PEOPLE HAVE PRIORITY



# Oral surgery and Implantology

# People have Priority



# The true innovations are in the detail

Many years of research form the foundation for numerous innovations. Because we ask ourselves every day what we can do for you.

#### Efficiency

W&H offers constant torque and maximal efficiency thanks to the precise interplay between devices and instruments. It is the efficiency that determines how much power actually reaches the bone. A great

deal of power can be lost to friction during the transfer of power from the motor to the bur shank.

The power output is often as low as 35 %. W&H optimises power transfer with the ball-bearing inner workings of the instrument. The ball bearings

eliminate large friction surfaces and ensure that at least 70 % of the power is transmitted to where it is needed: the bone.



The ancient Egyptians used the knowledge that more could be accomplished if stone blocks were stacked on rollers. The frictional

surface is greatly reduced using rollers – just like in W&H instruments. The ball bearings reduce friction, which ensures maximal output.

You can find additional information on wh.com

#### Hexagon chucking system

The hexagon chucking system developed by W&H ensures safe use even at high torques. The patented\* chucking system increases the area of power transfer.

This eliminates deformation of the bur shank and jammed chucking systems giving you an uninterrupted treatment process.

The system has been designed so you can continue using your existing burs and rotary instruments.

\* EU, USA

#### Sealing system

The lip seal has a locking effect.
This effect prevents the ingress of any debris into the interior of the instrument head. At the same time the design ensures that any excess service oil can easily escape during maintenance of the instrument.



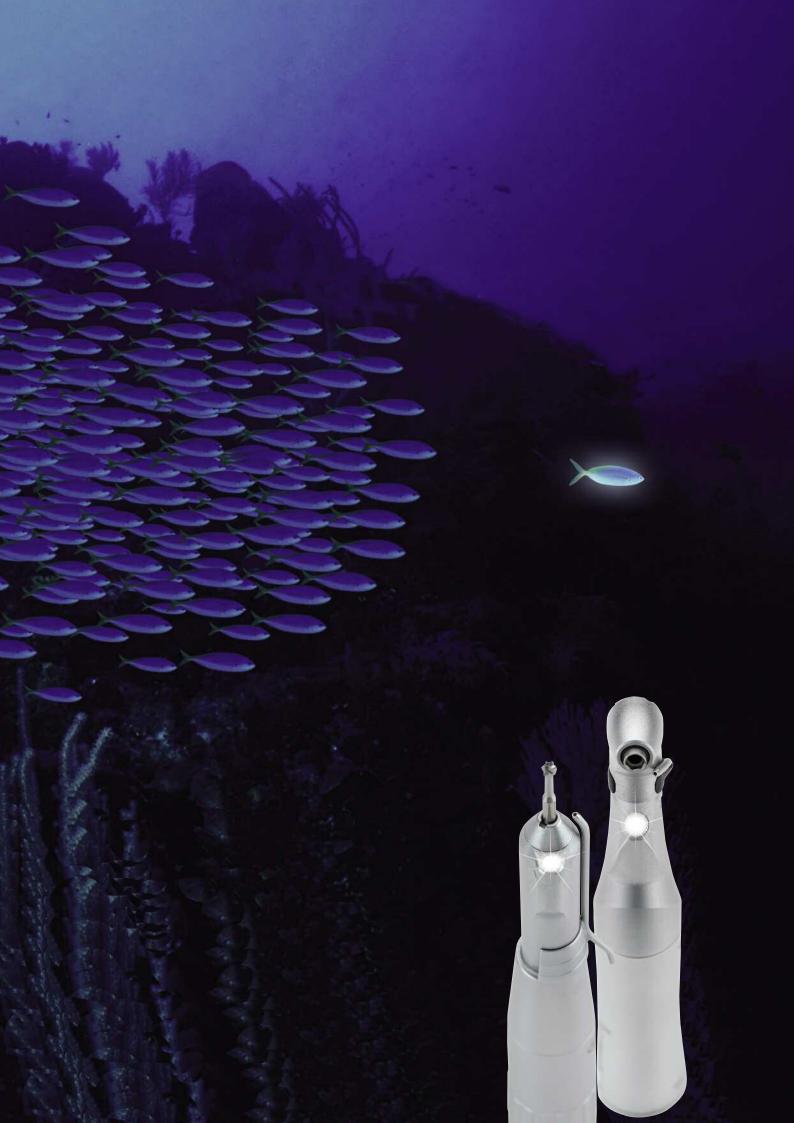
Hexagon chucking system for safe use at high torques



Closed while working



Oil penetrates from within during lubrication



# Surgical handpieces and contra-angles with LED+ and generator

Excellent lighting conditions facilitate accurate diagnoses and perfect treatment results. Reason enough to use daylight quality light for all operations.

W&H surgical instruments with LED+ generate their pure white light all by themselves. This is due to the integrated generator that provides power to the LEDs of the SI-11 LED G\*, WI-75 LED G\*, S-11 LED G and WS-75 LED G models.

With their neutral white light, based on the optimum colour temperature, our LEDs provide a superior light source.

This allows you to have daylight quality light in the treatment area whether you have an optic or

non-optic drive system.

The secret lies in the new Plus of the LEDs – the **colour rendering index (CRI)**. As the only supplier of LED+ W&H has once again established itself as the leader in the field of LED technology.

# High colour rendering index (CRI) Relaxed work thanks to daulight

Relaxed work thanks to daylight quality light, exceptional reproduction of natural colours and clear colour contrasts. The colour rendering index of artificial light sources is very important because a high CRI value significantly improves people's sense of wellbeing and ensures greater visibility. Perfect colour rendering has an index of 100. Conventional LEDs

only have a CRI of between 60 and 80 and are ineffective in reproducing red tones — a significant disadvantage for many medical applications.

However, surgical instruments use a new technology. The result is a CRI of more than 90 which means clear colour contrasts and exceptional reproduction of natural red tones in the mouth.



WS-75 LED G / WI-75 LED G \*



S-11 LED G / SI-11 LED G \*



**LED comparison:** natural red tones rendered by LED+

<sup>\*</sup> cannot be dismantled

# Surgical handpieces and contra-angles with LED+ and generator

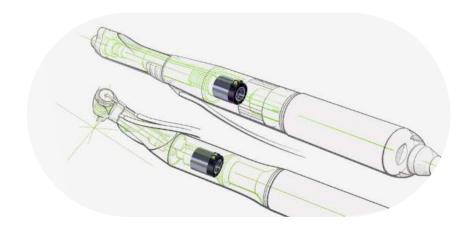
# Easy to dismantle – easy to assemble

As simple as they are efficient: both the S-11 LED G and the WS-75 LED G can be completely dismantled for effective cleaning. And they can be reassembled easily too.



#### Independent power supply

As soon as you activate your instrument, the generator turns. It autonomously generates the electricity needed for the LED+ regardless of the type of drive system you work with.



#### The main features at a glance

- > Light colour: daylight quality light
- > Independent LED+ due to the internal generator
- > Longer life compared with conventional halogen bulbs
- Coupling system ISO 3964 (DIN 13.940)
- > Can be thermo washer disinfected
- > Sterilizable

#### Optimal illumination

With a colour temperature of 5,500 K, W&H instruments produce a radiation spectrum that corresponds to daylight.

Perfect illumination is guaranteed.

#### High colour rendering index

Visual clarity: the new LED+ instruments from W&H have an unparalleled high colour rendering index (CRI). Colours illuminated by the daylight quality light in the mouth are rendered perfectly. For the first time, it is even possible for red tones to be observed naturally.

# Surgical straight and contra-angle handpieces

W&H has developed a series of straight and contra-angle handpieces for maxillo-facial surgery, implantology and microsurgery that are characterised by their reliability as well as having many other benefits.

The high-grade stainless steel ensures that these instruments are not only robust and durable but that they can also be thermo washer disinfected and sterilized.

To satisfy the stringent hygiene requirements for surgery, the instruments can be completely dismantled (except WI-75 E/KM\*). The weight of the surgical straight and contra-angle handpieces complements that of the motor for ideal balance in the hand during treatment.

The transmission ratio of the contra-angles can be appropriately selected for every procedure. The angled handpieces also provide a clear view of the treatment area.





WI-75 E/KM\*

WS-75 E/KM



WS-56 E

WS-92 E/3



- > Reliable due to robust construction
- > Easy to clean
- > Slim design good view
- > Durable made from high-grade stainless steel
- > Can be thermo washer disinfected
- > Sterilizable









# Surgical saw handpieces

#### Work in all directions

With our S-8 R, S-8 S and S-8 0 surgical saw handpieces. The three models are a perfect and durable solution for corrective osteotomies or bone removal with sagittal, oscillating or reciprocating motion.

Whichever direction you choose, with W&H you have a reliable partner at your side.

# All models can be completely dismantled

All three models were designed for use with maximal rotational speed while ensuring a uniform speed or cutting power of the instruments at the bone. But most importantly, they can be completely dismantled for simple and precise cleaning.



#### The main features at a glance

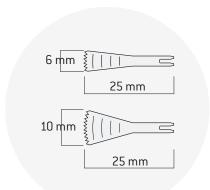
- > 100 % stainless steel
- > High cutting frequency with outstanding cutting power
- > Low vibration and exceptionally quiet
- > Can be completely dismantled, thermo washer disinfected and sterilized
- > Extensive range of saw blades (slim, good cutting power)



# Saw blade range for surgical saw handpieces

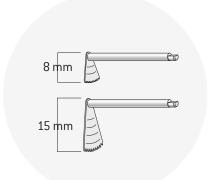
### Sagittal saw blades for S-8 S

width 6 mm or 10 mm, incl. depth gauge on the saw blade (2.5 mm graduations), 100 % stainless steel, available as single pack or five pack



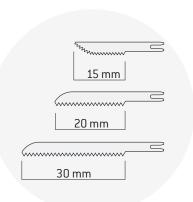
### Oscillating saw blades for S-8 0

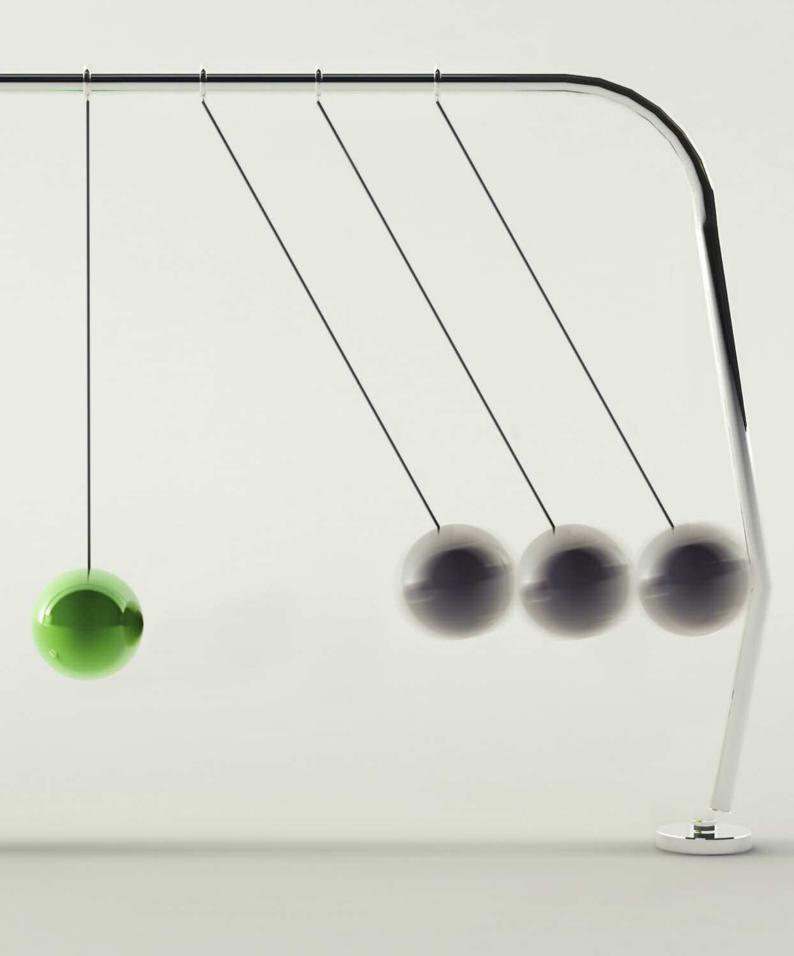
width 8 mm or 15 mm, incl. depth gauge on the saw blade (2.5 mm graduations), 100 % stainless steel, available as single pack



#### Reciprocating saw blades for S-8 R

length 15 mm, 20 mm or 30 mm, crosswise tooth setting for increased cutting power, 100 % stainless steel, available as single pack or five pack





## Elcomed

# Number 1 in the operating theatre

Up to 80 Ncm torque on the rotary instrument. A motor with a speed of 50,000 rpm that is one of the shortest and lightest in its class. W&H Elcomed: top quality and power – for all surgical requirements.

#### Logical integration of ease of use

Just one operating stage from which you can set all necessary parameters.

The six most important sequences of steps can be saved as individual programs.

Complete documentation at no extra cost. And all this with the highest levels of safety and precision: Elcomed from W&H.

#### Easy to use

The factory settings of the individual programs can easily be customised using the simple user interface.

The foot control enables you to switch from one program to the next, change the direction of rotation of the instrument, and start and stop both the coolant feed and the motor.

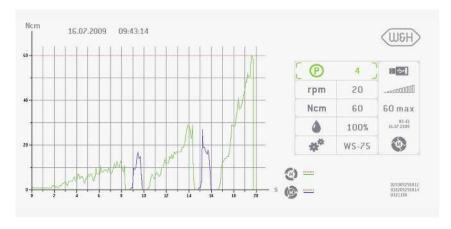


Elcomed is also available without documentation function

## Elcomed

# Complete documentation guaranteed

Each step in the application is completely documented and can be accessed at any time using the USB interface and the USB stick, which is included with the unit.



# No additional program — no additional costs

The data are displayed as a bitmap file and as a csv file for import into standard analysis programs.

Recording of torque for a treatment step, including the parameters set

#### The main features at a glance

- > Shortest and lightest 50,000 rpm motor
- > Can be used with all instruments that have an ISO connection
- > 5 80 Ncm for the rotary instrument
- > Automatic thread tapping function
- > With Data Matrix Code for electronic product identification

#### Better by foot

Operate the W&H Elcomed using the multifunctional AP-tested foot control, leaving your hands free for your instrument.



# Implantmed The intelligent drive unit from W&H

Implantmed from W&H offers you a well-engineered drive unit for dental surgery applications — always in keeping with the slogan, focusing on the basics.

Ease of use is the primary feature. You can set up all the steps for an implantation without difficulty and complete the treatment smoothly.

Implantmed also has an easy to read display. Accurate torque control enables precise work.

Implantmed is available in blue or green and has an elegant and smooth curved design which is easy to clean.

It also has an endo function for root canal preparation. A W&H endo contra-angle is available as an accessory.



### The main features at a glance

- > Very short and light motor
- > User-friendly operation
- > Wide speed range, 300 – 40,000 rpm at the motor
- > Precise torque limitation, 5 – 50 Ncm
- > Integrated coolant pump



# Prosthodontic screwdriver IA-400 Precise torque – guaranteed to save time

The cordless IA-400 prosthodontic screwdriver from W&H has precise torque control for precise, risk-free tightening of retaining screws. Using the W&H prosthodontic screwdriver also removes the need for ratchet systems. Only mechanical rotary instruments are required.

The torque control, which can be set from  $8-40~\rm Ncm$  in 1 Ncm increments, ensures maximum safety for the W&H prosthodontic screwdriver

Tightening a retaining screw requires precisely defined torque for the best possible result. The prosthodontic screwdriver automatically switches off when the set torque is reached to prevent the retaining screw from being overtightened.

The W&H prosthodontic screwdriver uses mechanical rotary instruments, which can easily be inserted into the chucking system on the head.

This means that the range of torque wrenches and ratchets used with individual implant systems becomes redundant.

The single-handed operation means the cordless prosthodontic screwdriver is fast and, most importantly, safe and provides the best possible view of the treatment site.

#### The main features at a glance

- > Precise torque control 8 40 Ncm
- > Automatic switch-off when the desired torque is reached
- > Constant speed saves time
- > Cordless operation
- > Good visibility
- > Removes the need for ratchet systems



# Accessories for surgery

- Transportation case ST-K 29 for transport of unit and accessories to other locations (unit not included)
- Sterilization cassette with compartments for motor, cables, straight and contra-angle handpieces (not included)
- Foot control S-N1, AP-tested (conforms to the guidelines for use in operating theatres)
- Foot control S-NU, AP-tested (conforms to the guidelines for use in operating theatres)
- Equipment trolley with\* and without power outlet strip
- > Total height: 78 cm
- > Upper tray (W x D): 39.5 cm x 36.5 cm
- > Middle tray (W x D): 31 cm x 24 cm
- > Lower tray (W x D): 40 cm x 43 cm



\* EU plug only

# Surgical handpieces and contra-angles with LED+ and generator (pages 5-6)

**C**€

Туре:	S-11 LED G	SI-11 LED G	WS-75 LED G	WI-75 LED G	
Transmission ratio:	1:1	1:1	20:1	20:1	
Coupling system:	ISO 3964 (DIN 13.940)				
Lighting system:		LED+			
Power supply:		indepen	dent generator		
Light quality:		d	laylight		
Spray:	external	external	single	single	
Internal cooling system:	_	-	Kirschner/Meyer	Kirschner/Meyer	
Chucking system:	Lever chuck	Lever chuck	Push-button chuck	Push-button chuck	
Rotary instruments:	for surgical burs and cutters 0 2.35 mm				
	L = 45  mm	L = 45  mm	with contra-angled shank	with contra-angled shank	
	also Stryker system	also Stryker system			
Maximum drive speed:	40,000 rpm	40,000 rpm	40,000 rpm	40,000 rpm	
Easily dismantled:	yes	no	yes	no	
Indications, e. g.:	apical resection	as for S-11 LED G	implantation	as for WS-75 LED G	
	osteotomy		segmental osteotomy		
	sequestrectomy				
	apical trepanning				
	bone modelling				

# Surgical contra-angles (page 7)

**C €** 0297

Туре:	WS-75 E/KM	WS-56 E	WS-92 E/3	WI-75 E/KM
Transmission ratio:	20:1	1:1	1:2.7	20:1
Coupling system:	ISO 3964 (DIN 13.940)			
External spray:	single	single	triple	single
Internal cooling system:	Kirschner/Meyer	_	_	Kirschner/Meyer
Chucking system:	Push-button chuck			
Rotary instruments:	for surgical burs and cutters with			
	contra-angled shank	contra-angled shank	FG shank	contra-angled shank
	0 2.35 mm	0 2.35 mm	0 1.6 mm	0 2.35 mm
Maximum drive speed:	50,000 rpm	50,000 rpm	50,000 rpm	50,000 rpm
Easily dismantled:	yes	yes	yes	no
Indications, e. g.:	implantation	maxillary and	hemisection	as for WS-75 E/KM
	segmental osteotomy	mandibular osteotomy	extraction of	
		germectomy	wisdom teeth	
		sequestrectomy		



|| All instruments can be thermo washer disinfected and sterilized up to 135 °C

# Surgical handpieces (page 7)

### **C**€

Туре:	S-11	SL-11	S-9	S-10 (S-12*)
Transmission ratio:	1:1	1:1	1:1	1:1
Coupling system:	ISO 3964 (DIN 13.940)			
Spray:	external	external	external	external
Chucking system:	Lever chuck	Lever chuck	Lever chuck	Lever chuck
Rotary instruments:	for surgical burs and cutters 0 2.35 mm			
	L = 45  mm	L = 45  mm	L = 45  mm	L = 70  mm
	also Stryker system	also Stryker system	also Stryker system	
Maximum drive speed:	50,000 rpm	30,000 rpm	50,000 rpm	50,000 rpm
Easily dismantled:	yes	yes	yes	yes
Indications, e.g.:	apical resection	as for S-11	extraction of	bone shaving
	osteotomy	for difficult	wisdom teeth	osteotomy
	sequestrectomy	to access areas	apical resection	fenestration
	apical trepanning		fenestration	osteosynthesis
	bone modelling		apical trepanning	in distal areas

<sup>\*</sup> S-12: as for S-10, 1:2, maximum drive speed 40,000 rpm, indications: e.g., complicated extractions of impacted wisdom teeth, apical resection in distal areas, bone shaving, osteotomy, decompression

# Surgical saw handpieces (pages 8-9)

### **C €** 0297

Туре:	S-8 R	S-8 0	S-8 S
Transmission ratio:	3.25:1	3.4:1	3.25:1
Coupling system:		ISO 3964 (DIN 13.940)	
Strokes / angle:	1.8 mm	12°	3°
Frequency (strokes/min):	12,300	11,800	12,300
Maximum drive speed:	40,000 rpm	40,000 rpm	40,000 rpm
Easily dismantled:	yes	yes	yes

# Elcomed [pages 11 – 12]

### **C €** 0297

Type:	SA-310	
Max. torque at the rotary instrument:	80 Ncm*	
Documentation**:	yes / USB	
Mains voltage:	110 – 130 V or 220 – 240 V, 50 / 60 Hz	
Max. output power / torque on the motor:	100 W / 7 Ncm	
Motor speed:	300 – 50,000 rpm, safety stop at 40,000 rpm	
Intended transmission instruments:	ISO connection 3964 (DIN 13.940)	
Length of motor cable:	1.8 m or 3.5 m	
Coolant flow volume:	0 – 100 ml/min	
Foot control:	yes	
Height / width / depth:	109 x 256 x 305 mm	

<sup>\*</sup> Adjustment with WS-75 and WI-75

# Implantmed [page 13]

## **C €** 0297

Type:	SI-915	SI-923		
Max. torque at the rotary instrument*:	50 Ncm	50 Ncm		
Mains voltage:	100 – 130 V, 50 / 60 Hz	220 – 240 V, 50 / 60 Hz		
Max. output power / torque on the motor: 70 W / 5.5 Ncm		Ncm		
Motor speed:	or speed: 300–40,000 rpm			
Intended transmission instruments:	ISO connection 3964 (DIN 13.940), transmission ratio 1:1, 20:1			
	program 4 – exclusively with WI-75 E/KM, WI-75 LED G, WS-75 E/KM or WS-75 LED G			
	program 5 — exclusively with EB-79			
Length of motor cable:	th of motor cable: 1.8 m			
Coolant flow volume:	approx. 100 ml/min			
Foot control:	yes			
Height / width / depth:	90 x 252 x 254 mm			

<sup>\*</sup> in program 4

<sup>\*\*</sup> also available without documentation function

# Prosthodontic screw driver IA-400 [page 14]

### Handpiece drive IA-400

**C €** 0297

Battery type:	Li ion
Battery voltage:	3.7 V
Rated capacity:	680 mAh
Speed of the instrument:	25 rpm
Torque:	8 – 40 Ncm
Charging time:	approx. 100 min.
Battery capacity:	approx. 40 screws
	at average torque
Weight:	90 g

### Contra-angle IA-80

Туре:	IA-80
Transmission ratio:	80:1
Coupling system:	W&H special coupling

### Charging station

Mains voltage:	100 – 240 V
Frequency:	50 – 60 Hz
Rated current:	0.08 - 0.12 A
Power:	5 W
Weight:	345 g

Pictures are for illustrative purposes only. Additional equipment and accessories are not included with the item.

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