

# Aesculap<sup>®</sup> microspeed uni

Get the speed you need



Aesculap Power Systems



# Relax – the power is in your hand.

*ergonomic, lightweight and quiet.....*



## **Ergonomic, lightweight and quiet – exceptional!**

With a weight of under 100 g and an outstanding design, the microspeed uni XS motor nestles like a pencil in your hand.

The sure grip profile of the compatible Hi-Line XS handpieces round off this ergonomic masterpiece. Fatigue free operation, however, also means noise-free operation. The extremely low noise level of the new high speed motor represents a further accomplishment of this innovative and unique motor concept.



# Get the speed you need.



*small – powerful – inspiring*

## Small – powerful – inspiring

This completely innovative high speed motor from Aesculap sets a milestone in the field of electric motor systems.

Small – but as powerful as its larger counterparts. The microspeed uni XS motor shows its true greatness in clinical use. Thanks to its new patented motor technology, cutting operations can be performed at a constant power and a speed of 80,000 rpm. The microspeed uni XS motor thus performs high-torque skull perforation as effortlessly as it does burring procedures to the vertebral column.

Combined with the slimline, ergonomic Hi-Line XS handpieces and the Hi-Line XS precision tools, the compact microspeed uni XS high speed motor allows for great visibility of the operation site, even in deep and very small accesses.

You will undoubtedly be impressed by this compact power pack.



# Relax – the power is in your hand.

## The control unit – High tech for intuitive and easy operation

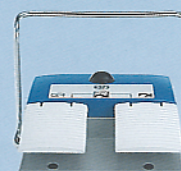
- Touch Screen with clear, self-explaining symbols and intuitive user dialog for easy operation
- Customizable settings: Acceleration and stopping characteristics for individual motors, oscillation angle and much more can be adapted to your individual preference
- The versatile control unit combined with the microspeed uni motors and hand-pieces designed for specific indications makes it a preferable system for
  - Neuro
  - Neurotology
  - Spine
  - Small bone
  - Arthroscopy
- Two motor connection sockets for effortless switching between the motors
- Integrated irrigation pump allows precise adjustments of the pump flow



GD670



GD668



GD671

## The foot controls

Their high-quality finish and resistance against fluids ensure a long lifetime for our foot control switches. Two options of foot switches are available – one pedal or two pedals.





### The motors

- **Specialized motors for special requirements**

The eight microspeed uni motors have been designed especially for the indication specific requirements. Combine them with its three specialized handpiece ranges, Hi-Line XS, micro-Line, mini-Line and you get the system according to your wishes.

- **Unrestricted cleanability**

The high-grade titanium motors and motor cables can be safely processed with alkaline cleaning agents. With Eccos, the ingenious storage and cleaning system, they can be washed simply and practically in the washing machine. For more information please refer to page 24.

- **High quality material**

State-of-the art manufacturing technology, years of experience in the field surgical motors, and the application of high quality material such as titanium make a product of value and quality.



GD672

GD673

### The motor cables

The motor cables are available either with hand control or for use with our foot control pedals.

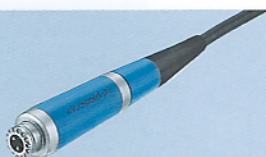


# microspeed uni – is in your hand. for **neuro, neurotology and spine**

## Precise interventions require instruments that are especially adapted to the task

In order to perform high-precision neuro, neurotological and spinal procedures, surgical instruments that do not impair the tactile sense are of enormous importance. Moreover, new, minimally invasive access techniques increasingly require the use of miniaturized instruments for the purpose of enhancing visibility of the operating site.

During the development of our motor systems, the focus is therefore always on a design which is adapted to the latest access techniques and the most recent findings in ergonomics.



## microspeed uni XS high speed motor GD675

- Small and light high speed motor with a speed range of 10,000 – 80,000 rpm
- Constant power through special motor actuation
- Extremely quiet
- Acceleration and stopping characteristics can be adjusted to individual requirements
- Unrestricted motor guidance thanks to particularly thin and flexible motor cable
- Easy handling of the eXtra Slim Hi-Line XS handpieces
- Smooth-running and vibration-free
- Compatible with all Hi-Line XS handpieces



# Hi-Line XS Handpieces

Craniofacial and multi-functional handpieces



## microspeed uni high speed motor GD676

- Compatible with all Hi-Line and Hi-Line XS handpieces
- Can be combined with motor cables with hand control or with foot control pedals
- Speed range: 10,000 - 80,000 rpm
- Constant power through special motor actuation
- Acceleration and stopping characteristics can be adjusted to individual requirements



# Hi-Line XS Handpieces

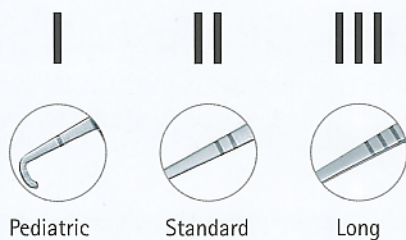
for neuro, neurology and spine

Craniotome and multifunction handpiece

## Handpiece



GB740R



Pediatric

Standard

Long

## Attachments



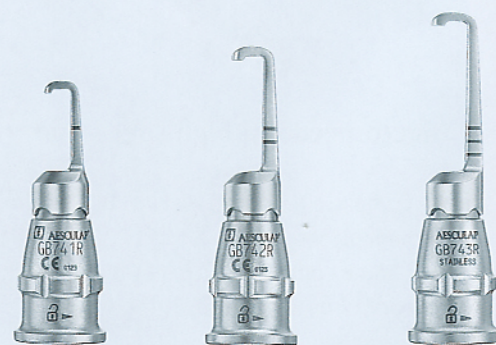
Support sleeve  
for reaming

▲ GB745R



Drill depth guard for controlled  
pilot drilling  
Drilling depth: 2 - 8 mm adjustable

▲ GB744R



Fixed  
dura guards

I  
GB741R

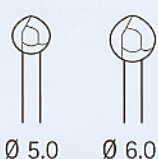
II  
GB742R

III  
GB743R



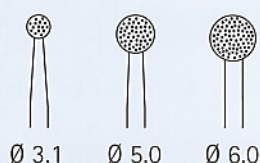
## Burrs

### Twin-Cut ball burrs



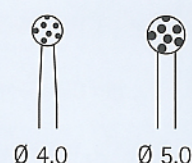
GE396R GE397R

### Diamond burrs coarse



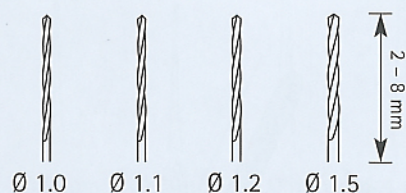
GE394R GE398R GE399R

### extra coarse



GE386SU GE387SU ②

### Twist drills



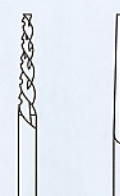
GE390R GE391R GE389R GE395R

### Pin cutter



GE392R

### Craniotome cutters spiral straight

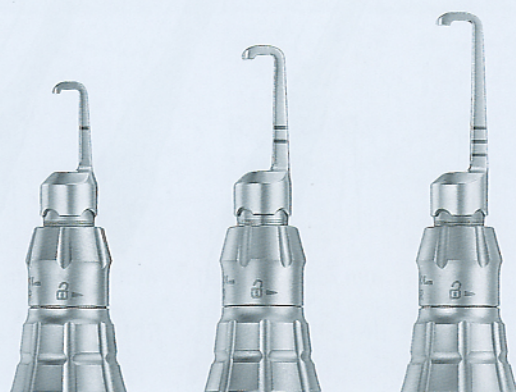


I GE420R GE429SU ②

II GE520R GE529SU ②

III GE620R GE629SU ②

Steerable  
dura guards



I  
GB746R

II  
GB747R

III  
GB748R



# Hi-Line XS Handpieces

## Standard handpieces

The proven user-friendly ring coding system allows simple and clear identification of handpiece and associated burs.


Ring coding  
standard handpieces  
and burs











## Hi-Line XS burrs


### Diamond burrs, long neck

	Ø	0.6 mm	0.8 mm	1.0 mm	1.4 mm	1.8 mm	1.8 mm	2.3 mm	2.7 mm
I	②	GE459SU	GE460SU	GE461SU			GE463SU	GE464SU	GE465SU
II					GE562R	GE563R			

### Diamond burrs

		coarse		extra coarse		
						
	 Ø	2.3 mm	3.1 mm	4.0 mm	5.0 mm	6.0 mm
I	GE424R	GE425R	GE456SU ②	GE457SU ②		
II	GE524R	GE525R	GE556SU ②	GE557SU ②	GE558SU ②	
III	GE624R	GE625R	GE656SU ②	GE657SU ②	GE658SU ②	

### Neuro cutters

	Ø	1.8 mm	2.3 mm	3.1 mm	3.1 mm	3.1 mm	3.1 mm
I		GE431R	GE434R	GE435R			
II		GE531R	GE534R	GE535R	GE553R	GE554R	GE555R
III		GE631R	GE634R	GE635R	GE653R	GE654R	GE655R

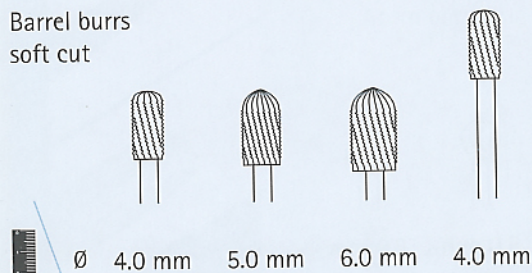
All burrs are shown actual size with the corresponding extension from the handpiece



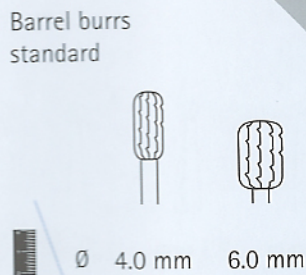
# Hi-Line XS Handpiece

## Hi-Line XS burrs

### Barrel burrs soft cut



### Barrel burrs standard



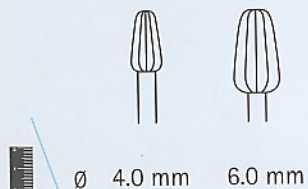
II GE548R GE549R GE550R

II GE544R GE546R

III GE648R GE649R GE650R GE645R

III GE644R GE646R

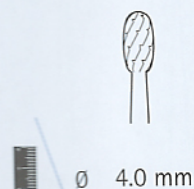
### Cone burrs



### Reverse taper burr coarse diamond



### Oval burr



II GE540R GE542R

II GE539R


II GE536R

III GE639R




## Hi-Line XS burrs


### Rosen burrs

	Ø	1.0 mm	1.4 mm	1.8 mm	2.3 mm	2.7 mm	3.1 mm	4.0 mm	5.0 mm	6.0 mm
I		GE401R	GE402R	GE403R	GE404R	GE405R	GE406R	GE407R	GE408R	GE409R
II		GE501R	GE502R	GE503R	GE504R	GE505R	GE506R	GE507R	GE508R	GE509R
III				GE603R	GE604R	GE605R	GE606R	GE607R	GE608R	GE609R

### Rosen burrs, long neck

	Ø	0.6 mm	0.8 mm	1.0 mm	1.4 mm	1.8 mm	1.8 mm	2.3 mm	2.7 mm
I ②		GE469SU	GE470SU	GE471SU			GE473SU		GE475SU
II					GE572R	GE573R		GE574R	

### Diamond burrs

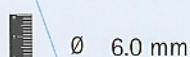
	Ø	1.0 mm	1.4 mm	1.8 mm	2.3 mm	2.7 mm	3.1 mm	4.0 mm	5.0 mm	6.0 mm
I		GE411R	GE412R	GE413R	GE414R	GE415R	GE416R	GE417R	GE418R	GE419R
II		GE511R	GE512R	GE513R	GE514R	GE515R	GE516R	GE517R	GE518R	GE519R
III				GE613R	GE614R	GE615R	GE616R	GE617R	GE618R	GE619R



# Hi-Line XS Handpieces

## Hi-Line XS burrs

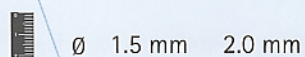
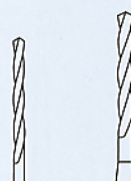
Acorn burr



I GE437R

II GE537R

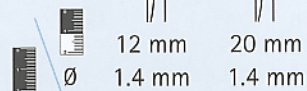
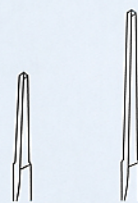
Twist drills



I GE432R GE433R

II GE532R GE533R

Lindemann



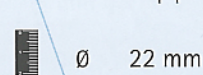
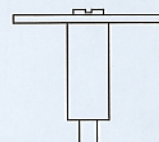
II GE522R GE523R

Pin cutter



II GE521R

Diamond disc



I GE430SU ②

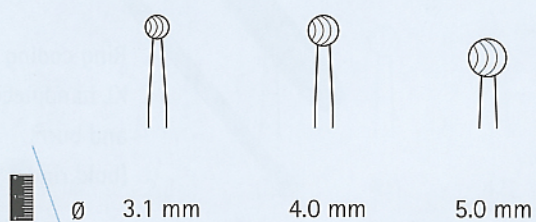
II GE530SU ②

All burrs are shown actual size with the corresponding extension from the handpiece



## Tungsten Carbide

### Rosen burrs

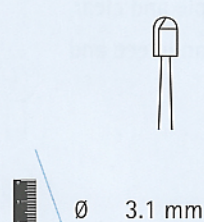


I GE406TC-SU GE407TC-SU GE408TC-SU ②

II GE507TC-SU GE508TC-SU ②

III GE607TC-SU GE608TC-SU ②

### Neuro cutter

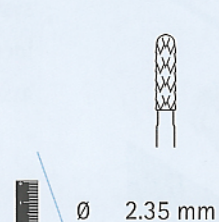


I GE435TC-SU ②

II GE535TC-SU ②

III GE635TC-SU ②

### Side rasp burr



II GE528SU ②

III GE628SU ②



# Hi-Line XS Handpieces

Extra long handpieces

The proven user-friendly ring coding system allows simple and clear identification of handpiece and associated burs.

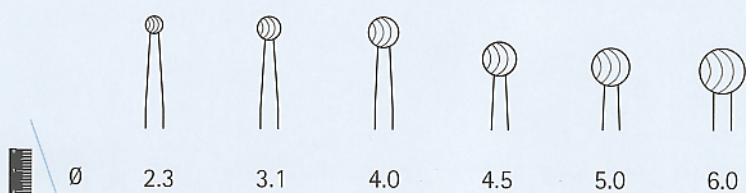
Ring coding  
XL handpieces  
and burs  
(bold rings)





## Hi-Line XS burrs

### Rosen burrs

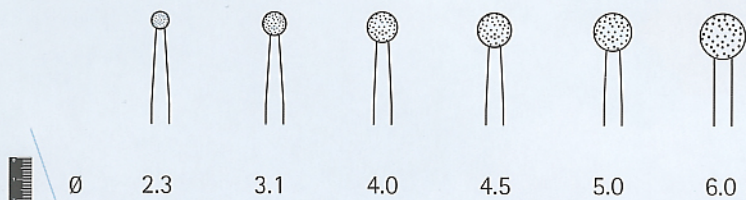


XLI GE704R GE706R GE707R GE708R GE709R

XLII GE280SU GE282SU GE281SU ②

XLIII GE290SU GE292SU GE291SU ②

### Diamond burrs

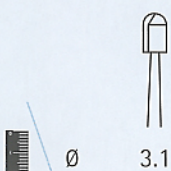


XLI GE714R GE716R GE717R GE718R GE719R

XLII GE283SU GE286SU GE284SU ②

XLIII GE293SU GE296SU GE294SU ②

### Neuro cutters

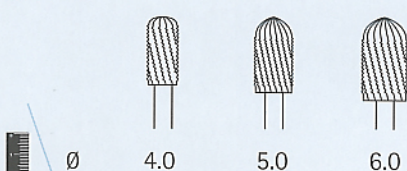


XLI GE702R

XLII GE288SU ②

XLIII GE298SU ②

### Barrel burrs soft cut

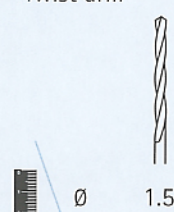


XLI GE711R GE729R GE712R

XLII GE285SU ②

XLIII GE295SU ②

### Twist drill



XLI GE700SU ②

All burrs are shown actual size with the corresponding extension from the handpiece



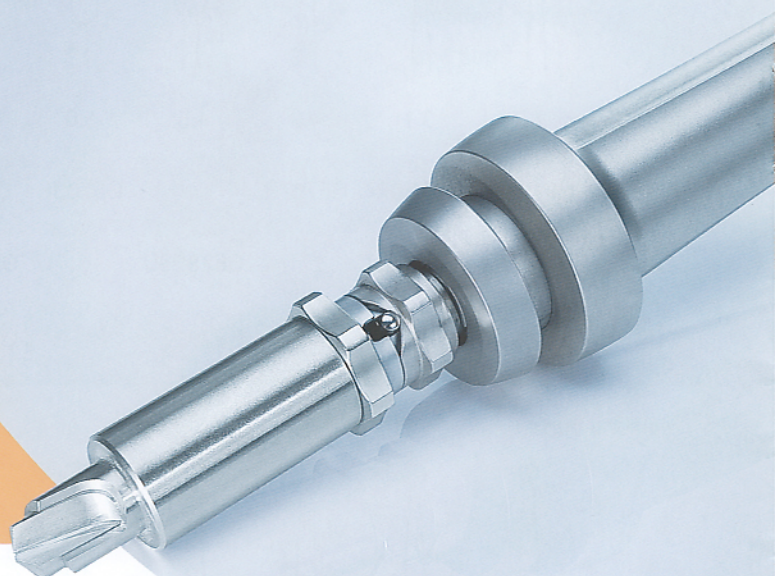
# microspeed uni – for **neuro, neurotology and spine**

Standard handpieces

H-Line X2 burrs

## The high speed system with low speed value added

The range of applications for the microspeed uni system extends beyond advanced high speed burring. Complete your system, for example with the new perforator driver, the universal drill handpieces or the soft-tissue sparing micro-saws.



### microspeed uni perforator driver GD685

- Extremely short design through integration of the motor in the handpiece!
- The short design and the proximity of the grip surface to the skull enable a close control via the motor during the skull perforation
- Powerful torque
- Constant power through special motor actuation
- Absence of rotating parts ensures safe operation
- Speed range: 800 – 1,200 rpm
- All common safety perforators with Hudson shanks can be used
- Can be combined with motor cables with hand control or with foot control pedals



## Low speed – micro-Line



### microspeed uni low speed motor GD678

- Low speed motor for all microsurgical sawing and drilling operations
- Speed range: 1,000 – 30,000 rpm
- Can be combined with motor cables with hand control or with foot control pedals
- Wide choice of micro-Line handpieces available
- Constant power through special motor actuation
- Acceleration and stopping characteristics can be adjusted to individual requirements



GB129 micro-Line sagittal saw



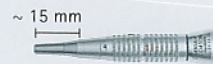
GB130R micro-Line reciprocating saw



GD305 micro-Line reciprocating saw, incl. saw blade GD320R



GD307 micro-Line sagittal saw



GD450M micro-Line handpiece 1:1, for 70 mm burrs, coding: 1 blue ring



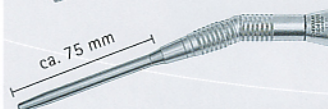
GD451M micro-Line handpiece 1:1, for 95 mm burrs, coding: 1 blue ring



GD455M micro-Line handpiece 1:2, for 70 mm burrs, coding: 1 red ring



GD456M micro-Line handpiece 1:2, for 95 mm burrs, coding: 1 red ring



GD457M micro-Line handpiece 1:2, for 125 mm burrs, coding: 1 red ring

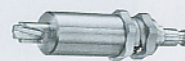


GB111 micro-Line handpiece 4:1, coding: 1 green ring



GB119 micro-Line angle piece head 2:1, coding: 1 green dot, for dental shank

### Perforators



GB300R Cranial perforator with Hudson shank, Ø 6/9 mm



GB302R Cranial perforator with Hudson shank, Ø 9/12 mm



GB304R Cranial perforator with Hudson shank, Ø 12/15 mm

For information on the respective tools, please refer to our Burrs & Blades catalogue 017599.



# microspeed uni – pieces for small bone surgery and arthroscopy

Craniotome and multi-handpiece low speed motor

## Ergonomic, lightweight design meets endless power

These two low speed motors, with 16,000 rpm are ideal for the requirements of small bone surgery. Combine these motors with a wide choice of mini-Line handpieces. Sawing, drilling, burring, wiring – the mini-Line has it all!



## microspeed uni pistol GD684

- Low speed pistol for arthroscopy and small bone surgery
- Compatible with all mini-Line handpieces
- Lightweight and ergonomic shape for fatigue-free and precise operating
- Oscillation- and tapping mode for a safe and accurate preparation of screw holes
- Acceleration and stopping characteristics can be adjusted to individual requirements

For information on the respective tools, please refer to our Burrs & Blades catalogue 017599.



## Low speed – mini-Line



### microspeed uni mini motor GD674

- Pencil-shaped microspeed uni motor for small bone surgery
- Compatible with all mini-Line handpieces
- Can be operated either with the motor cable with hand control GD673 or with the motor cable for foot control GD672
- Acceleration and stopping characteristics can be adjusted to individual requirements



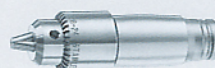
GB376R mini-Line burr attachment, 1:2, for tools with 2.35 mm shank



GB382R mini-Line drill attachment, 16:1, for tools with AO shank



GB383R mini-Line drill attachment, 16:1, Jacobs chuck Ø 0 - 4.0 mm



GB377R mini-Line drill attachment, 36:1, Jacobs chuck Ø 0 - 6.5 mm



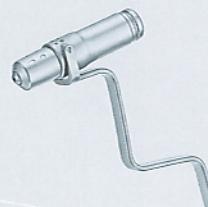
GB389R mini-Line drill attachment, 36:1, for tools with hexagonal shank



GB373R mini-Line angled drill attachment, 8:1, for tools with dental shank



GB374R mini-Line angled K-wire chuck, 17:1, Ø 0.6 - 1.6 mm, for use with microspeed uni mini motor GD674



GB398R mini-Line K-wire chuck, 16:1, Ø 0.6 - 2.5 mm, for use with microspeed uni pistol GD684



GB390R mini-Line sagittal saw attachment



GB391R mini-Line reciprocating saw attachment



GB392R mini-Line transversal saw attachment

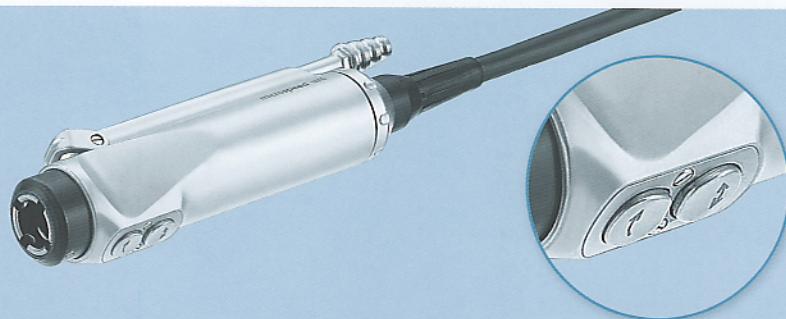


# microspeed uni – for small bone surgery and arthroscopy

## Arthroscopic procedures require reliable, ergonomically sophisticated shaver handpieces

The microspeed uni shaver handpieces excel in particular thanks to their compact, lightweight design. Even extremely long operations can thus be performed comfortably and without fatigue. Modern production technologies and the use of top-grade materials are characteristic of these first-class quality products.

Combined with our extensive range of shaver blades and burrs, the microspeed uni system is one of the most sophisticated and advanced shaver systems available.



### microspeed uni shaver handpiece with hand control GD681

- The ergonomic two button control design allows easy operation of oscillation, right and left mode with fingertips

For information on the respective tools, please refer to our Burrs & Blades catalogue O17599.



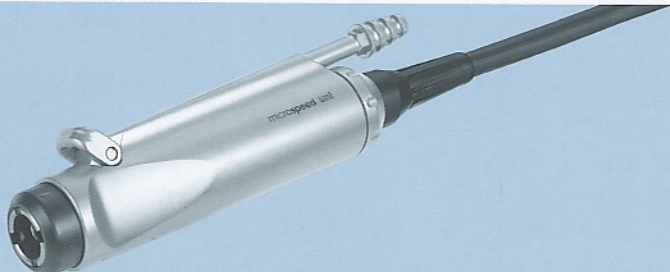
# microspeed uni – Processing speed & precision

For dental bone surgery and orthodontics

Focus – Longevity for your investment

microspeed uni

- Compact, lightweight (275 g) construction with ergonomic design for fatigue-free and precise operating
- Automatic tip recognition
- Speed range burr tips:  
400 – 5,000 rpm
- Speed range reamer tips:  
1,000 – 8,000 rpm
- Oscillation frequency: 0.3 – 2.0 seconds
- Acceleration and stopping characteristics can be adjusted to individual requirements
- Suction power easily adjustable over the control lever on the handpiece



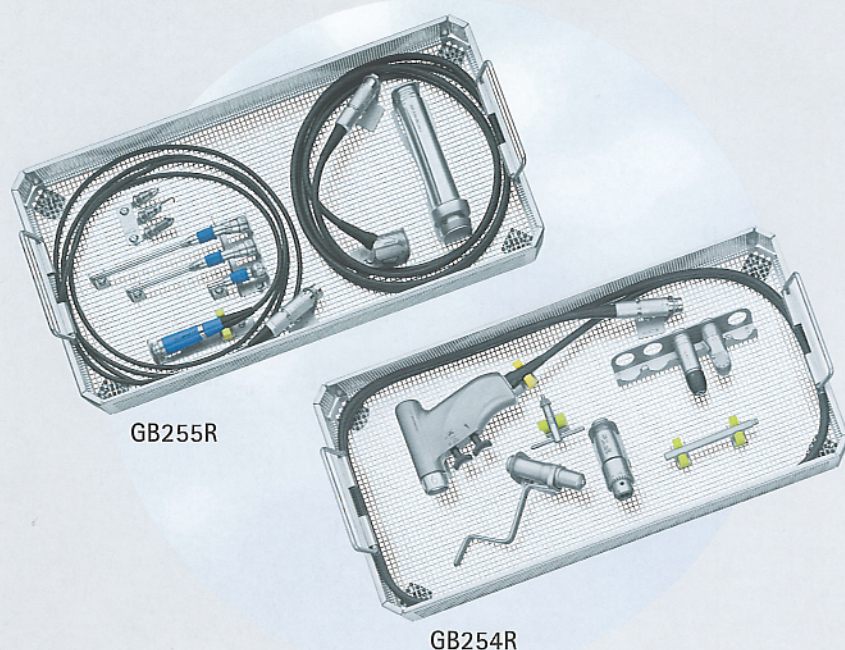
## microspeed uni shaver handpiece GD682

- For use with foot control pedal GD671



# microspeed uni – Processing and Maintenance

Eccos – Longevity for your investment




Reprocessing motors and accessories has never been as simple and convenient as this. The system remains in specially designed Eccos fixations during the entire application and reprocessing cycle. The complete, loaded Eccos trays can be mechanically cleaned and autoclaved.

## GB255R Eccos set for neurosurgery


 50 mm

comprising:	Quantity
JF212	1
GB587R	1
GB586R	1
GB614R	1
GB615R	1
GB689R	1

## GB254R Eccos set for small bone surgery

 50 mm

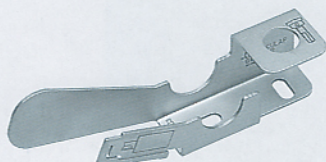
comprising:	Quantity
JF212	1
GB579R	1
GB673R	1
GB674R	2
GB690R	3

 50 mm

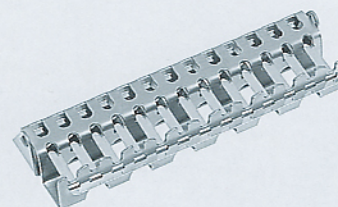
This symbol indicates the respective tray height.

## Additional Eccos fixations available

### GB572R Eccos fixation for GB300R-GB308R



### GB613R Eccos fixation for 13 Hi-Line XS burrs



For more informations on the Eccos fixations, please refer to our Burrs & Blades catalogue 017599.



## Maintenance concept – Sterilit oil spray



### GB600 Sterilit Power Systems Oil Spray

300 ml, 6

Lubricating the microspeed uni system is a simple affair. The motor and handpieces are sprayed with the Sterilit oil spray before each sterilisation cycle.

Complete lubrication of the motor and handpieces, making permanent intraoperative lubrication unnecessary.

#### GB600830 Spray Adapter mini-Line



#### GB600870 Spray Adapter microspeed uni XS



#### GB600820 Spray Adapter microspeed uni, microLAN, miniLAN, Hi-Line, Hi-Line XS, Hi-Line XXS, HiLAN, HiLAN XS



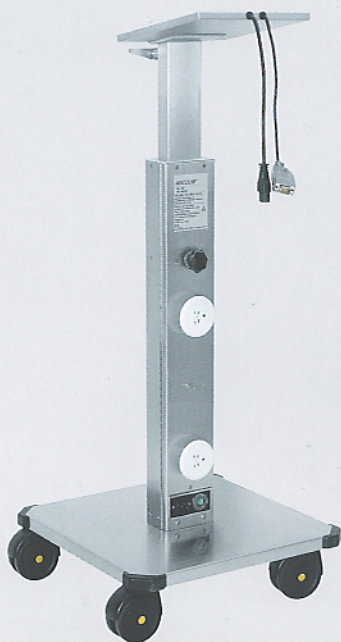
#### GB600810 Spray Adapter for micro-Line handpieces





## ...and Accessories

**GA411**  
Mobile stand  
for microspeed uni  
control unit;  
adjustable height



### Power cord

TE780 Power cord for Europe; 1.5 m  
TE730 Power cord for Europe; 5 m  
TE735 Power cord for USA, Canada, Japan; 5 m  
TE734 Power cord for UK; 5 m




## ...and Accessories

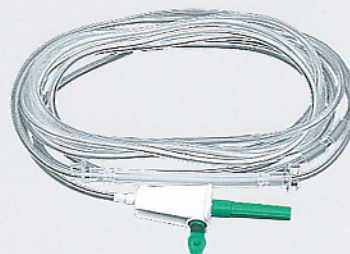
Spray nozzles for  
Hi-Line XS handpieces

Handpiece	Spray nozzle
GB740R	GB767SU
I	GB761SU
II	GB762SU
III	GB763SU
XLI	GB764SU
XLII	GB765SU
XLIII	GB766SU

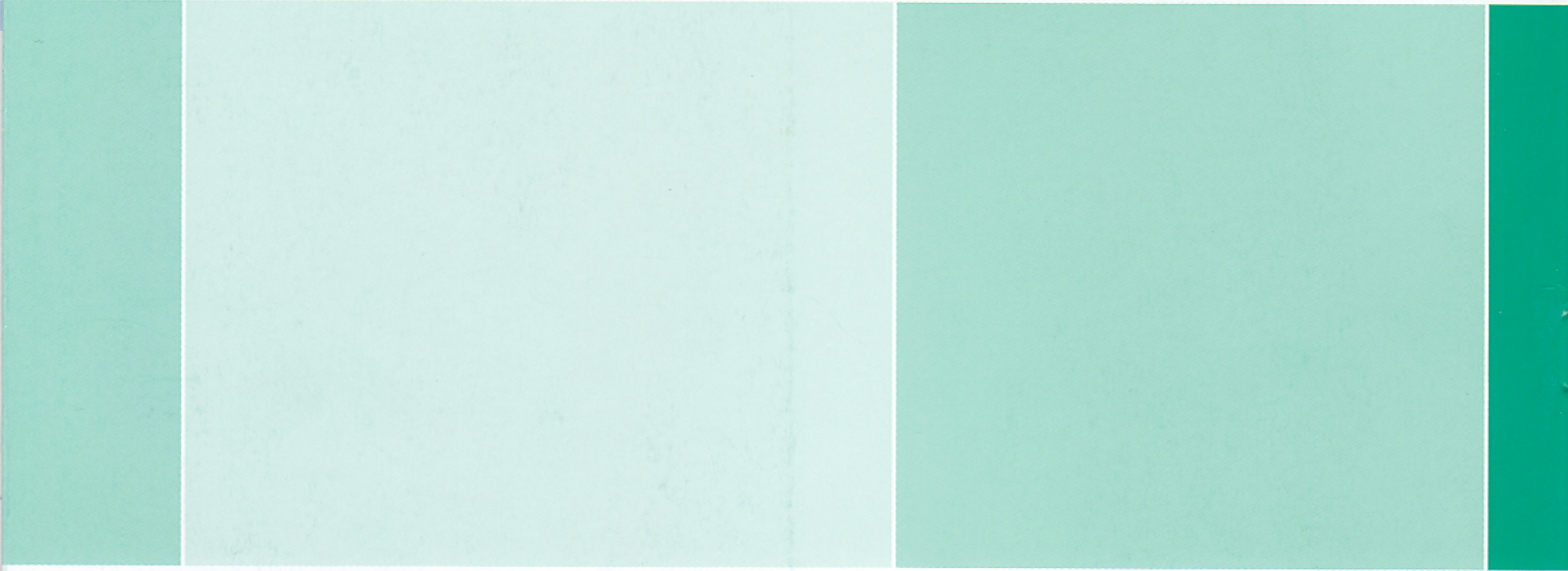


**GA391SU**  
Tubing set

complete with adaptor for spray nozzle, fixation  
clips and short spike; for single use;  10







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