

# Handpiece Collection



# W&H: the leader in handpiece innovation.

For more than 125 years, W&H has been setting the standard with new technology and innovative product development. Today, the exclusive A-dec|W&H partnership co-develops the world's most advanced handpiece systems and small equipment integration, with a shared commitment to quality, reliability and excellent service.

A-dec|W&H products are also backed by some of the best and longest warranties in the dental industry: two years for Synea and one year for Alegra handpieces. Authorized repairs are warranted for a full year, not simply the remaining warranty period.

## Milestones in handpiece development.

**1890**

W&H becomes the first European manufacturer of mechanically operated hand and contra-angle handpieces.



**1979**

W&H introduces 360 degree coupling and the world's first push-button chucks for turbines, immediately simplifying the process of changing the bur on the instrument head.



**1992**

W&H introduces the Assistina, a cleaning and care device that is both simple to use and very cost effective. The new product allows fully automatic oil service and complete cleaning of spray channels for the first time ever.



**2007**

W&H becomes the first dental equipment manufacturer to introduce turbines with sterilizable LEDs to the market with Synea handpieces.

2009

W&H introduces LED light from non-lighted 4-hole tubing with a unique self-generating turbine. These Alegra handpieces connect seamlessly to non-lighted 4-hole tubing.



2014

W&H develops the smallest electric motor available, the EA-53, which seamlessly integrates into A-dec delivery systems with controls integrated into the touchpad. Up to two motors can run off one controller.



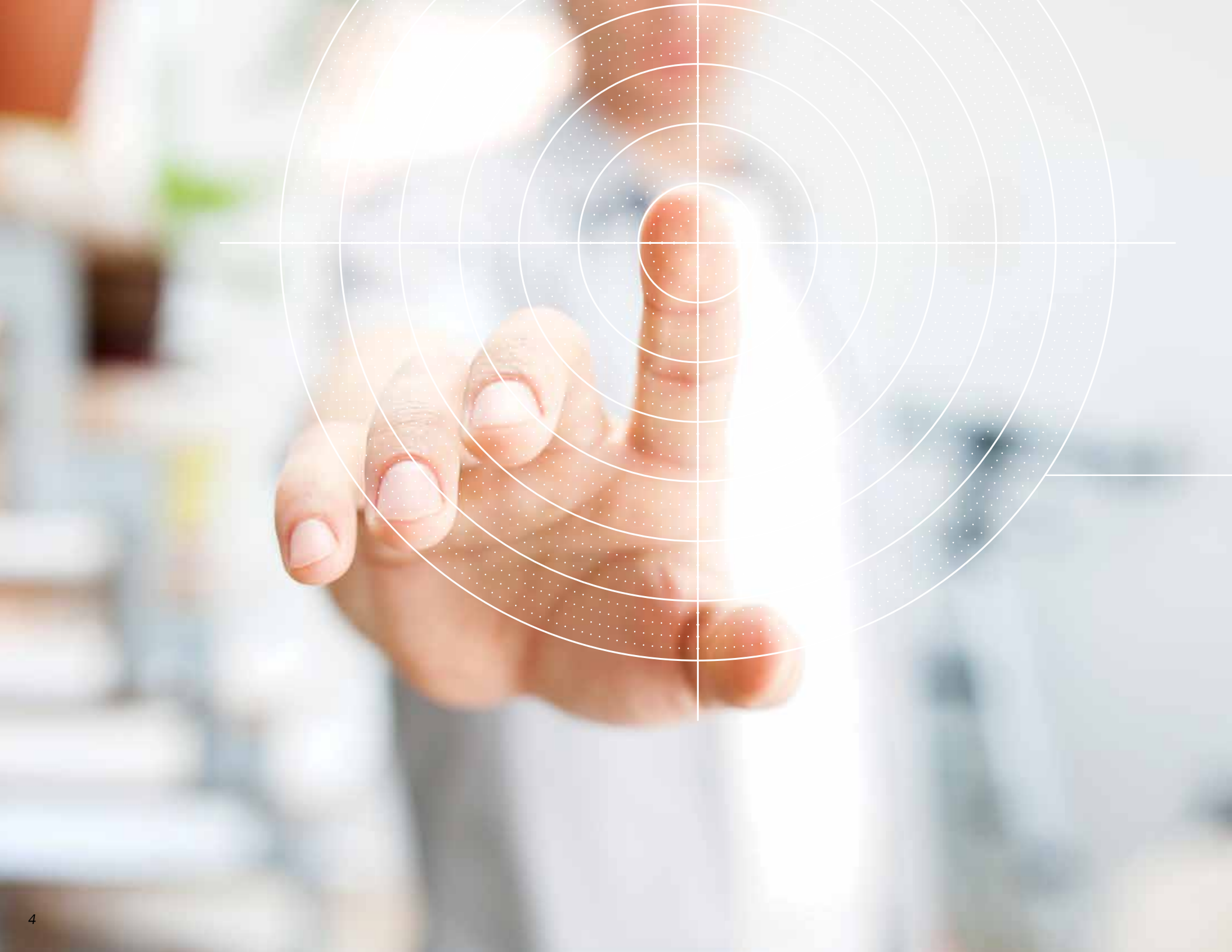
W&H achieves a technological sensation: five powerful, pinhead-sized LEDs integrated in a ring shape, surrounding the burr on the Synea 500 turbine.



## Handpiece Try & Buy

A-dec|W&H handpieces are engineered for optimal power, precision and control—and testing them for yourself couldn't be easier. Visit [a-dec.com/Try](http://a-dec.com/Try) for details.





## High performance for the human touch.

A-dec | W&H handpiece systems are engineered for optimal power, precision, and control, for the specific application at hand. Precisely balanced for the perfect feel in your hand, you can focus on what matters most: your patient.

### Table of contents

Synea 500 .....	10-13
Synea 400 .....	14-17
Alegra 300 .....	18-21
Endo and Hygiene .....	22-23
Motors .....	24-25
Specifications .....	26-27



# Air or electric? Why not both?

## Electric handpieces.

### When power, precision and versatility are key.

Electric handpieces deliver ultra-smooth performance for the greatest range of applications. With A-dec|W&H, you get the world's smallest electric motor and handpieces to work between high-speed and low-speed, and endodontics. All the torque you need balances lightly in your hand. And for gross enamel reduction or crown removal, expect full power for every precision cut and fine margin.



### Why electric?

If you like having full power and torque, you want electric. With the EA-53 electric motor, you can have it all: small size, big integration, and tactile sensitivity that sets a whole new standard.



## Air handpieces.

### When feel and vision matter most.

Doctors choose air handpieces for the tactile sensation of the bur with applied pressure. A-dec | W&H ensures productivity and optimal vision with refined small heads, unique placement of the LED illumination, and superior sight lines.

### Why you need both.

For increased efficiency, choose both. The power and precision of electric quickly tackles the big jobs. And, when you need the finesse of an air handpiece, it's right at your fingertips.



# Solutions for everyone.

Air and electric. Speed and torque. Weight and balance. Access and vision. We're here to help you put together the ideal combination for your practice.



## Synea 500

Unmatched visibility. Power and precision. Compact and ultra lightweight. It's best in class, and you'll notice the difference the moment you feel it in your hand.

- Air
- Electric



## Synea 400

Streamlined and simple, yet sophisticated. Synea 400 fits all leading brands' quick-disconnect couplers for easy mounting and removal. It's our most varied collection.

- Air
- Electric







## Alegra 300

The patented self-generating LED+ light changes everything. Simply attach your Alegra 300 high-speed handpiece to any air tubing and enjoy LED+ light.

- Air



## A-dec | W&H Handpiece Advisor

Compare handpiece models and find detailed product information at [a-dec.com/HandpieceAdvisor](http://a-dec.com/HandpieceAdvisor).



# Synea 500 | Air High-speed

Patented ring-LED+ lighting around the bur creates bright, shadow-free illumination.



TK-97L  
High-speed  
Mini head

## A more powerful experience.

Meet the new high-speed standard. Get unparalleled performance with outstanding control, balance and power. Plus, get shadow-free illumination with 5 LED+ lights surrounding the bur.

- Lightest handpiece system in the industry with our best swivel for reduced hand and wrist fatigue
- Ring LED+ illuminates the entire oral cavity
- Debris clearing 5 spray ports provides unprecedented visibility
- Available in four head sizes: micro, mini, standard and torque



TK-94L  
Micro



TK-97L  
Mini



TK-98L  
Standard



TK-100L  
Torque

Handpieces and head sizes are shown actual size.

## Works with

The Synea 500 series handpieces require a RQ-24 Roto-Quick coupler.



gross enamel reduction • crown and bridge • amalgam removal • polishing • finishing



# Synea 500 | Electric

## Compact length\*

## Standard length



WK-93LTS  
High-speed  
Friction-grip 1:4.5



WK-56LTS  
Low-speed  
Latch 1:1



WK-93LT  
High-speed  
Friction-grip 1:4.5



WK-56LT  
Low-speed  
Latch 1:1



HK-43LT  
Low-speed  
Lab 1:1

Handpieces are shown actual size.

high-speed • gross enamel reduction • crown and bridge • amalgam removal • polishing • finishing

low-speed • decay removal • refining • finishing • polishing

## Who knew it could be this good?

The new super compact and lightweight handpiece design provides the power of an electric in the size of an air handpiece. Nothing in the world comes close. At the leading edge of technology, Synea 500 gives you a comprehensive range of high-speed and low-speed options.

- Micro head design offers exceptional access and visibility
- 5 spray ports clear debris to provide an optimal view of the working surface
- One-piece unibody design reduces sound and provides virtually vibration-free operation
- Scratch-resistant surface is as sleek as the ultra-smooth operation

*"The small size, quiet operation, and terrific power make this the best handpiece I have used."*



*Dr. Jerry Martin  
Granite Bay, California*

## Works with

Synea 500 standard handpieces work best with the EA-53 electric motor or any E-style electric motor.

\*Synea 500 compact handpieces work with the EA-53 and any compact E-style electric motor.



EA-53

## Operator handpiece package

*Take advantage of our bundled handpiece packages and save.*



Synea 500 electric  
(3) WK-93LTS

To compare handpiece models visit  
[a-dec.com/HandpieceAdvisor](http://a-dec.com/HandpieceAdvisor).

# Synea 400 | Air

## Proven and sophisticated.

Serious technology reduces hand fatigue and improves visibility. Lots of choices, one result: precision with comfort.

- Mini head design improves access and visibility
- Standard head offers extra cutting power
- Lightest handpiece system in the industry to reduce hand and wrist fatigue
- LED+ illuminates the entire arch with daylight quality light
- 4 spray ports provide effective cooling and a clear view



TG-97L  
High-speed  
Mini head



TG-98L  
High-speed  
Standard head

Handpieces are shown actual size.

gross enamel reduction • crown and bridge • amalgam removal • polishing • finishing

## Works with

The TG-97L/98L handpieces require a RQ-24 Roto-Quick coupler. Other Synea 400 handpieces are also available. See page 24.



RQ-24



# Synea 400 | Electric

## Standard length



WG-99LT  
High-speed  
Friction-grip 1:5



WG-56LT  
Low-speed  
Latch 1:1



WG-57LT  
Low-speed  
Friction-grip 1:1



WG-66LT  
Low-speed  
Latch 2:1



HG-43A  
Low-speed  
Lab 1:1

Handpieces are shown actual size.

high-speed • gross enamel reduction • crown and bridge • amalgam removal • finishing

low-speed • decay removal • refining • finishing • polishing



## Broad applications and seamless delivery system integration.

One-piece unibody design for reduced sound and virtually vibration-free operation. Ultra quiet operation means comfort for doctor and patient alike.

- Mini head design improves access and visibility
- 3 times more power than air high-speeds for exceptionally efficient cutting
- 4 spray ports provide effective cooling and a clear view (WG-99LT)

### Works with

The Synea 400 standard handpieces work best with the EA-53 electric motor or any E-style electric motor.



EA-53

*"Synea handpieces make me a better dentist!"*



*Dr. Andrew Olsson  
Hood River, Oregon*

### Operatory handpiece package

*Take advantage of our bundled handpiece packages and save.*



*Synea 400 electric  
(3) WG-99LT*

To compare handpiece models visit  
[a-dec.com/HandpieceAdvisor](http://a-dec.com/HandpieceAdvisor).

# Alegra 300 | Air



TE-97LQ  
High-speed  
Mini head



TE-98LQ  
High-speed  
Standard head

Handpieces are shown actual size.

## How EASY is this?

You gain light without upgrading, and there's no reason for a service call to install an intraoral light source. Just attach and go. Our whole new approach to air technology works on any delivery system with 4-hole tubing.

## Simple. Adaptable. Affordable.

Get all of the comfortable balance, low noise, and illumination you've come to expect with premium offerings, at a price you will appreciate.

- Mini head design improves access and visibility
- Standard head offers extra cutting power
- Unique self-generated LED+ lighting—fits any type of handpiece tubing including non-lighted
- 3 spray ports provide effective cooling and a clear view
- Lightweight handpiece design reduces hand and wrist fatigue

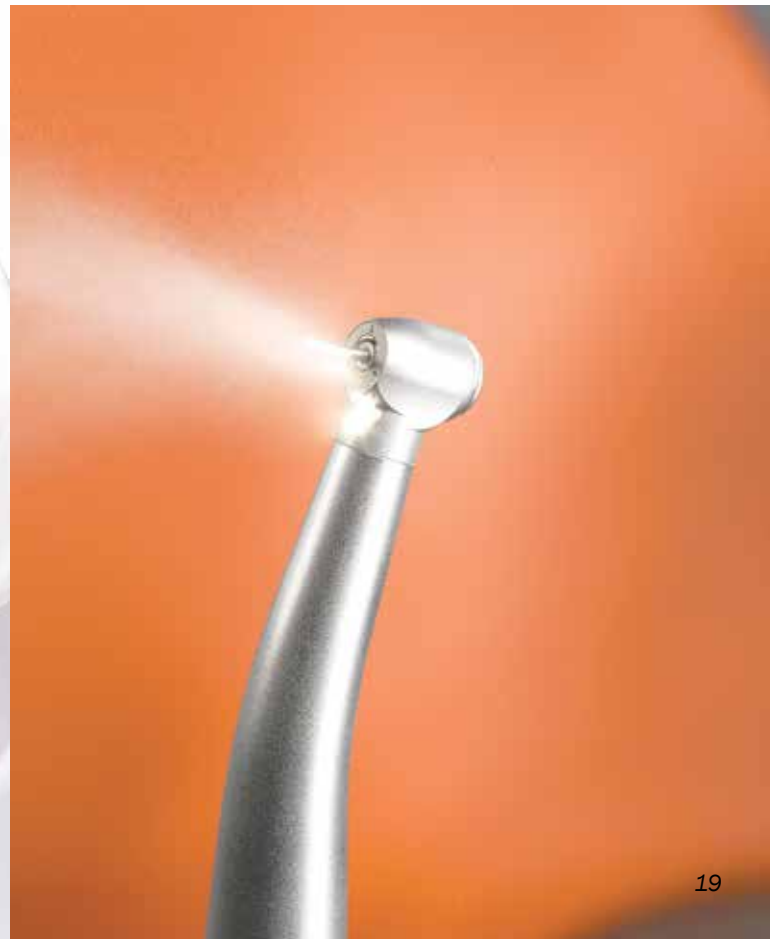
gross enamel reduction • crown and bridge • amalgam removal • polishing • finishing

## Works with

The Alegra 300 series high-speed air handpieces require a RQ-54 Roto-Quick coupler.



RQ-54



# Alegra 300 | Air



WE-56T  
Low-speed  
Latch 1:1



WE-57T  
Low-speed  
Friction grip 1:1



WE-66T  
Low-speed  
Latch 4:1



HE-43T  
Low-speed  
Lab 1:1

Handpieces are shown actual size.

decay removal • refining • finishing • polishing

## Finish. Polish. Finesse.

Handpieces to help you perfect those critical finishing steps.

- Short, slim, and lightweight handpiece design with our best swivel reduces hand and wrist fatigue
- Precision ball-bearings provide exceptional tactile feedback with smooth and quiet operation
- Mini head design improves access and visibility
- Unibody design simplifies handpiece cleaning, maintenance, and sterilization

## Works with

The Alegra 300 handpieces (shown) require an AM-20RM air motor. Other handpieces and motor options are also available. See page 25.



A-dec | W&H  
AM-20RM



Midwest® compatible  
AM-20MW



StarDental® compatible  
AM-20SD

*“When we’re excavating decay using the low-speed handpiece, the patients don’t even notice it anymore.”*



Dr. Juliette Murko,  
Pittsburgh, Pennsylvania

## Air low-speed handpiece package

*Take advantage of our bundled handpiece packages and save.*



300 series air package  
(2) WE-56T  
(1) AM-20RM

To compare handpiece models visit  
[a-dec.com/HandpieceAdvisor](http://a-dec.com/HandpieceAdvisor).

## Endea

Get better access with a micro head. With Endea's legacy of innovation you're ready to access the canal with unmatched control, visibility and ease.

- Micro head design offers exceptional access and visibility
- Precision ball-bearing design provides precise torque and ultra smooth operation to improve performance and maintain file integrity
- The 2:1 speed reducing ratio delivers increased control over file speed and torque limits (EB-79)
- The 4:1 speed reducing ratio delivers increased power and more torque when needed (EB-77)



EB-79  
Endo  
Latch 2:1



EB-77  
Endo  
Latch 4:1

Handpieces are shown actual size.

## Works with

Endea handpieces work best with the EA-53 electric motor partnered with the A-dec deluxe touchpad.



EA-53

# Specialty | Hygiene

## Proxeo

All-around comfort for optimal prophy treatments. The advanced, lightweight Proxeo collection minimizes fatigue, while accommodating all leading cups and brushes.

- Micro head design offers exceptional access and visibility
- Precision ball-bearings provide superior tactile feedback with smooth and quiet operation
- Short, lightweight handpiece and motor with ultra smooth swivel deliver outstanding ergonomics

*Handpieces are shown actual size.*



WP-64TS  
Prophy set  
4:1



HP-44TS  
Prophy set  
4:1



EA-53

### A motor with feeling.

Lightweight and loaded with versatility, the EA-53 motor gives you outstanding tactile sensitivity from one small, powerful, and quiet motor. Compact and balanced with a full range of handpieces for high-speed and low-speed applications—expect to do your best work better. Ultra-quiet and low vibration, with a natural tactile sensation.

For general dentistry, hygiene, and endodontics, the EA-53 motor is ready to fully integrate with your A-dec 500 and A-dec 300.

- Compact and lightweight electric motor provides superior ergonomics for reduced hand and wrist fatigue
- Electric motor provides over three times the power of an air handpiece in virtually the same size
- Vibration-free motor operation delivers unparalleled tactile feedback
- Low noise level and LED+ lighting for superior visibility

### Add an electric motor to any delivery.

One of the smallest motors on the market is now available as a tabletop. With a touchpad interface, the EA-53TT gives you the ability to add an electric motor with endo functionality to any delivery system.



EA-53TT Tabletop



# AM-20 | Air Motor



## Traditional for a good reason.

Tactile sensation and power all rolled into one lightweight, dependable motor solution. With an air motor, you have the ability to remove tooth structure rapidly, with a light touch. No wonder air motors have been used in dentistry for more than 40 years. You know you will get a motor that's easy to control and long lasting.

- Precision ball-bearings provide exceptional tactile feedback with smooth and quiet operation
- Powerful design creates greater cutting efficiency
- Ultra smooth swivel and light weight reduce hand and wrist fatigue














	System	Max. speed (rpm)
AM-20RM	A-dec   W&H	20,000
AM-20MW	Midwest compatible	20,000
AM-5MW		5,000
AM-20SD	StarDental compatible	20,000
AM-5SD		5,000
Torque Multiplier		20,000-5,000

# Specifications



	Model	Head type	Power (watts)	Light	Spray ports	Head diameter (mm)	Head height (mm)	Head height (w 19 mm bur)	Weight (grams)	Noise level (dB)	Coupler	Tubing
Synea 500 Series Air High-Speeds	TK-94L	micro	14W	LED+	5	9.0	10.2	17.2 (16 mm bur)	39	57	RQ-24	6-pin
	TK-97L	mini	21W	Ring LED+		10.0	13.1	21.1	38			
	TK-98L	standard	24W			11.5	14.6	21.4	40			
	TK-100L	torque	26W			13.0						
Synea 400 Series Air High-Speeds	TG-97L	mini	18W	LED+	4	10.0	13.1	21.1	40	59	RQ-24	6-pin
	TG-98L	standard	21W			11.5	14.6	21.4				
	TG-97LW	mini	16W	halogen		10.0	13.1	21.1	60		RA-24/25	
	TG-98LW	standard	19W			11.5	14.6	21.4	61			
	TG-97LM	mini	16W	standard LED		10.0	13.1	21.1	68			Kavo multi-flex lux
	TG-98LM	standard	19W			11.5	14.6	21.4	70			
	TG-97LN	mini	16W			10.0	13.1	21.1	50		NSK PTL	
	TG-98LN	standard	19W	11.5		14.6	21.4	52				
	TG-97	mini	16W	no light		10.0	13.1	21.1	43		RQ-04	4-hole
	TG-98	standard	19W			11.5	14.6	21.4	44			
Alegra 300 Series Air High-Speeds	TE-97LQ	mini	14W	self- generated LED+	3	10.4	13.2	21.4	46	62	RQ-54	4-hole
	TE-98LQ	standard	16W			12.2	15.0	21.8	48			


	Model	Handpiece type	Gear ratio	Max. Speed (rpm)	Chuck	Light	Spray ports	Head diameter (mm)	Head height (mm)	Head height (w 19 mm bur)	Weight (grams)	Length (mm)				
Synea 500 Series	WK-93LTS	compact electric high-speed	1:4.5	180,000	Push-button 1.6mm friction grip burs	yes	5	9.1	13.2	21.2	66	87				
	WK-93LT	standard electric high-speed									71	96				
	WK-56LTS	compact electric low-speed	1:1	40,000	Push-button 2.35mm latch burs		1	9.5	12.5	20.0	66	87				
	WK-56LT	standard electric low-speed									68					
	HK-43LT	standard electric straight			Twist-tension 2.35 mm lab burs						n/a	n/a	n/a	88	96	
Synea 400 Series	WG-99LT	standard electric high-speed	1:5	200,000	Push-button 1.6mm friction grip burs	yes	4	9.5	14.5	21.7	74	96				
	WG-56LT	standard electric low-speed	1:1	40,000	Push-button 2.35mm latch burs				1	13.5	21.5		68			
	WG-57LT	standard electric low-speed			Push-button 1.6mm friction grip burs		9.9	15.5		22.2	70					
	WG-66LT	standard electric low-speed	2:1	20,000	Push-button 2.35mm latch burs		9.5	13.5	21.5	68						
	HG-43A	standard electric straight	1:1	40,000	Twist-tension 2.35 mm lab burs		No	1	n/a	n/a	n/a		77			
Alegra 300 Series	WE-56T	A-dec   W&H air low-speed	1:1	20,000	Push-button 2.35mm latch burs	No	No	10.1	13.01	20.7	42	87.9				
	WE-57T	A-dec   W&H air low-speed	1:1	20,000	Push-button 1.6mm friction grip burs					22.4						
	WE-66T	A-dec   W&H air low-speed	4:1	5,000	Push-button 2.35mm latch burs					20.7						
	HE-43T	A-dec   W&H air straight	1:1	20,000	Twist-tension 2.35 mm lab burs					n/a			n/a	n/a	44	87.1
	WE-56TMW	Midwest compatible air low-speed	1:1	20,000	Push-button 2.35mm latch burs					20.7						
	WE-57TMW	Midwest compatible air low-speed	1:1	20,000	Push-button 1.6mm friction grip burs					22.4						
	HE-43TMW	Midwest compatible air straight	1:1	20,000	Twist-tension 2.35 mm lab burs					n/a			n/a	n/a	41	78.2
	WE-56TSD	StarDental compatible air low-speed	1:1	20,000	Push-button 2.35mm latch burs					10.1			13.01	20.7	79.7	
	WE-57TSD	StarDental compatible air low-speed	1:1	20,000	Push-button 1.6mm friction grip burs					22.4						
HE-43TSD	StarDental compatible air straight	1:1	20,000	Twist-tension 2.35 mm lab burs	n/a	n/a	n/a	39	66.9							

# Synea | 500 Series






















	Air High-Speed	Compact Electric	Standard Electric
Synea 500	 TK-94L  TK-98L  TK-97L  TK-100L	 WK-93LTS high-speed  WK-56LTS low-speed	 WK-93LT high-speed  WK-56LT low-speed  HK-43LT lab
Coupler	 RQ-24  6-pin	 Electric Motor	 EA-53

## Operatory handpiece packages

Synea 500 Air	
(3) Synea 500 air high-speeds	(1) Roto-Quick
 TK-97L or TK-98L	 RQ-24

Synea 500 Electric
(3) Synea 500 electric high-speed compacts
 WK-93LTS

# Synea | 400 Series

Air High-Speed		Coupler	Standard Electric		
 TG-97L	 TG-98L	 RQ-24	 WG-99LT high-speed	 WG-56LT low-speed	 WG-57LT low-speed
 TG-97LW	 TG-98LW	 RA-24/25	 WG-66LT low-speed	 HG-43A lab	
 TG-97	 TG-98	 RQ-04			
 TG-97LM	 TG-98LM	 Kavo® Multi-Flex		 EA-53	
 TG-97LN	 TG-98LN	 NSK® PTL			

## Operatory handpiece packages

**Synea 400 Air**


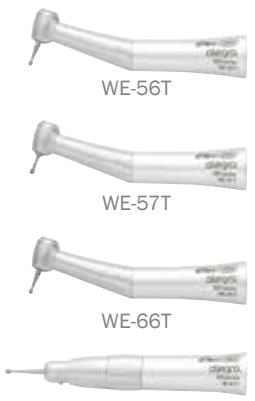
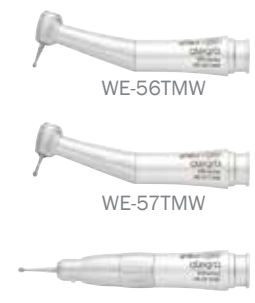


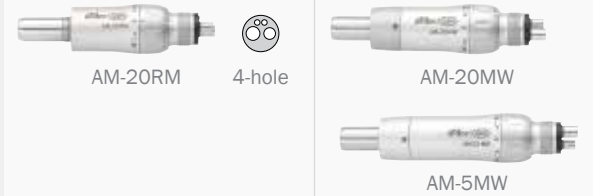

(3) Synea 400 air high-speeds  
TG-97L or TG-98L

(1) Roto-Quick  
RQ-24

**Synea 400 Electric**

(3) Synea 400 electric high-speeds  
WG-99LT


# Alegra | 300 Series

Air High-Speed		Air Low-Speed		
		A-dec   W&H	Midwest	StarDental
Alegra 300	 <p>TE-97LQ      TE-98LQ</p>	 <p>WE-56T WE-57T WE-66T HE-43T</p>	 <p>WE-56TMW WE-57TMW HE-43TMW</p>	 <p>WE-56TSD WE-57TSD HE-43TSD Torque Multiplier</p>
	 <p>RQ-54      4-hole</p>	<p>Air Motors</p>  <p>AM-20RM      4-hole AM-20MW      4-hole AM-5MW      4-hole</p>	 <p>AM-20SD      4-hole AM-5SD      4-hole</p>	

## Operatory handpiece packages

**Alegra 300 Air High-Speed Handpieces**


(3) Alegra 300 air high-speeds      (1) Roto-Quick



TE-97QL or TE-98QL      RQ-54

**Alegra 300 Air Low-Speed Handpieces**

(2) Alegra 300 air low-speeds      (1) Air motor



WE-56T      AM-20RM

## Proxeo



HP-44TS phophy set



WP-64TS phophy set

## Endea



EB-79



EB-77



EA-53

Electric  
Motor

# What goes into a best in class partnership?

With more than 170 years of combined dependability and dedicated support, A-dec and W&H have a mutual vision of improving the daily lives of dental professionals worldwide.



## Shared values.

**W&H Philosophy:** People have priority. Our focus is based on customer benefits with innovative products and services by focusing particularly on the requirements of the customer and offering pioneer solutions for them.

**The A-dec Way:** Our philosophy is a commitment to strive for excellence in all we do. No detail is too small to qualify for attention. Quality is everyone's responsibility. There is no such thing as "almost" fair or "almost" honest.

## Strength in numbers.

Established: 1890  
Employees: 1000 worldwide  
Headquarters: Bürmoos, Austria

Established: 1964  
Employees: 1000 worldwide  
Headquarters: Newberg, Oregon USA

## Unsurpassed customer support.

With more than 60 A-dec|W&H territory managers, legendary A-dec customer service, and a wide network of authorized dealers, we are available to assist you with installation, operation and maintenance. A-dec|W&H is your partner for the life of your practice.



### A-dec Headquarters

2601 Crestview Drive  
Newberg, Oregon 97132 USA  
Tel: 1.800.547.1883 within USA/CAN  
Tel: +1.503.538.7478 outside USA/CAN  
Fax: +1.503.538.0276  
a-dec.com

### A-dec Australia

Tel: 1.800.225.010 within AUS  
Tel: +61.(0)2.8332.4000 outside AUS

### A-dec China

Tel: 400.600.5434 within CN  
Tel: +86.571.89026088 outside CN

### A-dec United Kingdom

Tel: 0800.233285 within UK  
Tel: +44.(0).24.7635.0901 outside UK

A-dec, the A-dec logo, A-dec Inspire, Cascade, Century Plus, Continental, Decade, ICX, ICV, Performer, Preference, Preference Collection, Preference ICC, Radius, and reliablecreativesolutions are trademarks of A-dec Inc. and are registered in the United States and other countries. A-dec 500, A-dec 400, A-dec 300, and A-dec 200 are also trademarks of A-dec Inc. None of the trademarks or trade names in this document may be reproduced, copied, or manipulated in any manner without the express, written approval of the trademark owner.

Certain touchpad symbols are proprietary to A-dec Inc. Any use of these symbols, in whole or in part, without the express written consent of A-dec Inc., is strictly prohibited.

The colors and products shown may vary from the actual materials and are subject to change without notice. Please see your authorized A-dec dealer for accurate color samples and the most current product information.

© 2017 A-dec Inc. All rights reserved.  
85.6074.00/PP/8M/12-17/Rev H