PEOPLE HAVE PRIORITY

Oral surgery
and Implantology

People have Priority

led+

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 optimizes 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.

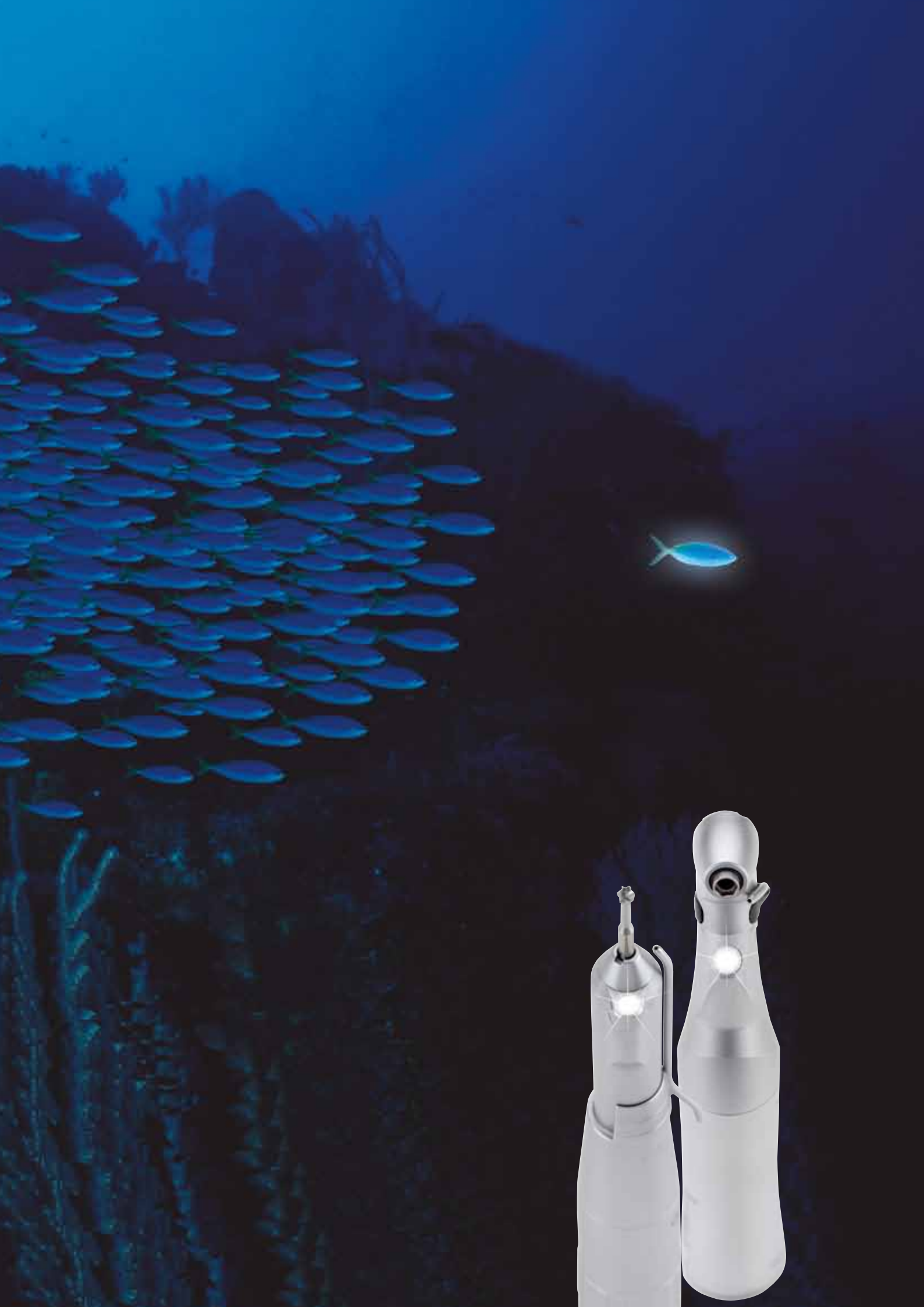
Sealing system
The lip seal has a locking effect. This effect prevents the ingress of any debris into the interior of the instrument head. At the same time the design ensures that any excess service oil can easily escape during maintenance of the instrument.

* EU, USA

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.

* cannot be dismantled

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

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

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 daylight quality light, exceptional reproduction of natural colours and clear colour contrasts. The colour rendering index is an important attribute of artificial lighting because a high CRI value significantly improves people's sense of wellbeing and ensures greater visibility. Perfect colour rendering has an index of 100.

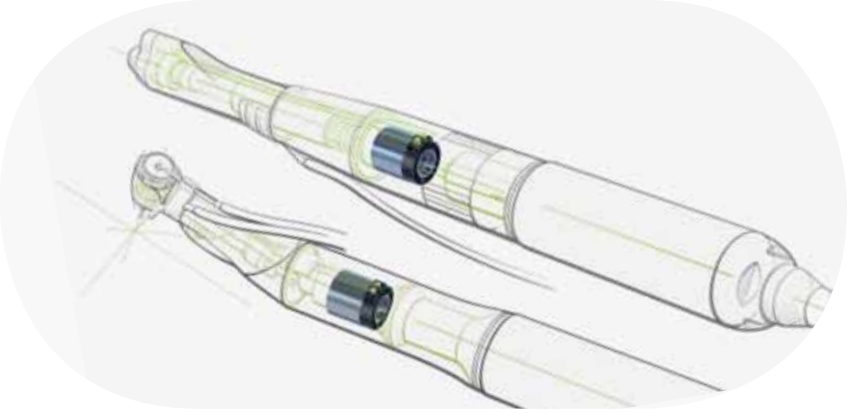
Conventional LEDs only have a CRI of between 60 and 80 and are ineffective in reproducing red tones – a significant disadvantage for many medical applications. Surgical instruments, however, use a new technology. The result is a CRI of more than 90 which means clear colour contrasts and exceptional reproduction of natural red tones in the mouth.

LED comparison: natural red tones rendered by LED+

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

The main features at a glance

- 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

S-10
S-12

S-9

SL-11

S-11

Surgical saw handpieces

Work in all directions
With our S-8 R, S-8 S and S-8 O 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.

S-8 S sagittal

S-8 O oscillating

S-8 R reciprocating

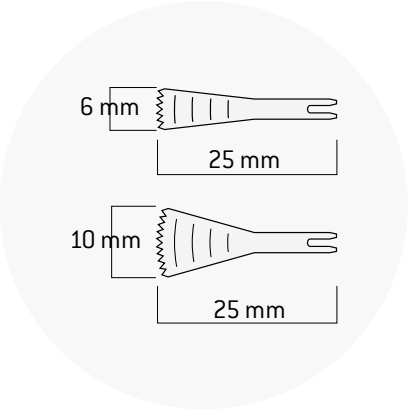
The main features at a glance

- 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)

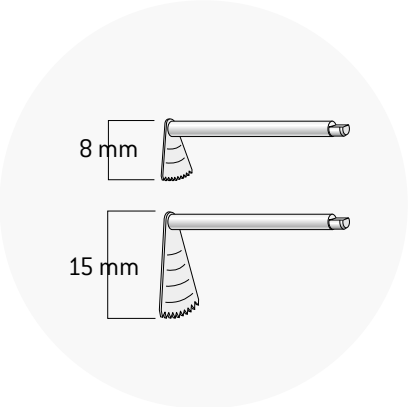
All three models can be completely dismantled

Saw blade range
for surgical saw handpieces

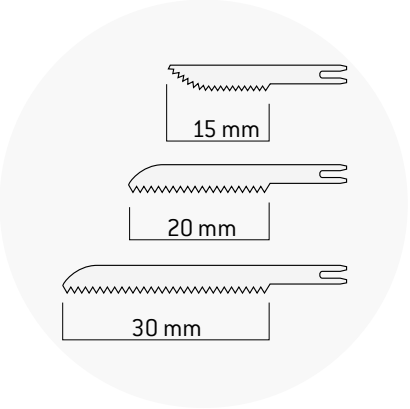
Sagittal saw blades for S-8 S
width 6 mm or 10 mm,
incl. depth gauge on the saw blade (2.5 mm graduations),
100 % stainless steel,
available as single pack or five pack

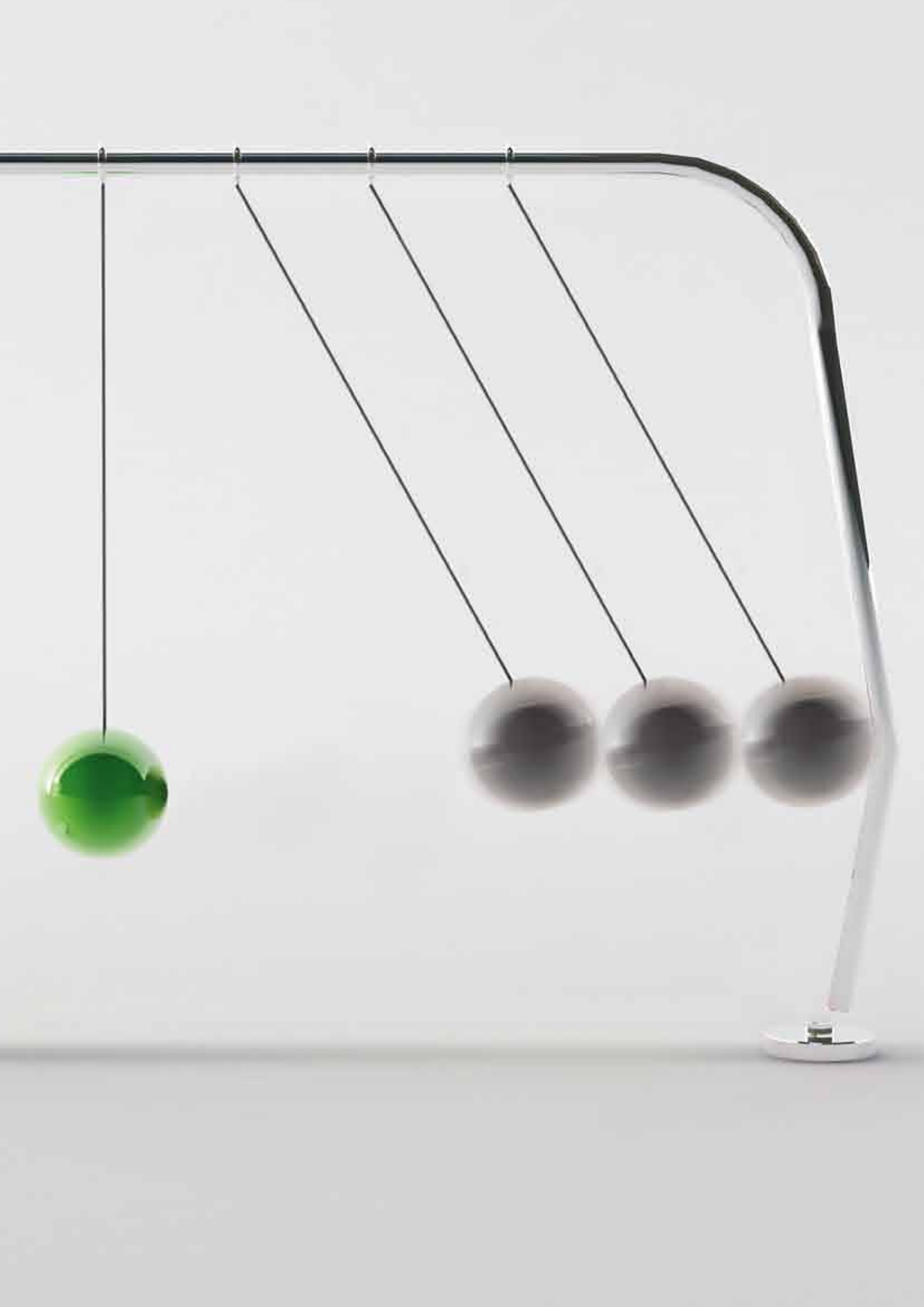


Oscillating saw blades for S-8 O
height 8 mm or 15 mm,
incl. depth gauge on the saw blade (2.5 mm graduations),
100 % stainless steel,
available as single pack



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.

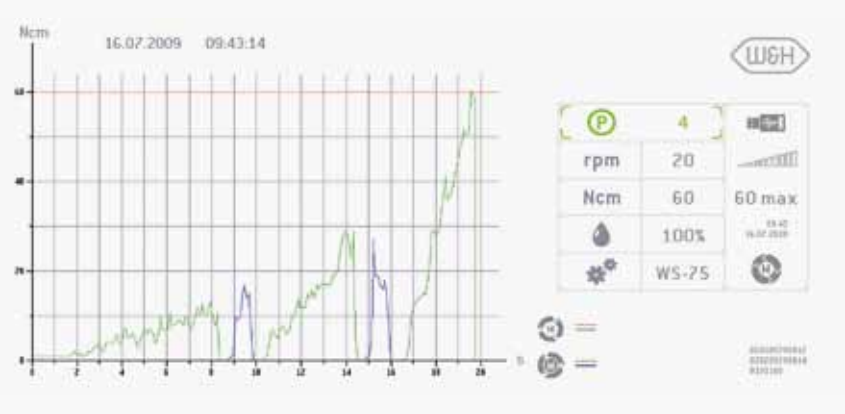
Logical integration of ease of use
Just one operating stage from which you can set all necessary parameters.
The six most important sequences of steps can be saved as individual programs.
Complete documentation at no extra cost. And all this with the highest levels of safety and precision: Elcomed from 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.



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

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.

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 cutter 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

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.

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

Large display
Implantmed has a large, easy-to-read display that clearly shows the defined values.

Automatic thread cutter function
The thread cutter function supports you when inserting implants in hard bone. Tapping a thread minimizes the compression of the bone and promotes stress-free healing of the implant.

Foot control
The foot control offers optimum freedom of movement for both hands and you can concentrate fully on the most important factor: your patients.

The main features at a glance

- Powerful motor
- User-friendly operation
- Wide speed range, 300 – 40.000 rpm at the motor
- Precise torque limitation, 5 – 70 Ncm
- Automatic thread cutter function
- Motor with cable, thermo washer disinfectable and sterilizable

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 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

1. Transportation case ST-K 29 for transport of unit and accessories to other locations (unit not included)

2. Sterilization cassette with compartments for motor, cables, straight and contra-angle handpieces (not included)

3. Foot control S-N1, AP-tested (conforms to the guidelines for use in operating theatres)

4. Equipment trolley with* and without power outlet strip
   - > Total height: 78 cm
   - > Upper tray (WxD): 39,5 cm x 36,5 cm
   - > Middle tray (WxD): 31 cm x 24 cm
   - > Lower tray (WxD): 40 cm x 43 cm

1

2

3

4

* EU plug only

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

CE 0297

Type:	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:	independent generator			
Light quality:	daylight			
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 Ø 2.35 mm			
	L = 45 also Stryker system	L = 45 also Stryker system	with contra-angled shank	with contra-angled shank
Maximum drive speed:	40,000 min^{-1}	40,000 min^{-1}	40,000 min^{-1}	40,000 min^{-1}
Easily dismantled:	yes	no	yes	no
Indications, e.g.:	apical resection osteotomy sequestrectomy apical trepanning bone modelling	as for S-11 LED G	implantation segmental osteotomy	as for WS-75 LED G

Surgical contra-angles (page 7)

CE 0297

Type:	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 Ø 2.35 mm	contra-angled shank Ø 2.35 mm	FG shank Ø 1.6 mm	contra-angled shank Ø 2.35 mm
Maximum drive speed:	50,000 min^{-1}	50,000 min^{-1}	50,000 min^{-1}	50,000 min^{-1}
Easily dismantled:	yes	yes	yes	no
Indications, e.g.:	implantation segmental osteotomy	maxillary and mandibular osteotomy germectomy sequestrectomy	hemisection extraction of wisdom teeth	as for WS-75 E/KM

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

Surgical handpieces (page 7)

CE 0297

Type:	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 Ø 2.35 mm			
	L = 45 also Stryker system	L = 45 also Stryker system	L = 45 also Stryker system	L = 70
Maximum drive speed:	50,000 min^{-1}	30,000 min^{-1}	50,000 min^{-1}	50,000 min^{-1}
Easily dismantled:	yes	yes	yes	yes
Indications, e.g.:	apical resection osteotomy sequestrectomy apical trepanning bone modelling	as for S-11 for difficult to access areas	extraction of wisdom teeth apical resection fenestration apical trepanning	bone shaving osteotomy fenestration osteosynthesis in distal areas

*** S-12:** as for S-10, 1:2, maximum drive speed 40,000 min^{-1}; indications: e.g., complicated extractions of impacted wisdom teeth, apical resection in distal areas, bone shaving, osteotomy, decompression

Surgical saw handpieces (pages 8 – 9)

CE 0297

Type:	S-8 R	S-8 O	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 min^{-1}	40,000 min^{-1}	40,000 min^{-1}
Easily dismantled:	yes	yes	yes

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

Elcomed (pages 11 – 12)

CE 0297

Type:	SA-310
Max. torque at the rotary instrument*:	80 Ncm
Documentation**:	yes / USB
Mains voltage:	100 – 130 V or 220 – 240 V, 50 / 60 Hz
Max. mechanical output power:	100 W
Max torque at the motor:	7 Ncm
Motor speed:	300 – 50,000 min^{-1}, safety stop at 40,000 min^{-1}
Intended transmission instruments:	ISO connection 3964 (DIN 13.940)
Length of motor cable:	1.8 m or 3.5 m
Coolant rate:	0 – 100 ml/min
Foot control:	yes
Height / width / depth:	109 x 256 x 305 mm

* Adjustment with WS-75 and WI-75
** also available without documentation function

Implantmed (page 13)

CE 0297

Type:	SI-915	SI-923
Max. torque at the rotary instrument*:	70 Ncm	
Mains voltage:	100 – 130 V, 50 / 60 Hz	220 – 240 V, 50 / 60 Hz
Max. mechanical output power:	70 W	
Max. torque at the motor	5.5 Ncm	
Motor speed:	300 – 40,000 min^{-1}	
Intended transmission instruments: Program 4 and 5:	ISO connection 3964 (DIN 13.940), transmission ratio 1:1, 20:1 exclusively with WI-75 E/KM, WI-75 LED G, WS-75 E/KM or WS-75 LED G	
Length of motor cable:	1.8 m	
Coolant rate:	approx. 100 ml/min	
Foot control:	yes	
Height / width / depth:	100 x 235 x 240 mm	

* in program 4

Prosthodontic screw driver IA-400 (page 14)

CE
0297

Handpiece drive IA-400	
Battery type:	Li ion
Battery voltage:	3.7 V
Rated capacity:	680 mAh
Speed of the instrument:	25 min^{-1}
Torque:	8 – 40 Ncm
Charging time:	approx. 100 min.
Battery capacity:	approx. 40 screws at average torque
Weight:	90 g

Contra-angle IA-80	
Type:	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 shown are not included as standard.

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