**TD 783 / TDS 890**

⚠️ **Do not sterilise**

**Instruction**

REF 2100038-ENG/12.10

**English**

Devices entirely made in Switzerland by Bien-Air Dental SA.

**Type**

Straight laboratory turbine with or without spray.

**Intended use**

Product intended for professional use only. Use in laboratory work. Any use other than that for which this device is intended is prohibited and may prove dangerous.

**Technical data**

**Coupling**

2- or 4-hole pressure gauge and direct fig. 1.

**Recommended rotation speed**

Up to 300,000 rpm.

**Weight**

60 g (2.11 oz).

**Air consumption**

2 normliter/min to 200 kPa (29 psi).

**Air spray rate**

2 normliter/min to 200 kPa (29 psi).

**Water spray rate**

100 ml/min to 200 kPa (29 psi).

**Information**

The technical specifications, illustrations and dimensions mentioned in these instructions are given only as a guide. They may not be the subject of any claim. The manufacturer reserves the right to make technical improvements to its equipment, without amending these instructions. For all additional information, please contact Bien-Air Dental SA at the address indicated on the back cover.

**Using**

**Air pressure output**

Do not use the turbine at above the required air pressure.

**For use without unit:**

Adjust the required air pressure to 2.5 bar (36.28 psi) with the assistance of a Bien-Air Dental Inspection pressure gauge - 3-hole or 4-hole version placed between hose and connection, fig. 1.

**For use with the S001 unit:**

Refer to the indications of the unit's manometer. The required air pressure is 3 bar (44 psi).

⚠️ **Important**

The device must not be started without a bur inserted into the chuck.

**Bur**

Diameter of shaft 1.69 mm (0.06 in), type 3 in accordance with ISO 1797; max. length 25 mm (0.98 in), code 4-6 in accordance with ISO 6360-1, fig. 2.

---

**Inserting the tool**

Place the bur in the turbine's chuck fig. 3. Then insert the turbine head in the bur securing tool, press the bur against the metal disc in the bur securing tool and press firmly until you hear a «clic» fig. 4.

**Extracting the tool**

Hold the central part of the straight turbine's handle firmly in one hand and press the rear part of the handle forward. Release and remove the bur fig. 5.

**Seals replacement**

2V: Remove the seal according to fig. 6; 4V: Remove the seal according to fig. 7. Removing seal, place it on the tubes and remount the attachment fig. 1.

**Maintenance**

⚠️ **Non-sterilisable**

Only use maintenance products and components from Bien-Air Dental. The use of other products and components can void the guarantee.

**Servicing**

Never disassemble the device. For any modification and repair, we recommend that you contact your regular supplier or Bien-Air Dental directly. Bien-Air Dental asks the user to have its dynamic instruments checked or inspected at least once a year.

**Cleaning**

Use Spraynet cleaner fig. 8. Spray the inside and outside of the equipment to remove the residues and carefully clean the surfaces.

Never immerse in disinfectant solutions.

Not suitable for ultrasonic bath.

**Lubrication**

**Lubrication at least twice a day.**

- Only use Lubrimed medical grease and greaser.
- First-time use: Remove the cap, screw the knurled back-housing until the grease appears at the end of the rod. Wipe off surplus grease and replace cap after use.
- Remove the bur and introduce the rod of the greaser to the bottom. The dose corresponds to one half-turn of the knurled back-housing. Use the guidelines fig. 9.
- Replace a bur, turn on the air and run the turbine for about 15 seconds.

⚠️ **Important**

After cleaning and disinfecting the instrument and before using it, operate at moderate speed, with a bur in the chuck, for 10 to 15 seconds to distribute, and remove, the excess lubricant.

**Cleaning of spray tubes fig. 10**

Wire cleaner.

**Transport and storage conditions**

Temperature between –40°C (-40°F) and 70°C (158°F), relative humidity between 10% and 100%, atmospheric pressure 50 kPa to 106 kPa (7.3 to 15.3 psi).

**Other precautions for use**

The device must be used by a qualified person in accordance with the current legal provisions concerning industrial safety, health and accident prevention measures, and these working instructions. In accordance with these requirements, the operator:

- must only use operating devices that are in perfect working order, in the event of irregular functioning, excessive vibration, abnormal heating or other signs indicating malfunction of the device, the work must be stopped immediately; in this case, contact a repair centre that is approved by Bien-Air Dental;
- must ensure that the device is used only for the purpose for which it is intended, must protect themselves, their patients and third parties from any danger, and must avoid contamination through the use of the product.

Rest the device on a suitable support in order to eliminate the risk of injury to you yourself and to third parties.

**Recommendations**

It is essential to use dry, purified compressed air in order to ensure the long working life of the device. Maintain the quality of the air and the water by regular maintenance of the compressor and the filtration systems.

The use of unfiltered hard water will lead to early blockage of the tubes, connectors and spray cones.

After a period of prolonged use, the device must be cleaned and serviced according to these instructions.
Adhere to the Instructions for Use, in accordance with the instructions of the tool manufacturer. Never use a tool with an incorrect rod, as there is a risk of this becoming detached during the use and causing injury to you yourself and to third parties.

The device is not intended for medical treatment; any use other than that for which this product is intended is not allowed and may prove to be dangerous. The device meets all the current European legal requirements (according to the European Directive 93/42/EEC relating to medical devices).

**Guarantee**

**Terms of guarantee**

Bien-Air Dental grants the user a guarantee covering all functional defects, material or production faults. The device is covered by this guarantee for 12 months from the date of invoicing.

Bien-Air Dental offers a 24-month guarantee for the glass-bar light conductors.

In the event of justified claim, Bien-Air Dental or its authorised representative will fulfil the company's obligations under this guarantee by repairing or replacing the product free of charge. Any other claims, of whatever nature, in particular in the form of a claim for damages and interest, are excluded.

Bien-Air Dental shall not be held responsible for improper use resulting from:

- excessive wear and tear
- improper use
- non-observance of the instructions for installation, operation and maintenance
- unusual chemical, electrical or electrolytic influences
- poor connections, whether of the air, water or electricity supply.

The guarantee does not cover flexible “fibre optic” type conductors, or any parts made of synthetic materials.

The guarantee shall become null and void if the damage and its consequences are due to improper manipulation of the product, or modifications to the product carried out by persons not authorised by Bien-Air Dental. Claims under the terms of the guarantee will be considered only on presentation, together with the product, of the invoice or the consignment note, on which the date of purchase, the product reference and the Serial No. should be clearly indicated.

This product may be covered by one or more of the following patents:

<table>
<thead>
<tr>
<th>Country</th>
<th>Patent Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP Europe</td>
<td>745358 / 688539 / 948294 / 1145688 / 1563800 / 1563801 / 1675523 / 1753360</td>
</tr>
<tr>
<td>DK Denmark</td>
<td>29616023.7</td>
</tr>
<tr>
<td>JP Japan</td>
<td>100553584</td>
</tr>
<tr>
<td>FR France</td>
<td>9600315</td>
</tr>
<tr>
<td>DK Denmark</td>
<td>2394845 / 4298933 / 7000419</td>
</tr>
<tr>
<td>EP Europe</td>
<td>2722972</td>
</tr>
<tr>
<td>CH Switzerland</td>
<td>948294 / 1145688 / 1563800 / 1563801 / 1675523 / 1753360</td>
</tr>
<tr>
<td>FR France</td>
<td>100553583</td>
</tr>
</tbody>
</table>

**Set supplied**

- **TD 783**
  - REF 1600161-001
  - REF 1600162-001

- **TD 783**
  - REF 1600161-001
  - REF 1600162-001

- **TDS 890**
  - REF 1600163-001

**Optional accessories**

<table>
<thead>
<tr>
<th>10x</th>
<th>10x</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF 1000001-010</td>
<td>REF 1302401-010</td>
</tr>
<tr>
<td>REF 1302403-010</td>
<td>REF 1000003-001</td>
</tr>
<tr>
<td>REF 1600243-001</td>
<td>REF 1600242-001</td>
</tr>
<tr>
<td>REF 1600237-006</td>
<td>REF 1600036-006</td>
</tr>
</tbody>
</table>

**List of Bien-Air Dental SA registered trade mark products ®:**

- Aquilor®
- Boralina®
- ChiroPro®
- Diamline®
- Edila®
- Isolit®
- Lubrifluid®
- Lubrimed®
- Lubrimed®
- Lubrifluid®
- Mex®
- Myolux®
- PowerCare®
- Prestilina®
- Spray®

In these instructions, “Device” corresponds to the product described in the heading “Type”. For example, turbine, contra-angle, handpiece, micromotor, tube, electronics, connecters, station etc.

**Symbols**

- ![Manufacturer](image)
- ![CE Marking](image)
- ![Wear rubber gloves.](image)
- ![Move in the direction indicated.](image)
- ![Attention.](image)
- ![Move fully to the stop, in the direction indicated.](image)

**Bien-Air Dental SA**

- **Lunguine 69**
  - Cas posteal
  - 91111 Freiburg, Deutschland
  - Tel. +49 (0) 761 47 44 64
  - Fax +49 (0) 761 47 44 91
  - office@bienair.com

- **Bien-Air Deutschland GmbH**
  - Jefdingener Strasse 11
  - 79111 Freiburg, Deutschland
  - Tel. +49 (0) 761 47 57 40
  - Fax +49 (0) 761 47 57 49
  - ha-de@bienair.com

- **Bien-Air España SA**
  - Entrecos, 169 Bajo
  - 08029 Barcelona, España
  - Tel. +34 934 25 30 40
  - Fax +34 934 25 98 60
  - ha-es@bienair.com

- **Bien-Air USA, Inc.**
  - Medical Technologies
  - Suite 100
  - Irvine, CA 92606 USA
  - Phone 1-800-433-BIEN
  - Phone 949-477-6959
  - Fax 949-477-6951
  - ha-usa@bienair.com

- **Bien-Air Canada Inc.**
  - 1302401-010
  - 1302403-010
  - Seal 3V
  - Seal 4V

- **Bien-Air Italia s.r.l.**
  - Via Vaino 3
  - 20122 Milano, Italia
  - Tel. +39 (02) 58 52 12 51/52/54
  - Fax +39 (02) 58 52 12 53
  - ba-italia@bienair.com

- **Bien-Air UK Limited**
  - The Street Capel
  - Surrey RH5 5Z, England
  - Tel. +44 (0) 1306 711 305
  - Fax +44 (0) 1306 712 505
  - ba-uk@bienair.com

- **Bien-Air Asia Ltd.**
  - Naka-shibukuro
  - Dainichi-Seimei Bldg. 10F
  - 2-40-12 Harubukan, Toshimaku
  - Tokyo, 171-0014, Japan
  - Tel. +81 (3) 5994-7860
  - Fax +81 (3) 5994-7860
  - ba-asia@bienair.com

- **Beijing Bien-Air**
  - Medical Instrument
  - Technology Service Co. Ltd.
  - Room 907, The Exchange Beijing,
  - No. 118 Jian Guo Lu Yi,
  - Chaoyang District,
  - Beijing, 100022, China
  - Tel. +86 10 6567 0651
  - Fax +86 10 6567 0647
  - ba-beijing@bienair.com

**List of Bien-Air Dental SA registered trade mark products ®:**

- Aquilor®
- Boralina®
- ChiroPro®
- Diamline®
- Edila®
- Isolit®
- Lubrifluid®
- Lubrimed®
- Lubrimed®
- Lubrifluid®
- Mex®
- Myolux®
- PowerCare®
- Prestilina®
- Spray®

In these instructions, “Device” corresponds to the product described in the heading “Type”. For example, turbine, contra-angle, handpiece, micromotor, tube, electronics, connecters, station etc.

**Symbols**

- ![Manufacturer](image)
- ![CE Marking](image)
- ![Wear rubber gloves.](image)
- ![Move in the direction indicated.](image)
- ![Attention.](image)
- ![Move fully to the stop, in the direction indicated.](image)