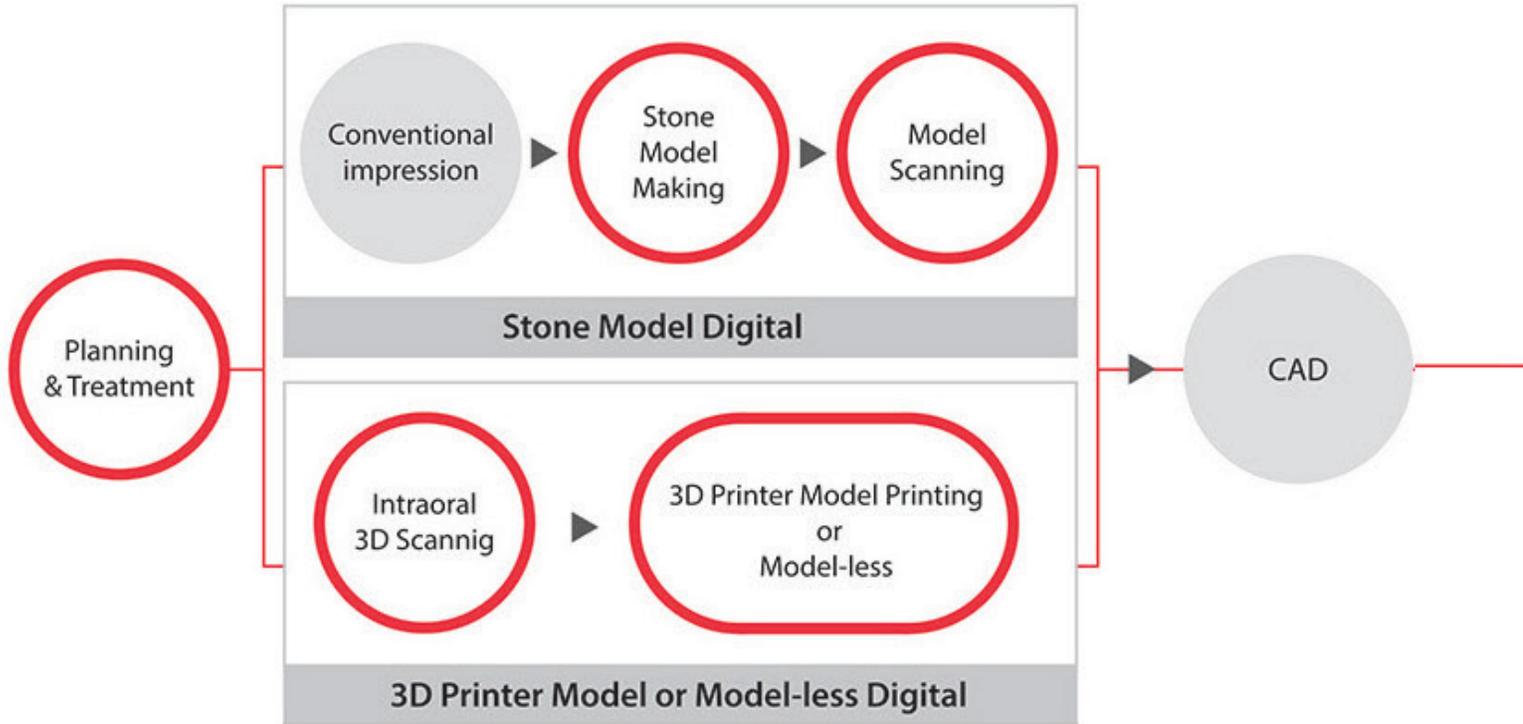


# ARUM CATALOG

DIGITAL DENTISTRY SOLUTIONS



# ARUM Digital Dentistry Workflow



## Implant



## Consumables



## Lab Driver



With use of products of Arum Dentistry from planning & treatment and CAD/CAM design to prosthesis production, Digital Dentistry becomes fun for you.  
 You can realize simple prosthesis production and prosthetic treatment using ARUM Digital Dentistry Solution that features: "Fixture Design (Patent No. 10-2118038)" allowing rapid formation of new bones by the distribution of the stress on the upper part of the fixture to prevent fracture and facilitate smooth blood flow in the screw part (Patent No.10-2118038);

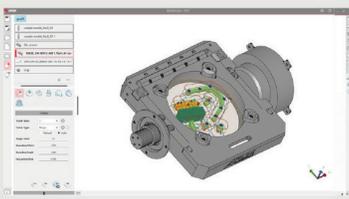
"Excellent Machining Precision of CAD / CAM milling machine recognized in the world market over the last 20 years; "Accurate and Excellent Quality Dental Material" that went through total inspection process (Ti 6Al-4V ELI / stainless steel 303F); "Zirconia Block" boasting its strength and natural shade, and "3D Printer System"(Printer, UV curing machine, Resin) boasting its fast printing speed and accuracy, you can realize simple prosthesis production and prosthetic treatment.



**CAM Program**

**CAD/CAM Materials**

**3D Printer Materials**



ARUM CAM



ARENA (Zirconia Block)  
 [ White, Pre-Shade, Multi-Layered ]



3D Printer Resin  
 [ Model, C&B ]

# ARUM Milling Machine Line Up



| Model                       | 5X-200                  | 5X-500L                    | 5X-500                     | 5X-450                  | 4X-450                  |                         |
|-----------------------------|-------------------------|----------------------------|----------------------------|-------------------------|-------------------------|-------------------------|
| Axis                        | 5 Axis                  | 5 Axis                     | 5 Axis                     | 5 Axis                  | 4 Axis                  |                         |
| Processing                  | Wet and Dry             | Wet and Dry                | Wet and Dry                | Wet and Dry             | Wet                     |                         |
| Max. RPM                    | 60,000                  | 60,000                     | 60,000                     | 60,000                  | 50,000                  |                         |
| Spindle Power               | DC 3.0kw                | AC 2.2kw                   | AC 2.2kw                   | AC 1.28kw               | AC 1.8kw                |                         |
| A.T.C                       | 15                      | 20                         | 20                         | 15                      | 6                       |                         |
| Tool Shank (mm)             | Ø6                      | Ø6                         | Ø6                         | Ø6                      | Ø6                      |                         |
| Motor                       | Servo                   | Servo                      | Servo                      | Stepping                | Stepping                |                         |
| Drive Mechanism             | Ball Screw              | Ball Screw                 | Ball Screw                 | Ball Screw              | Ball Screw              |                         |
| Way System                  | Linear Guide            | Linear Guide               | Linear Guide               | Linear Guide            | Linear Guide            |                         |
| Total Size (W*D*H)          | 31.5 x 37.4 x 69.3 inch | 43.31 x 35.83 x 67.52 inch | 27.95 x 35.83 x 66.73 inch | 31.1 x 31.1 x 64.8 inch | 31.1 x 31.1 x 64.8 inch |                         |
| Weight (Machine / Table)    | 595 lbs / 298 lbs       | 728 lbs / 192 lbs          | 507 lbs / 143 lbs          | 408 lbs / 144 lbs       | 408 lbs / 144 lbs       |                         |
| Travel                      | X,Y,Z axis              | 13 x 5.75 x 5.71 inch      | 8.98 x 5.04 x 5.12 inch    | 8.98 x 5.04 x 5.12 inch | 9.65 x 4.57 x 5.12 inch | 9.65 x 4.57 x 5.12 inch |
|                             | A / B axis              | 360° / ±30°                | 360° / ±30°                | 360° / ±30°             | 360° / ±35°             | 360° / -                |
| Disk Jig or Cartridge Type  | O type                  | O type, C type             | O type, C type             | C type                  | -                       |                         |
| Number of Jig               | -                       | 12                         | -                          | -                       | -                       |                         |
| Jig exchange                | -                       | Auto                       | -                          | -                       | -                       |                         |
| <b>Materials</b>            |                         |                            |                            |                         |                         |                         |
| Pre-milled Blank (Titanium) | ◎ (5ea)                 | ◎ (10ea)                   | ◎ (10ea)                   | ◎ (5ea)                 | ◎ (10ea)                |                         |
| Co-Cr & Ni-Cr Disk          | ◎                       | ○                          | ○                          | X                       | X                       |                         |
| Titanium Disk               | ◎                       | ◎                          | ◎                          | ○                       | X                       |                         |
| Lithium Disilicate          | ○                       | ○                          | ○                          | ○                       | X                       |                         |
| Nanocomposite               | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Zirconia                    | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| PMMA                        | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| PEEK                        | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Wax                         | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| <b>Applications</b>         |                         |                            |                            |                         |                         |                         |
| Implant Bar                 | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Screw-Retained Bridge       | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Customized Abutment         | ◎                       | ◎                          | ◎                          | ◎                       | ◎                       |                         |
| Hybrid Abutment             | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Inlay & Onlay               | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Crown & Coping              | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Crown & Coping Bridge       | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Model                       | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Bite Splint                 | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Denture                     | ◎                       | ◎                          | ◎                          | ◎                       | X                       |                         |
| Page                        | 5-8p                    | 9-12p                      |                            | 13-16p                  |                         |                         |



| 4X-100                  | 5X-400                  | 5X-300 Pro              | 5X-300D                 | 4X-300                  | 4X-300D                 |
|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| 4 Axis                  | 5 Axis                  | 5 Axis                  | 5 Axis                  | 4 Axis                  | 4 Axis                  |
| Wet and Dry             | Wet and Dry             | Wet and Dry             | Dry                     | Wet and Dry             | Dry                     |
| 50,000                  | 80,000                  | 80,000                  | 60,000                  | 80,000                  | 60,000                  |
| AC 1.8kw                | AC 0.5kw                | AC 0.5kw                | AC 0.5kw                | AC 0.5kw                | AC 0.5kw                |
| 8                       | 10                      | 12                      | 12                      | 12                      | 12                      |
| Ø6                      | Ø4                      | Ø4                      | Ø4                      | Ø4                      | Ø4                      |
| Servo                   | Stepping                | Stepping                | Stepping                | Stepping                | Stepping                |
| Ball Screw              | Ball Screw              | Ball Screw              | Ball Screw              | Ball Screw              | Ball Screw              |
| Linear Guide            | Linear Guide            | Linear Guide            | Linear Guide            | Linear Guide            | Linear Guide            |
| 28 x 35 x 68.9 inch     | 22.5 x 25.8 x 64 inch   | 22.4 x 24.4 x 62.2 inch | 22.4 x 24.4 x 25.2 inch | 22.4 x 24.4 x 62.2 inch | 22.4 x 24.4 x 25.2 inch |
| 463 lbs / 181 lbs       | 220 lbs / 143 lbs       | 198 lbs / 143 lbs       | 198.4 lbs / X           | 198.4 lbs / 143 lbs     | 198.4 lbs / X           |
| 9.84 x 4.56 x 4.33 inch | 5.71 x 4.33 x 3.35 inch | 6.26 x 4.72 x 3.54 inch | 6.26 x 4.72 x 3.54 inch | 6.26 x 4.72 x 3.54 inch | 6.26 x 4.72 x 3.54 inch |
| - / 360°                | ±35° / 360°             | ±30° / 360°             | ±30° / 360°             | 360° / -                | 360° / -                |
| O type                  | O type                  | C type                  | C type                  | -                       | -                       |
| -                       | -                       | -                       | -                       | -                       | -                       |
| -                       | -                       | -                       | -                       | -                       | -                       |
| ◎ (10ea)                | ○ (2ea)                 | X                       | X                       | X                       | X                       |
| X                       | X                       | X                       | X                       | X                       | X                       |
| X                       | X                       | X                       | X                       | X                       | X                       |
| ○ (T Jig X)             | ◎                       | ◎                       | X                       | ◎                       | X                       |
| ◎ (T Jig X)             | ◎                       | ◎                       | ◎                       | ◎                       | ◎                       |
| ◎ (T Jig X)             | ◎                       | ◎                       | ◎                       | ◎                       | ◎                       |
| ◎ (T Jig X)             | ◎                       | ◎                       | ◎                       | ◎                       | ◎                       |
| ◎ (T Jig X)             | ◎                       | ◎                       | ◎                       | ◎                       | ◎                       |
| ◎ (T Jig X)             | ◎                       | ◎                       | ◎                       | ◎                       | ◎                       |
| ◎ (T Jig X)             | ◎                       | ◎                       | ◎                       | ◎                       | ◎                       |
| X                       | X                       | X                       | X                       | X                       | X                       |
| X                       | ○                       | ○                       | X                       | X                       | X                       |
| ◎ (T Jig ◎)             | ○                       | X                       | X                       | X                       | X                       |
| ○ (T Jig X)             | ◎                       | ◎                       | ◎                       | ○                       | ○                       |
| ○ (T Jig X)             | ◎                       | ◎                       | ◎                       | ○                       | ○                       |
| ○ (T Jig X)             | ◎                       | ◎                       | ◎                       | ○                       | ○                       |
| ○ (T Jig X)             | ◎                       | ◎                       | ◎                       | X                       | X                       |
| X                       | ◎                       | ◎                       | ◎                       | X                       | X                       |
| X                       | ◎                       | ◎                       | ◎                       | X                       | X                       |
| X                       | ○                       | ◎                       | ◎                       | X                       | X                       |
| 17-18 P                 | 19-22 P                 | 23-26 P                 | 27-28 P                 | X                       |                         |

\* Products are subject to change without notice to improve quality, function, design or otherwise. / ◎: High Compatibility / ○: Compatibility / X: Non-Compatibility

# ARUM 5X-200 Complete Ultimate System



## Amazing milling power

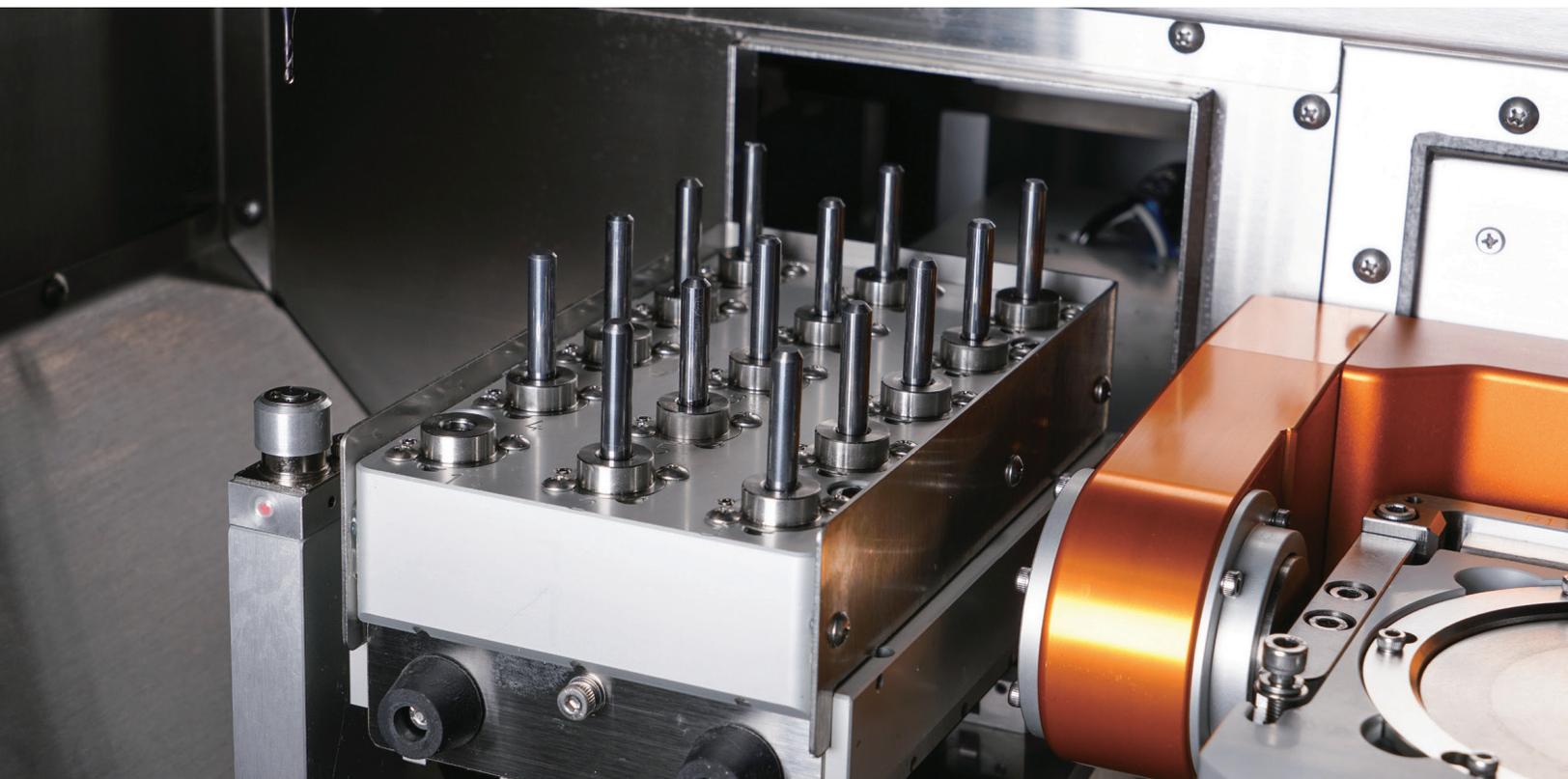
With DC 3.0kw spindle, Servo Motor & Linear Guide, you can mill any dental material such as Titanium, Co-Cr, Pre-milled Blank, Zirconia, Lithium Disilicate, Nanocomposite, PMMA, PEEK, and WAX and more.



## A standard of METAL milling

This machine can be compared with none of the metal milling machine. You can mill various shapes such as Implant Bar Bridge, Screw-retain Bridge, and Partial Framework using various materials such as Titanium, Co-Cr, and Ni-Cr, etc.

Based on unsurpassed metal milling capability and extensive knowhow accumulated over many years, the excellence of our product has been proven in the global market.





### Mounting of 5 pre-milled blanks

With a function of mounting of 5 pre-milled blanks simultaneously. Also, you can product Customized Abutment without Connector with AT Holder. In addition, it is possible to process using the Straumann PMAB holder (Bushing type) exclusively for Straumann Pre-milled Blanks, so it has expandability.



### Easy material replacement

As it is easy to replace Disk Cartridge, you can replace Disk quickly and easily and use materials economically.



### Special tool designed for perfection

The optimal tool designed to increase the completeness of milling. With use of ARUM's special tools (burs) such as Drill Tool, Reamer Tool, and Thread Tool, etc., you can achieve the best milling restoration.



DC  
3.0kw



Wet



Dry



All Disk



Connectorless



CAD Block



Pre-milled



5Axis

Co-Cr & Titanium Disk



Screw-Retained Bridge Crown & Coping



Implant Bar & Screw-Retained Bridge Coping

## Materials & Applications Info.

| Materials                   |         | Applications                           |   |
|-----------------------------|---------|--|---|
| Pre-milled Blank (Titanium) | ◎ (5ea) | Implant Bar                            | ◎ |
| Co-Cr & Ni-Cr Disk          | ◎       | Screw-Retained Bridge (Crown & Coping) | ◎ |
| Titanium Disk               | ◎       | Customized Abutment                    | ◎ |
| Lithium Disilicate          | ○       | Hybrid Abutment                        | ◎ |
| Nanocomposite               | ◎       | Inlay & Onlay                          | ◎ |
| Zirconia                    | ◎       | Crown & Coping                         | ◎ |
| PMMA                        | ◎       | Crown & Coping Bridge                  | ◎ |
| PEEK                        | ◎       | Model                                  | ◎ |
| Wax                         | ◎       | Bite Splint                            | ◎ |
|                             |         | Denture                                | ◎ |

◎: High Compatibility / ○: Compatibility / X: Non-Compatibility

## Specifications

|                 |             |                          |                                     |
|-----------------|-------------|--------------------------|-------------------------------------|
| Axis            | 5-Axis      | Drive Mechanism          | Ball Screw                          |
| Processing      | Wet and Dry | Way System               | Linear Guide                        |
| Spindle Power   | DC 3.0kw    | Machine Size (W*D*H)     | 31.5 x 37.4 x 37 inch               |
| Max. RPM        | 60,000      | Total Size (W*D*H)       | 31.5 x 37.4 x 69.3 inch             |
| A.T.C           | 15          | Weight (Machine / Table) | 595 lbs / 298 lbs                   |
| Tool Shank (mm) | Ø6          | Travel                   | X,Y,Z axis<br>13 x 5.75 x 5.71 inch |
| Motor           | Servo       |                          | A / B axis<br>360° / ±30°           |

## Accessories

|  |   |   |   |  |
|--|---|---|---|--|
|  |  |  |  |  |
| Disk Cartridge   | AT Holder   | Attachment  | Bushing   | Straumann PMAB holder (Bushing type)   |

\* Products are subject to change without notice to improve quality, function, design or otherwise.

# ARUM 500 Series [5X-500L / 5X-500]

The Leader of Middle Class Specialized

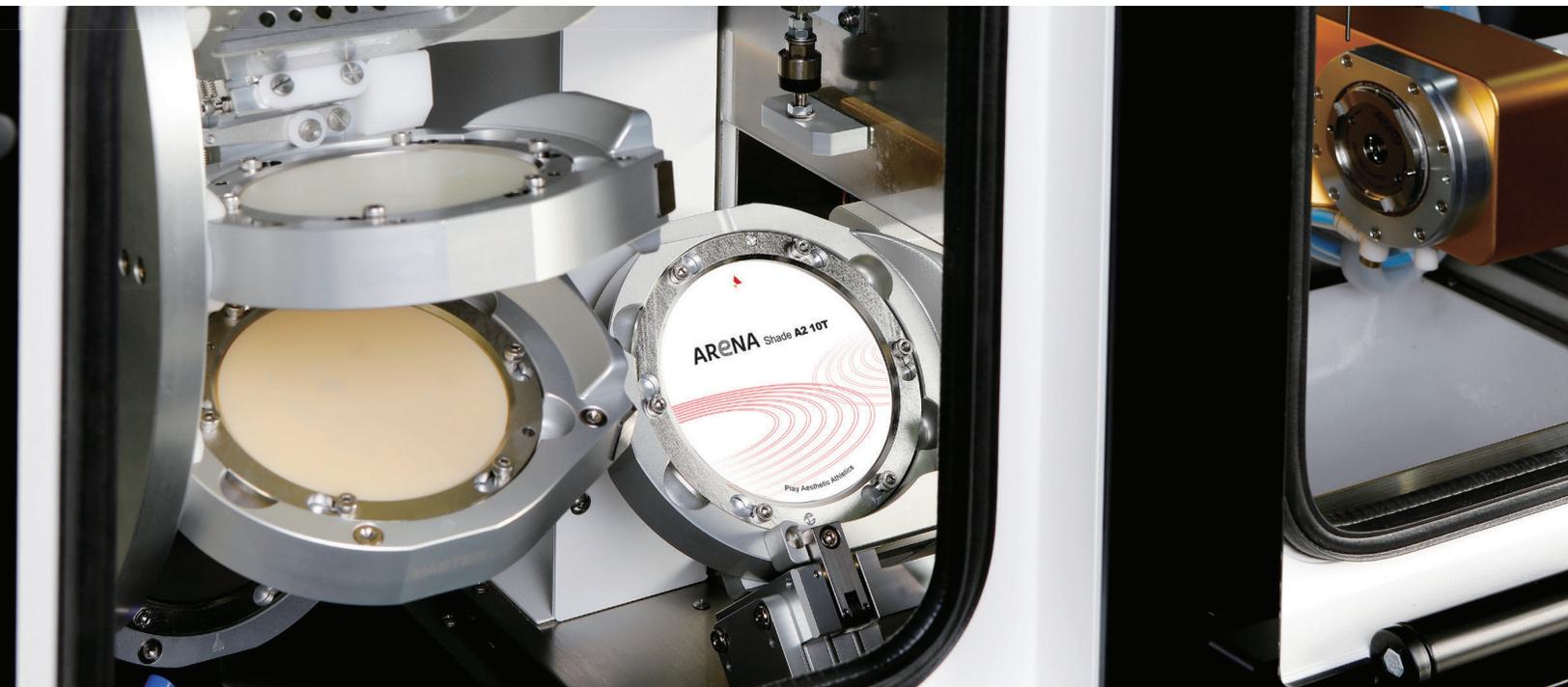


## Outstanding machining performance

5X-500L is a model with a loader part and with it you can realize a 24-hour smart factory with automatic replacement of 12 jigs.

You can machine accurately and stably even with repeated Jig replacement, and manage production time efficiently.

5X-500 is a modal without a loader part. With it you can easily replace 4 types of jigs, which allows you to be able to freely machine from disk to pre-milled blank.



### Excellent Precision and Durability

With ZERO Point system, you can achieve excellent origin point precision despite repeated jig replacement, which allows you to machine even complex shape stably. Servo Motor with built-in Absolute Encoder and Auxiliary Support compensates for even fine vibrations.



### Best-in-class Spindle

With the powerful spindle from Sycotec in Germany, it boasts excellent performance in machining all dental CAD/CAM materials including metal (Co-Cr, Titanium, Ni-Cr)

### Labial Side Machining

With Open C Type Jig, you can minimize time spent in precision machining and post-machining of labial (or Buccal) side texture and undercut area.



**ARENA** Shade A2 10T  
Pily Aesthetic Athletics

|          |      |        |          |      |          |           |
|----------|------|--------|----------|------|----------|-----------|
| 12       | 20   |        |          |      |          |           |
| Magazine | Tool | Labial | Occlusal | Cuff | All Disk | CAD Block |

## Materials & Applications Info.

| Materials                   |          |          | Applications                           |         |        |
|-----------------------------|----------|----------|--|---------|--------|
| Model                       | 5X-500L  | 5X-500   | Model                                  | 5X-500L | 5X-500 |
| Pre-milled Blank (Titanium) | ◎ (10ea) | ◎ (10ea) | Implant Bar                            | ◎       | ◎      |
| Co-Cr & Ni-Cr Disk          | ○        | ○        | Screw-Retained Bridge (Crown & Coping) | ◎       | ◎      |
| Titanium Disk               | ◎        | ◎        | Customized Abutment                    | ◎       | ◎      |
| Lithium Disilicate          | ○        | ○        | Hybrid Abutment                        | ◎       | ◎      |
| Nanocomposite               | ◎        | ◎        | Inlay & Onlay                          | ◎       | ◎      |
| Zirconia                    | ◎        | ◎        | Crown & Coping                         | ◎       | ◎      |
| PMMA                        | ◎        | ◎        | Crown & Coping Bridge                  | ◎       | ◎      |
| PEEK                        | ◎        | ◎        | Model                                  | ◎       | ◎      |
| Wax                         | ◎        | ◎        | Bite Splint                            | ◎       | ◎      |
|                             |          |          | Denture                                | ◎       | ◎      |

◎: High Compatibility / ○: Compatibility / X: Non-Compatibility

## Specifications

| Model                    | 5X-500L                    | 5X-500                     |
|--------------------------|----------------------------|----------------------------|
| Axis                     | 5-Axis                     | 5-Axis                     |
| Processing               | Wet and Dry                | Wet and Dry                |
| Spindle Power            | AC 2.2kw                   | AC 2.2kw                   |
| Max. RPM                 | 60,000                     | 60,000                     |
| A.T.C                    | 20                         | 20                         |
| Tool Shank (mm)          | Ø6                         | Ø6                         |
| Motor                    | Servo                      | Servo                      |
| Drive Mechanism          | Ball Screw                 | Ball Screw                 |
| Way System               | Linear Guide               | Linear Guide               |
| Machine Size (W*D*H)     | 43.31 x 35.83 x 33 inch    | 27.95 x 35.83 x 33 inch    |
| Total Size (W*D*H)       | 43.31 x 35.83 x 67.52 inch | 27.95 x 35.83 x 66.73 inch |
| Weight (Machine / Table) | 728 lbs / 192 lbs          | 507 lbs / 143 lbs          |
| Travel                   | X,Y,Z axis                 | 8.98 x 5.04 x 5.12 inch    |
|                          | A / B axis                 | 360° / ±30°                |
| Number of Jig            | 12                         | -                          |
| Jig exchange             | Auto                       | -                          |



## Accessories

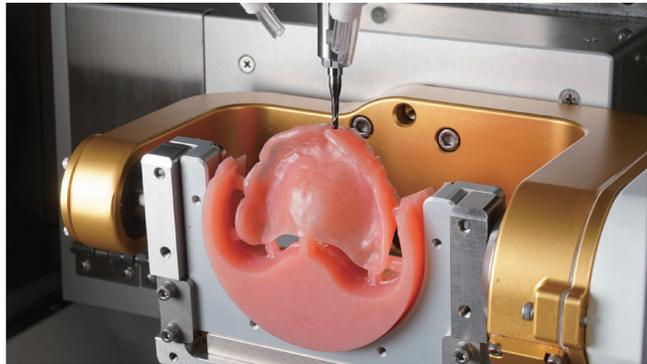
|  |   |   |
|--|---|---|
|   |  |  |
| Disk Jig   | Disk C Type Jig   | Premill Jig (5X-500L Dedicated)   |
|   |  |  |
| AT Holder (5X-500L Dedicated)  | Premill Jig T Type  | CAD Block Cartridge   |
|  |  |  |
| Attachment   | Calibration Master & Probe  | Straumann PMAB holder (Bushing type)  |

\* Products are subject to change without notice to improve quality, function, design or otherwise.



# ARUM 450 Series [5X-450 / 4X-450]

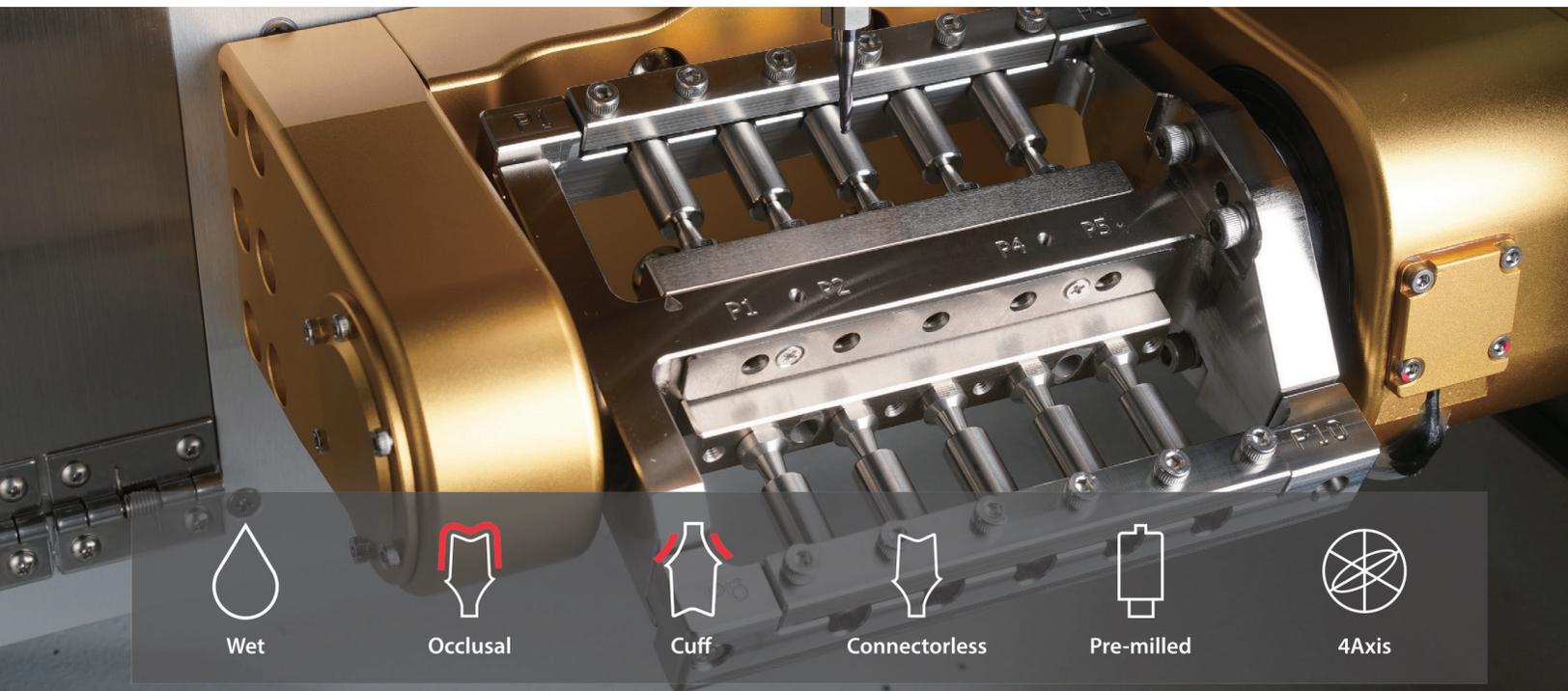
Faithful Mill for Main Prosthesis



## Milling of various prostheses

With use of open C type cartridge, you can precisely machine Labial Side (Buccal Side) and Under-Cut zone that requires additional machining.

With the amazing power of the best-in-class spindle AC 1.28kw, you can machine various shapes and materials such as Denture, Zirconia, CAD Block, and Titanium milled Bar. etc. (Except for Ni-Cr / Co-Cr Disk) [5X-450]



Wet



Occlusal



Cuff



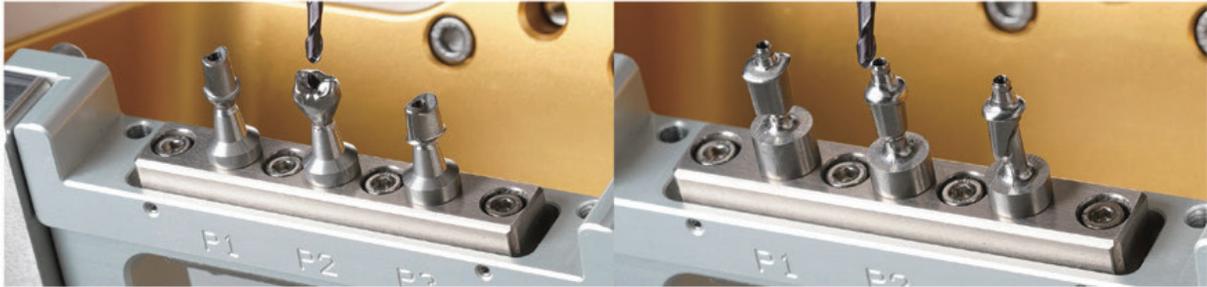
Connectorless



Pre-milled

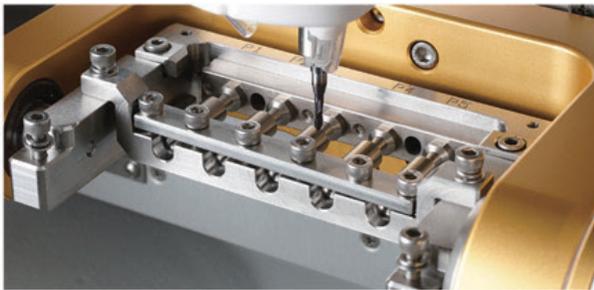


4Axis



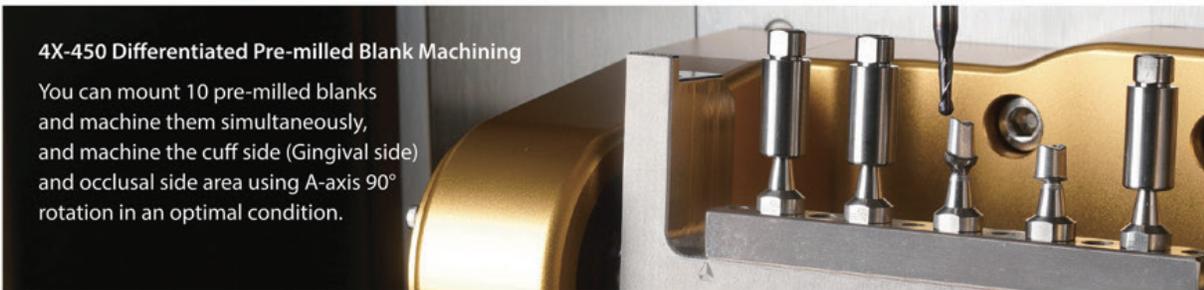
**Precision machining using AT Cartridge**

In addition to simple top & bottom side machining, you can machine cuffside (Gingival side), occlusal side, and retention groove using AT Cartridge. [5X-450]



**Machining with removal of connector**

By using the attachment, you can machine customized abutment from which the connector has been removed. The improved bonding with the upper prosthesis with removal of connector reduces the work during the post production stage, allowing you to produce prostheses in a more efficient way. [5X-450]



**4X-450 Differentiated Pre-milled Blank Machining**

You can mount 10 pre-milled blanks and machine them simultaneously, and machine the cuff side (Gingival side) and occlusal side area using A-axis 90° rotation in an optimal condition.



Wet



Dry



Labial



Occlusal



Cuff



Disk



CAD Block



5Axis



Titanium Disk



Zirconia Crown

## Materials & Applications Info.

| Materials                   |         |          | Applications                           |        |        |
|-----------------------------|---------|----------|--|--------|--------|
| Model                       | 5X-450  | 4X-450   | Model                                  | 5X-450 | 4X-450 |
| Pre-milled Blank (Titanium) | ⊙ (5ea) | ⊙ (10ea) | Implant Bar                            | ⊙      | X      |
| Co-Cr & Ni-Cr Disk          | X       | X        | Screw-Retained Bridge (Crown & Coping) | ⊙      | X      |
| Titanium Disk               | ○       | X        | Customized Abutment                    | ⊙      | ⊙      |
| Lithium Disilicate          | ○       | X        | Hybrid Abutment                        | ⊙      | X      |
| Nanocomposite               | ⊙       | X        | Inlay & Onlay                          | ⊙      | X      |
| Zirconia                    | ⊙       | X        | Crown & Coping                         | ⊙      | X      |
| PMMA                        | ⊙       | X        | Crown & Coping Bridge                  | ⊙      | X      |
| PEEK                        | ⊙       | X        | Model                                  | ⊙      | X      |
| Wax                         | ⊙       | X        | Bite Splint                            | ⊙      | X      |
|                             |         |          | Denture                                | ⊙      | X      |

⊙: High Compatibility / ○: Compatibility / X: Non-Compatibility

## Accessories



Disk Cartridge (5X-450 Dedicated)



AT Holder (5X-450 Dedicated)



AT Cartridge (5X-450 Dedicated)



Disk Cartridge  
(5X-450 Dedicated)



AT Holder  
(4X-450 Dedicated)



Attachment



Straumann PMAB holder  
(Bushing type)

## Specifications

| Model                    |            | 5X-450                  | 4X-450                  |
|--------------------------|------------|-------------------------|-------------------------|
| Axis                     |            | 5-Axis                  | 4-Axis                  |
| Processing               |            | Wet and Dry             | Wet                     |
| Spindle Power            |            | AC 1.28kw               | AC 1.8kw                |
| Max. RPM                 |            | 60,000                  | 50,000                  |
| A.T.C                    |            | 15                      | 6                       |
| Tool Shank (mm)          |            | Ø6                      | Ø6                      |
| Motor                    |            | Stepping                | Stepping                |
| Drive Mechanism          |            | Ball Screw              | Ball Screw              |
| Way System               |            | Linear Guide            | Linear Guide            |
| Machine Size (W*D*H)     |            | 31.1 x 31.1 x 3.1 inch  | 31.1 x 31.1 x 3.1 inch  |
| Total Size (W*D*H)       |            | 31.1 x 31.1 x 64.8 inch | 31.1 x 31.1 x 64.8 inch |
| Weight (Machine / Table) |            | 408 lbs / 144 lbs       | 408 lbs / 144 lbs       |
| Travel                   | X,Y,Z axis | 9.65 x 4.57 x 5.12 inch | 9.65 x 4.57 x 5.12 inch |
|                          | A / B axis | 360° / ±35°             | 360° / -                |

\* Products are subject to change without notice to improve quality, function, design or otherwise.

# ARUM 4X-100 One Very Serious machine



## Completion of Customized Abutment machining

With various machining methods of pre-milled blank provided by us, anyone can easily machine high quality Customized Abutment. In addition, free processing from disk to pre-milled blank is possible depending on the Jig type selection. (Metal Disk cannot be processed)



## Cuff side (Gingival side) & Occlusal side Precision milling

With a jig for pre-milled blank machining, precision machining of the cuff side and occlusal side areas is possible to increase the completeness. In addition, it is possible to process using the Straumann PMAB holder (Bushing type) exclusively for Straumann Pre-milled Blanks, so it has expandability.



Wet



Dry



Occlusal



Cuff



Connectorless



Zirconia



4Axis

## Materials & Applications Info.

| Materials                   |          |          | Applications                           |       |   |
|-----------------------------|----------|----------|--|-------|---|
| Jig Type                    | Basic    | T        | Jig Type                               | Basic | T |
| Pre-milled Blank (Titanium) | ◎ (10ea) | ◎ (10ea) | Implant Bar                            | X     | X |
| Co-Cr & Ni-Cr Disk          | X        | X        | Screw-Retained Bridge (Crown & Coping) | X     | X |
| Titanium Disk               | X        | X        | Customized Abutment                    | ◎     | ◎ |
| Lithium Disilicate          | ○        | X        | Hybrid Abutment                        | ○     | X |
| Nanocomposite               | ◎        | X        | Inlay & Onlay                          | ○     | X |
| Zirconia                    | ◎        | X        | Crown & Coping                         | ○     | X |
| PMMA                        | ◎        | X        | Crown & Coping Bridge                  | ○     | X |
| PEEK                        | ◎        | X        | Model                                  | X     | X |
| Wax                         | ◎        | X        | Bite Splint                            | X     | X |
|                             |          |          | Denture                                | X     | X |

◎: High Compatibility / ○: Compatibility / X: Non-Compatibility

## Specifications

|                 |             |                          |                                       |
|-----------------|-------------|--------------------------|---------------------------------------|
| Axis            | 4-Axis      | Drive Mechanism          | Ball Screw                            |
| Processing      | Wet and Dry | Way System               | Linear Guide                          |
| Spindle Power   | AC 1.8kw    | Machine Size (W*D*H)     | 28 x 35 x 33.5 inch                   |
| Max. RPM        | 50,000      | Total Size (W*D*H)       | 28 x 35 x 68.9 inch                   |
| A.T.C           | 8           | Weight (Machine / Table) | 463 lbs / 181 lbs                     |
| Tool Shank (mm) | Ø6          | Travel                   | X,Y,Z axis<br>9.84 x 4.56 x 4.33 inch |
| Motor           | Servo       |                          | A / B axis<br>- / 360°                |

## Accessories

|   |   |   |   |   |   |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| Disk Cartridge  | AT Cartridge  | AT Holder A/B   | Attachment  | Bushing   | Straumann PMAB holder (Bushing type)  |

\* Products are subject to change without notice to improve quality, function, design or otherwise.

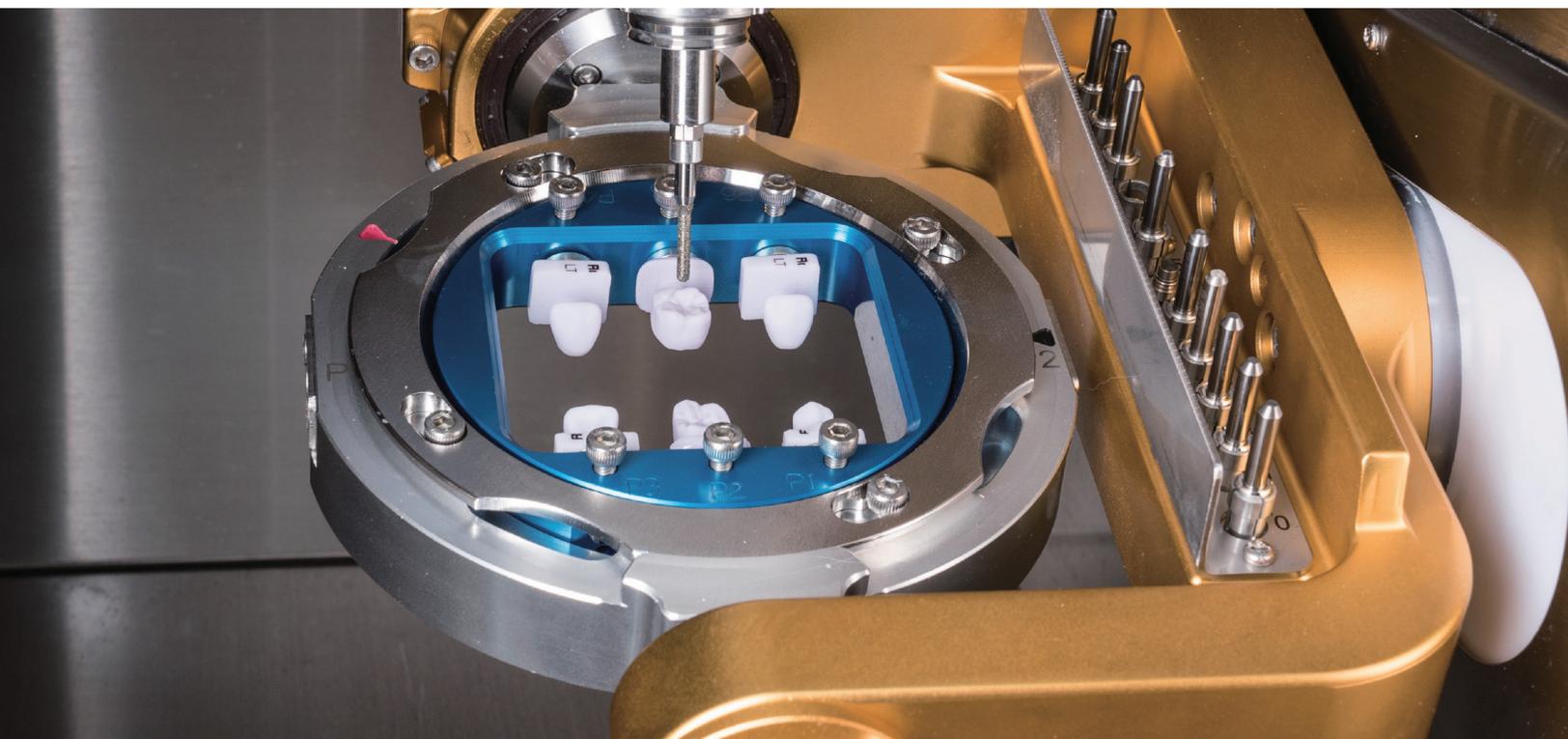
# ARUM 5X-400 Economical & Reasonable

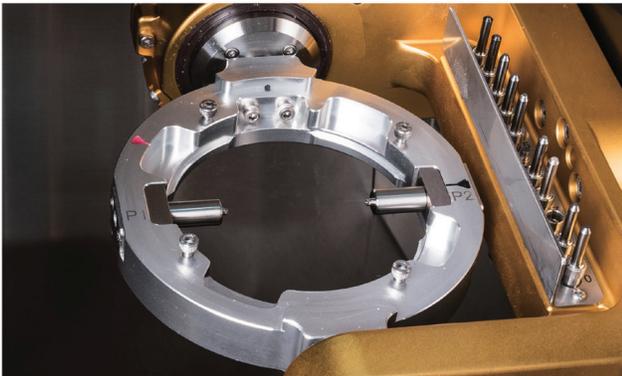


## Unrivaled grinding capability

With the adoption of a high RPM specialized spindle, this equipment boasts its unrivalled capability of grinding Lithium Disilicate (Glass Ceramic).

We improved user convenience by applying the cartridge that can mount and machine up to 6 CAD Blocks (Lithium Disilicate, Nanocomposite), and the application of high-precision ball screws allows you to get high quality machining outputs.





**Your reasonable choice**

You can machine various materials from Zirconia Disk to CAD Block, Pre-milled Blank, and select between wet and dry machining. You can enjoy the maximum results at a reasonable price.



**User-friendly environment**

With Auto Calibration Function, you can maintain the best condition of machine anytime, anywhere. You can always see a certain level of machining. U.I design makes operation of equipment easy and simple.

**Like natural teeth**

Every patient wants a prosthesis that looks natural. With milling the grooved part precisely using ARUM's 0.3mm tool for Zirconia, you can reproduce the teeth that look natural.

**RPM**  
**80,000**

Wet

Dry

Zirconia

CAD Block

Pre-milled

5Axis



Crown & Coping Bridge  
Lithium Disilicate



Zirconia Crown



Customized Abutment

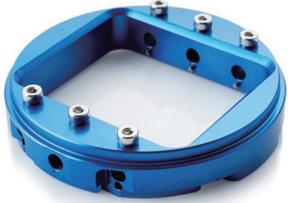
## Materials & Applications Info.

| Materials                   |         | Applications                           |   |
|-----------------------------|---------|--|---|
| Pre-milled Blank (Titanium) | ○ (2ea) | Implant Bar                            | X |
| Co-Cr & Ni-Cr Disk          | X       | Screw-Retained Bridge (Crown & Coping) | ○ |
| Titanium Disk               | X       | Customized Abutment                    | ○ |
| Lithium Disilicate          | ◎       | Hybrid Abutment                        | ◎ |
| Nanocomposite               | ◎       | Inlay & Onlay                          | ◎ |
| Zirconia                    | ◎       | Crown & Coping                         | ◎ |
| PMMA                        | ◎       | Crown & Coping Bridge                  | ◎ |
| PEEK                        | ◎       | Model                                  | ◎ |
| Wax                         | ◎       | Bite Splint                            | ◎ |
|                             |         | Denture                                | ○ |

## Specifications

|                 |             |                          |                         |                         |
|-----------------|-------------|--------------------------|-------------------------|-------------------------|
| Axis            | 5-Axis      | Drive Mechanism          | Ball Screw              |                         |
| Processing      | Wet and Dry | Way System               | Linear Guide            |                         |
| Spindle Power   | AC 0.5kw    | Machine Size (W*D*H)     | 22.5 x 25.8 x 26.8 inch |                         |
| Max. RPM        | 80,000      | Total Size (W*D*H)       | 22.5 x 25.8 x 64 inch   |                         |
| A.T.C           | 10          | Weight (Machine / Table) | 220 lbs / 143 lbs       |                         |
| Tool Shank (mm) | Ø4          | Travel                   | X,Y,Z axis              | 5.71 x 4.33 x 3.35 inch |
| Motor           | Stepping    |                          | A / B axis              | ±35° / 360°             |

## Accessories

|  |  |  |
|--|--|--|
|  |  |  |
| CAD Block Cartridge  | AT Cartridge   | Attachment   |

\* Products are subject to change without notice to improve quality, function, design or otherwise.

# ARUM 5X-300 Pro Bright Future, Right System



## Efficient C-TYPE JIG

Labial (or Buccal) side texture and undercut area precision processing minimize post-processing time.



## Easy and easy material change

You can easily exchange from disk to CAD block as it uses cartridge type materials.





**All in One System**

An external compressor is not required, and all additional devices (Dust Collector, Coolant System) are built inside the table to overcome installation space constraint and minimize noise. \*\* German Renfert SILENT compact CAM model is used (optional)

**High speed 80,000 RPM**

By choosing one from 2 modes of roughing process (U peeling milling, and Parallel milling), you can process glass ceramic materials more effectively.



**Excellent detail expression**

Through groove, labial side texture precision processing using ARUM's exclusive 0.3mm tool for Zirconia, you can process prostheses close to natural teeth.





Zirconia Crown



Zirconia Hybrid Abutment



Crown & Coping Bridge

## Materials & Applications Info.

| Materials                   |   | Applications                           |   |
|-----------------------------|---|--|---|
| Pre-milled Blank (Titanium) | X | Implant Bar                            | X |
| Co-Cr & Ni-Cr Disk          | X | Screw-Retained Bridge (Crown & Coping) | ○ |
| Titanium Disk               | X | Customized Abutment                    | X |
| Lithium Disilicate          | ◎ | Hybrid Abutment                        | ◎ |
| Nanocomposite               | ◎ | Inlay & Onlay                          | ◎ |
| Zirconia                    | ◎ | Crown & Coping                         | ◎ |
| PMMA                        | ◎ | Crown & Coping Bridge                  | ◎ |
| PEEK                        | ◎ | Model                                  | ◎ |
| Wax                         | ◎ | Bite Splint                            | ◎ |
|                             |   | Denture                                | ◎ |

◎: High Compatibility / ○: Compatibility / X: Non-Compatibility

## Specifications

|                 |             |                          |                                       |
|-----------------|-------------|--------------------------|---------------------------------------|
| Axis            | 5-Axis      | Drive Mechanism          | Ball Screw                            |
| Processing      | Wet and Dry | Way System               | Linear Guide                          |
| Spindle Power   | AC 0.5kw    | Machine Size (W*D*H)     | 22.4 x 24.4 x 25.2 inch               |
| Max. RPM        | 80,000      | Total Size (W*D*H)       | 22.4 x 24.4 x 62.2 inch               |
| A.T.C           | 12          | Weight (Machine / Table) | 198 lbs/ 143 lbs                      |
| Tool Shank (mm) | Ø4          | Travel                   | X,Y,Z axis<br>6.26 x 4.72 x 3.54 inch |
| Motor           | Stepping    |                          | A / B axis<br>±30° / 360°             |

\* Products are subject to change without notice to improve quality, function, design or otherwise.

## Accessories



C Type Cartridge



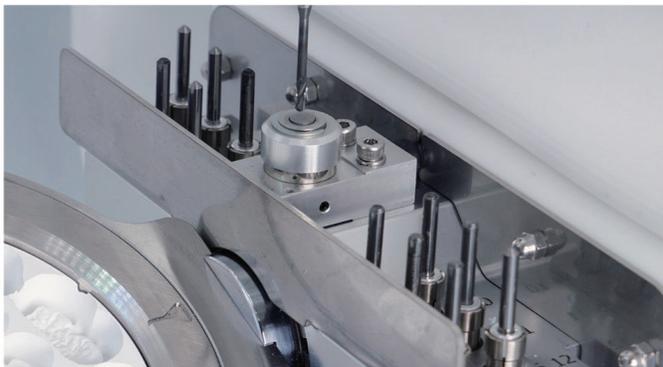
CAD Block Cartridge

# ARUM 5X-300D Compact and Powerful



## The beginning of a small change

With a small change of "7° Tilted Door" to ensure user's viewing angle, you can clearly see the milling progress. With the door opening wide, you can secure enough work space to conveniently change materials and setting tools. In addition, the interior floor is inclined for convenient cleaning.



## Device to automatically exchange 12 tools

With a 12-tool pocket, you can machine almost every material such as Zirconia, Lithium Disilicate, PMMA, PEEK, and WAX in just one setting, and the automatic tool change function allow you to use equipment without interruption.



## User-friendly use environment

With Auto Calibration Function, you can maintain the best condition of machine anytime, anywhere. You can always see a certain level of machining. U.I design with enhanced ease of use makes operation of equipment easy and simple.



### Excellent detail expression

Through groove, labial side texture precision processing using ARUM's exclusive 0.3mm tool for Zirconia, you can process prostheses close to natural teeth.



## Specifications

|                          |            |                         |
|--------------------------|------------|-------------------------|
| <b>Model</b>             |            | <b>5X-300D</b>          |
| Axis                     |            | 5-Axis                  |
| Processing               |            | Dry                     |
| Spindle Power            |            | AC 0.5kw                |
| Max. RPM                 |            | 60,000                  |
| A.T.C                    |            | 12                      |
| Tool Shank (mm)          |            | Ø4                      |
| Motor                    |            | Stepping                |
| Drive Mechanism          |            | Ball Screw              |
| Way System               |            | Linear Guide            |
| Machine Size (W*D*H)     |            | 22.4×24.4×25.2 inch     |
| Total Size (W*D*H)       |            | -                       |
| Weight (Machine / Table) |            | 198.4lbs / x            |
| Travel                   | X,Y,Z axis | 6.26 x 4.72 x 3.54 inch |
|                          | A / B axis | ±30° / 360°             |
| Disk Cartridge Type      |            | C type                  |

\* Products are subject to change without notice to improve quality, function, design or otherwise.

## Accessories

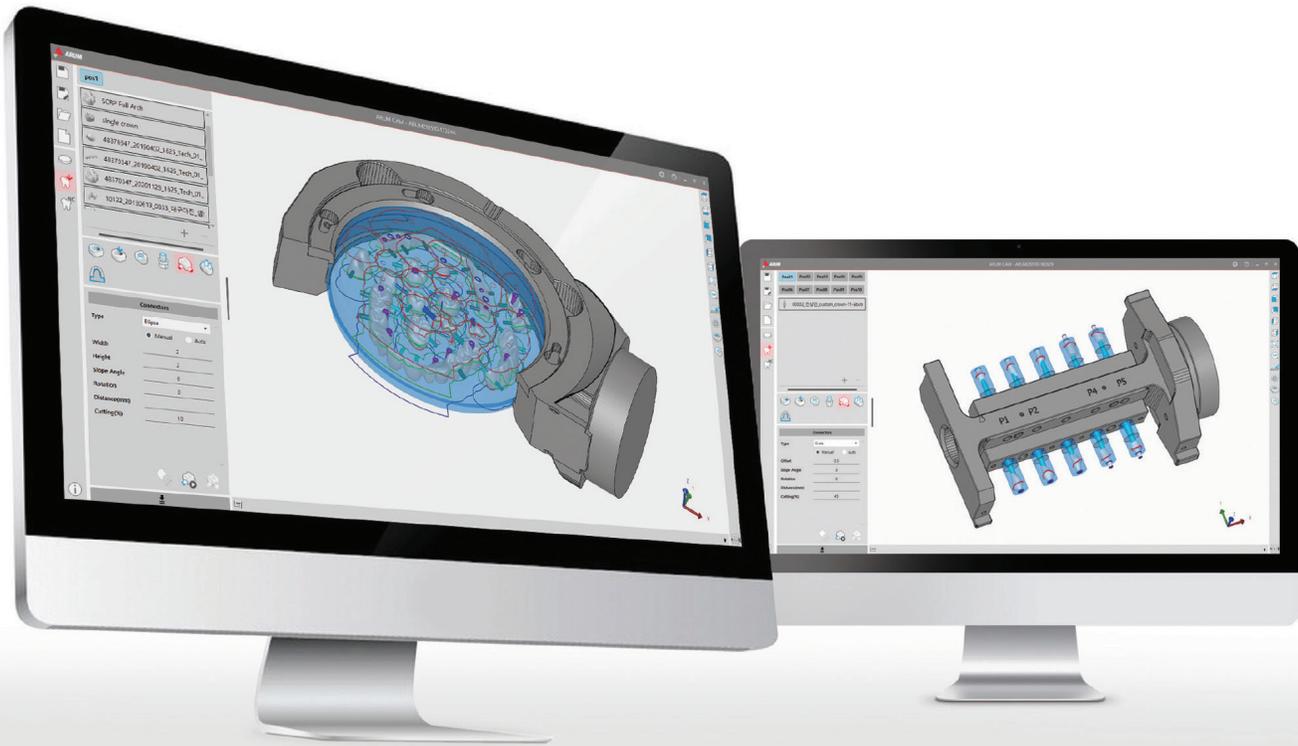


Disk Cartridge



CAD Block Cartridge

# ApexMill The Easy, The Fast, The Accurate.



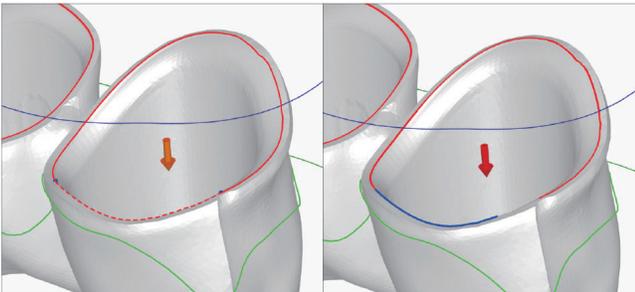
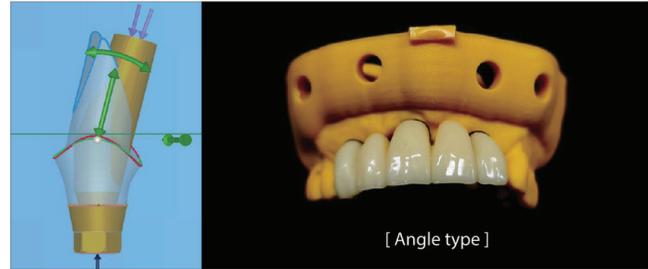
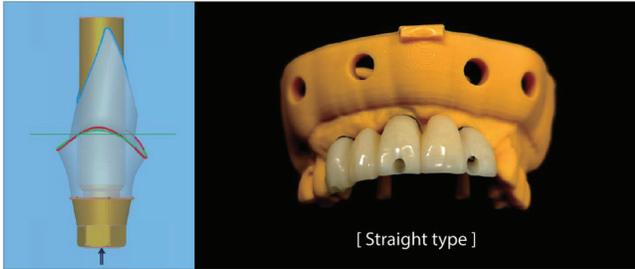
ApexMill is a software in which all the machining know-hows of ARUM DENTISTRY are integrated. It is, above all, optimized for ARUM Milling Machine, and guarantees excellent machining quality. It provides a UI/UX environment that is easy for everyone to understand and all the core functions necessary for dental part machining. Now you can experience the most practical and most powerful CAM Design developed by ARUM.

| Function                            | Description  |
|-------------------------------------|--|
| Implant library machining           | A function to easily machine the abutment implant interface with a variety of predefined libraries             |
| Angled screw channel machining      | A function to adjust the interface angle and machine angled screw channel                                      |
| Screw channel machining             | A function to paper the screw channel's inner shape / automatically analyze and machine End Type               |
| Grinding machining module           | Grinding optimized for lithium disilicate (glass ceramic)  |
| Basic shape recognition             | A function of automatic/manual recognition while working on margins and holes even without CAD information     |
| Advanced shape recognition          | Differentiated part recognition and modification   |
| Workflow and UI                     | Practical and intuitive user interface and experience  |
| Material information setting        | A function to register and modify materials and to modify basic information modification of each material      |
| Sinter frame creation               | A function to create a variety of sinter frames  |
| Toolpath master module              | A function to create and modify strategies, define customized machining method and modify machining tool       |
| Automatic placement                 | A function to set whether (or not) to use automatic part placement function and specify the degree of overlap  |
| User-defined area designation       | A function to designate and machine a specific area of the prosthesis  |
| Automatic connector                 | A function to automatically place connectors on part   |
| C-type jig machining                | A function to machine thin and long anterior teeth even with thin materials                                    |
| Machine connection                  | A function to print out NC output file path as a network folder so that it can be used directly on the machine |
| Circular material machining         | A function to machine the blank of circular material   |
| Block material machining            | A function to machine ceramic block material such as lithium disilicate (glass ceramic)                        |
| Pre-milled blank material machining | A function to machine the round bar material for abutment  |
| Undercut indication                 | A function to analyze the undercut for entire part appearance and analyze tooth's inner undercut individually  |
| Simulation history                  | A function to save and check the recently created list of NC simulation information                            |



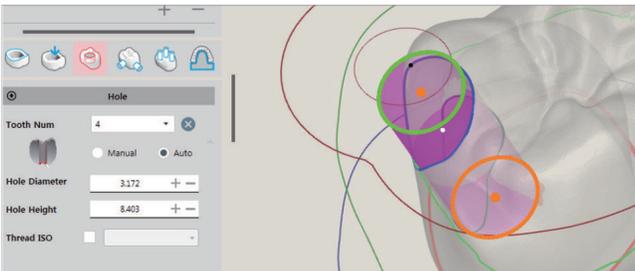
## Interface Library

With two types of library provided, ie. Straight / Angle, you can machine a wider variety of shapes. By using angle type, you can set the screw channel hole in the direction of lingual surface to produce aesthetically excellent prostheses.



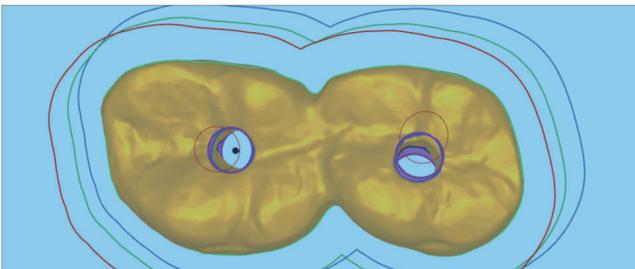
### Easy margin line edition

You can delete the margin line requiring modification with just 3 clicks, and create new margin lines in a short time.



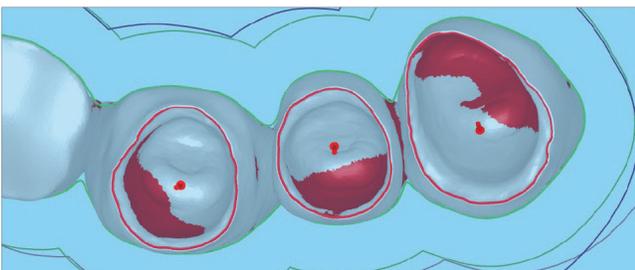
### 3-point SCR production

You can form SCR hole quickly and easily with 3-point click, and modify the height and diameter of the hole by entering numerical values or using a mouse. In addition, the boundary of the outer shape automatically changes according to the position of the hole, allowing the automatic detection of the possibility of collision between the tool and the material.



### A liberty to change the hole

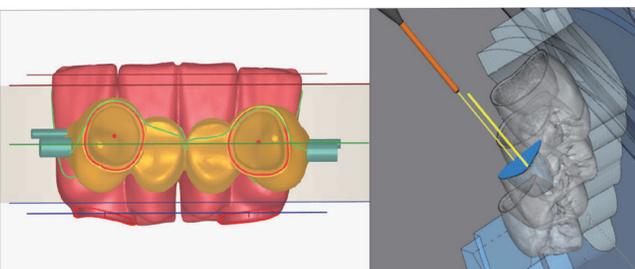
You can even change the hole for distorted or scanned parts, and freely modify the height, diameter, direction, and position of the hole.



### Individual undercut check

You can check the condition of the undercut individually which allows you to be able to set the insertion direction of the tool faster and more conveniently.

In addition, you can easily use the undercut view, the insertion direction modification, view insertion direction, and the occlusal surface machining direction setting using each of the provided icons.



### Open C-type jig machining

The use of C-type jig allows you to be able to easily machine thin and long anterior teeth and maximize the application of ApexMill.

# CAD/CAM etc

## Materials



Titanium, Co-Cr, Ni-Cr Disk



Zirconia



PMMA



PEEK



Wax



Lithium Disilicate(Glass Ceramic)



Nanocomposite



Pre-milled Blank

## CAD Program



## CAM Program



## Model Scanner



| Model                | FREEDOM HD         | FREEDOM UHD        |
|----------------------|--------------------|--------------------|
| Resolution of camera | 2.0MP              | 5.0MP              |
| Accuracy (um)        | 7                  | 7                  |
| Scan area (mm)       | -                  | -                  |
| Size (W*H*inch)      | 11.8 x 19.4 x 16.9 | 11.8 x 19.4 x 16.9 |
| Weight (lbs)         | 37.4               | 37.4               |

## Sintering Furnace



|                      |                        |                    |
|----------------------|------------------------|--------------------|
| Model                | ARUM sintering furnace | HTS/M/Zirkon       |
| Max. Temperature(°C) | 1600                   | 1,650              |
| Chamber Volume(mm)   | 90*90*65               | Ø120*30            |
| Size (W*H* inch)     | 14.7 x 19.3 x 15.1     | 15.3 x 31.1 x 19.7 |
| Weight (lbs)         | 72.7                   | 132.2              |

## Dust Collector



|                  |                           |
|------------------|---------------------------|
| Model            | Renfert SILENT CompactCAM |
| Size (W*H* inch) | 9.6 x 17.3 x 19.6         |
| Weight (lbs)     | 28.7                      |

# Lab Driver



## Screw Driver Tips

- Place the model scanbody and the abutment
- 10 types of tips  
(compatible with more than 300 implants system)



## Analog Insertion Tips

- Place the lab analog to 3D printed model
- Easy and safe to place the lab analog
- Prevent damage of the lab analog internal thread
- 5 types of tips (compatible with more than 300 implants system)



## Torque Adapter

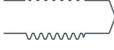
- For clamping Attachment and Premill for connectorless milling (with 0.3Nm torque)
- Prevent screw loosening during milling



## Screw Driver Tips Line-Up

| SIZE  | COLOR  | Compatible Implant System   |
|---|--------|---|
|  Hex 1.0         | Blue   | DENTIUM NR Line, DENTSPLY Ankylos C/X Implant, etc.   |
|  Hex 1.2         | Purple | BIOMET 3i Certain, BIOMET 3i EXTERNAL HEX, DENTIS i-Clean, DENTSPLY Xive, DIO UF, MEGAGEN AnyONE, MEGAGEN Anyridge, NEOBIOTECH, OSSTEM (HIOSSEN) GS(TS), OSSTEM SS, OSSTEM US, SIC Invent, etc. |
|  Hex 1.25        | Black  | BEGO Semados, BIOHORIZONS External, BIOHORIZONS Internal, DENTIS s-Clean, LASAK Bioniq, etc.  |
|  Hex 1.27        | Red    | ALPHABIOTEC Internal Hex, ANTHOGRYR axiom, ASTRA TECH OsseoSpeed TX, CAMLOG, DENTIUM Super-Line, IMPLANT DIRECT Legacy, MIS C1, MIS Internal Hexagon, ZIMMER Tapered Screw-Vent, etc.           |
|  Hex 1.3         | Green  | ASTRA TECH OsseoSpeed EV, CLC Conic, DYNA Pushin Octalock, KENTEC, PLATON, Type IV Pro, Sweden & Martina, etc.  |
|  Torx 1.7        | Brown  | STRAUMANN Bone Level, STRAUMANN Conical Bone Level, STRAUMANN synOcta, etc.   |
|  Torx 1.5 (Star) | Yellow | ADIN CLOSEFIT, NOBEL BIOCARE Active, NOBEL BIOCARE Branemark, NOBEL BIOCARE Replace Select, etc.  |
|  Cross          | Gray   | THOMMEN SPI, etc.   |
|  Ball Torx     | Orange | 1. Most of angled screws of ARUM Ti-base (screw head size is more than 2.1mm)<br>2. All implant system for disk angulated screw channels  |
|  Ball Hex      | White  | Some of angled screws of ARUM Ti-base (screw head size is less than 2.1mm)<br>*Please contact us for a separate list.   |

## Analog Insertion Tips Line-Up

| SIZE   | COLOR       | Compatible Implant System  |
|--|-------------|--|
|  M2.0*P0.40 | Cocoa       | Osstem(Hiossen) GS Regular, Dentium Super line, Megagen Anyone, Dentis S-clean, Straumann Tissue level, etc. |
|  M1.8*P0.35 | Light Green | Zimmer TSV, Megagen Anyridge, Biohorizon Internal, Bego Semados, etc.  |
|  M1.6*P0.35 | Pink        | Straumann Bone level, Osstem GS Mini, Nobel biocare Active Mini, Dentsply Xive, Neodent GM, etc.             |
|  M1.4*P0.30 | Sky Blue    | Straumann Bone level 2.9, Dio UF Narrow, Megagen Mini, Astra Yellow. Most of Multi unit, etc.                |
|  M2.5*P0.45 | Ivory       | Osstem US Wide, Nobel biocare Branemark WP, etc.   |

\*\* Aware of the color of analog tip

\*\* Contact us for a complete list of implant compatibility

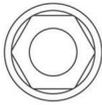
## Torque Adapter

|               |        |
|---------------|--------|
| <b>Torque</b> | 0.3 Nm |
|---------------|--------|

# Clinical Driver

- Use of Trimrite with excellent corrosion resistance
- Easy and simple cleaning
- For angle screw channels
- Heat treatment and hardness of 50 or more



| Size   | Length | Order Code | Implant System  | Recommend Torque |
|--|--------|------------|---|------------------|
| <br>Ball Torx | 22mm   | BT1722     | 1. Most of angled screws of ARUM Ti-Base<br>(screw head size is more than 2.1mm)<br>2. All implant system for disk angulated screw channels | 20 Ncm           |
|  | 15mm   | BT1715     |   |                  |
|  | 8mm    | BT1708     |   |                  |
| <br>Ball Hex  | 22mm   | BH1222     | Some of angled screws of ARUM Ti-Base<br>(screw head size is less than 2.1mm)<br>*Please contact us for a separate list.                    | 20 Ncm           |
|  | 15mm   | BH1215     |   |                  |
|  | 8mm    | BH1208     |   |                  |

# Attachment

With use of Attachment, you can machine more sophisticated and near perfect Customized Abutment.

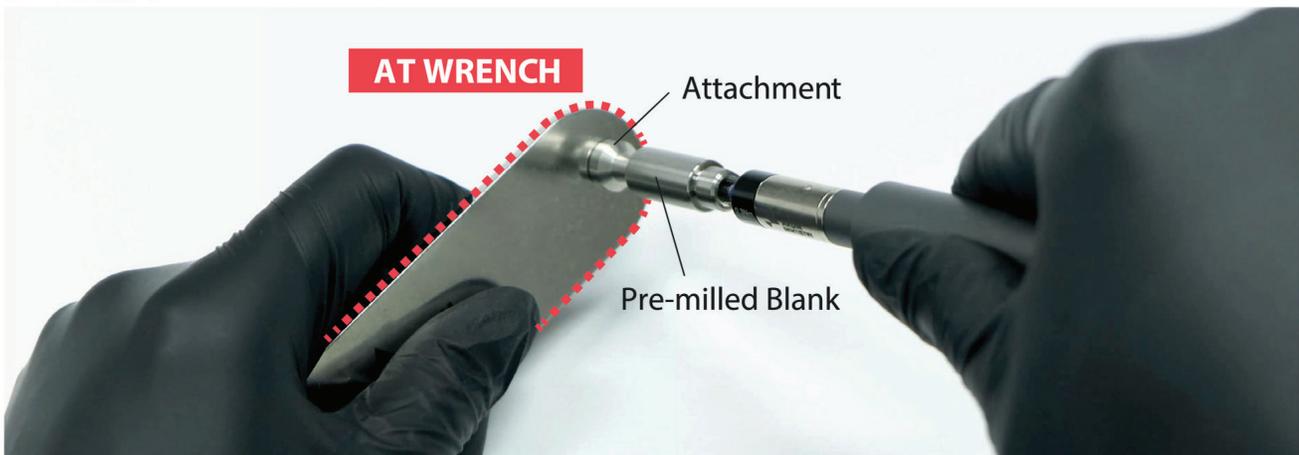
- Occlusal side milling : 500 Series | 450 Series
- Connectorless milling : 500 Series | 450 Series | 5X-200 | 5X-400



## AT Wrench

A tool to fix attachment when tightening with a strong torque to prevent separation of Attachment and Premill when machining premill in a connectorless method.

- Easy to use and storage
- Compatible with all ARUM Attachments
- Stainless Steel 304
- 4.7 x 1.1 x 0.1 inch / 0.16 lbs



## Use Case







ARUM Dentistry CO., Ltd.  
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