70
CR070017016	16	7.0	70



• Drilling heads with asymmetrical cutting design

# Steel, A-toothing

	-		
ArtNo.	Blades	Ø (mm)	Length (mm)
CR070221010	10	1.0	70
CR070221410	10	1.4	70
CR070222310	10	2.3	70
CR070223110	10	3.1	70
CR070223510	10	3.5	70
CR070224012	12	4.0	70
CR070225014	14	5.0	70
CR070226016	16	6.0	70



• Drilling heads with asymmetrical cutting design

#### Steel, Cross-Cut

ArtNo.	Blades	Ø (mm)	Length (mm)
CR070021410	10	1.4	70
CR070022312	12	2.3	70
CR070023112	12	3.1	70
CR070024014	14	4.0	70
CR070025014	14	5.0	70
CR070026016	16	6.0	70

Further **non-sterile** burs of lengths 95 mm and 125 mm on request

# for LowSpeed applications, non-sterile, reusable, length 70 mm, 1 piece/box



#### Steel

ArtNo.	Blades	Ø (mm)	Length (mm)
SR070010606	6	0.6	70
SR070010806	6	0.8	70
SR070011006	6	1.0	70
SR070011408	8	1.4	70
SR070011808	8	1.8	70
SR070012308	8	2.3	70
SR070012710	10	2.7	70
SR070013106	6	3.1	70
SR070013110	10	3.1	70
SR070013506	6	3.5	70
SR070013512	12	3.5	70
SR070014012	12	4.0	70
SR070014512	12	4.5	70
SR070015008	8	5.0	70
SR070015012	12	5.0	70
SR070016014	14	6.0	70
SR070017016	16	7.0	70



• Atraumatic and fast drilling and milling

# Steel, A-toothing

ArtNo.	Blades	Ø (mm)	Length (mm)
SR070222310	10	2.3	70
SR070223110	10	3.1	70
SR070223510	10	3.5	70
SR070224012	12	4.0	70
SR070225014	14	5.0	70
SR070226016	16	6.0	70



Dense and uniform diamond distribution for exact grinding behavior

# Diamond, medium grain

ArtNo.	Ø (mm)	Length (mm)
DR070010691	0.6	70
DR070010791	0.7	70
DR070010891	0.8	70
DR070011091	1.0	70
DR070011291	1.2	70
DR070011491	1.4	70
DR070011691	1.6	70
DR070011891	1.8	70
DR070012191	2.1	70
DR070012391	2.3	70
DR070012591	2.5	70
DR070012791	2.7	70
DR070012991	2.9	70
DR070013191	3.1	70
DR070013591	3.5	70
DR070014091	4.0	70
DR070014591	4.5	70
DR070015091	5.0	70
DR070016091	6.0	70
DR070017091	7.0	70



· Super rough diamond for bone removal and grinding

# Diamond, extra coarse grain

ArtNo.	Ø (mm)	Length (mm)
DR070012393	2.3	70
DR070012793	2.7	70
DR070013193	3.1	70
DR070013593	3.5	70
DR070014093	4.0	70
DR070014593	4.5	70
DR070015093	5.0	70
DR070016093	6.0	70
DR070017093	7.0	70



# Diamond, medium grain, barrel

ArtNo.	Ø (mm)	Length (mm)
DR070132091	2.0	70

# for LowSpeed applications, non-sterile, reusable, 1 piece/box



# Carbide, egg shaped

ArtNo.	Blades	Ø (mm)	Länge (mm)
CR070074008	8	4.0	70
CR070075510	10	5.5	70



#### Carbide, Lindemann bone bur

	Blades	∅ (mm)	Länge (mm)
CR065051604	4	1.6	65
CR065052104	4	2.1	65



# Steel, bud shaped

ArtNo.	Blades	Headlength	Ø (mm)	Length (mm)
SR070086014	14	11.0	6.0	70
SR070087016	16	12.5	7.0	70
SR070088016	16	14.0	8.0	70



# Steel, bud shaped, cross-cut

	•			
ArtNo.	Blades	Headlength	Ø (mm)	Length (mm)
SR070095012	12	9.5	5.0	70
SR070096014	14	11.0	6.0	70
SR070098016	16	14.0	8.0	70



# Steel, cylindrical, cross-cut

ArtNo.	Blades	Headlength	Ø (mm)	Length (mm)
SR070126014	14	11.0	6.0	70



# Steel, egg shaped, cross-cut

ArtNo.	Blades	Headlength	Ø (mm)	Length (mm)
SR070074010	10	9.5	4.0	70
SR070075012	12	10.0	5.0	70
SR070076014	14	11.0	6.0	70

Further **non-sterile** burs of lengths 95 mm and 125 mm on request

# Stand for rotating instruments, LowSpeed



- For instruments with length 70 mm
- Stainless steel
- For 24 burs, also available for 16, 34 and 45 burs
- Sterilizable

16 burs BS23507016 24 burs BS23507024 34 burs BS23507034 45 burs BS23507015-3



# Spike Cutter, straight



ArtNo.	$ID \oslash (mm)$	WL (mm)	Angle
78SB130	3.4	105	0°
78SB230	4.2	105.1	0°

# Spike Cutter, concave



ArtNo.	ID ∅ (mm)	WL (mm)	Angle
78SB131-C	3.4	104.3	15°
78SB231-C	4.2	104.3	15°
78SB330-C	3.4	101.8	30°
78SB430-C	4.2	101.8	30° /
78SB134-C	3.4	98.8	40°
78SB234-C	4.2	98.8	40°

# Agg. Full Radius, straight



ArtNo.	$ID \oslash (mm)$	WL (mm)	Angle
78SB100	3.4	105	0°
78SB200	4.2	105	0°

# Agg. Full Radius, concave



ArtNo.	ID ∅ (mm)	WL (mm)	Angle
78SB315	3.4	104.3	15°
78SB415	4.2	104.3	15°
78SB331	3.4	101.8	30°
78SB430	4.2	101.8	30°
78SB340	3.4	98.8	40°
78SB440	4.2	98.8	40°



# Handpieces

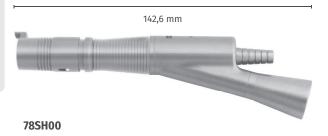
- Speed range in oscillating mode: 300 5000 U/min
- Oscillation period: 0.2 3.0 sec/cycle
- Speed range in continuous mode: 300 6000 rpm
- Max. torque at shaver blade: 12 Ncm

- 15,000 rpm
- External cooling
- Machine cleaning possible

- 15,000 rpm
- External cooling
- Machine cleaning possible

- 2 mm stroke
- External cooling
- Machine cleaning possible

# **ENT Shaver Handpiece, angled**



# Handpiece for micro sagittal saw, 1 piece



77SP000 \*

# Handpiece for oscillating micro saw, 1 piece



7750000 \*

# Handpiece for micro compass saw, 1 piece



77SS00 \*

\*Saw blades not included in delivery.

# Accessories for Mirco Drill and Shaver System



# **Foot pedal Vario IPX8**

- coolant regulation
- program selection
- motor controller

78FS01



# **Tripod for coolant**

78ST45

# Special Oilspray



- **Maintenance spray 00-108-005** for drill handpieces, electronic motors and instruments
- Nozzle **78AH01** for use of the Special Oil Spray at the HighSpeed and LowSpeed drilling handpiece
- **Nozzle 78AM01** for use of the Special Oil Spray at the HighSpeed and LowSpeed electronic motor

# System screen basket for drilling handpieces and electronic motors - compatible for validated cleaning and sterilization

- Multi-system basket 236 x 236 x 48 (43), large grid, buffering elements
- Multi-system cover 239 x 239 x 7, closure
- · Hanger bracket, rotatable
- Stop pin
- · 3-step stepped sleeve
- Universal fixation, cheese-head screw (standard)
- Flexible holding band, 2 x holder segment
- Plate 5 mm, Ø 10 mm, Ø 4 mm hole, blue
- Flat adapter nut
- Multiadapter with 1 x special thread on the outside and inside
- Sinking tube with 2 x plug-in adapter with seal, quick fixation, Plug connection and 1 threaded plug
- Cap adapter filter Ø 10 mm, standard filter, ring Ø 11.5 x 1 mm
- LL female tube attachment Ø 6.5 mm
- Tube Ø 5 mm (inner diameter), 30 cm



#### 78SK00

