

User and Maintenance Manual

Dental Lathes



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CE DECLARATION OF CONFORMITY

The undersigned:

CARLO DE GIORGI S.r.l.
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20021 BARANZATE (MI) - I

declares, under its own responsibility, that the apparatus:

Type **DENTAL LATHE**

described as:

grinding, polishing, and buffing machine designed for material removal processes, sharpening of tools, polishing and buffing procedures,

conforms to the Laws implementing the requirements of the "Machinery Directive" 2006/42/CE, the "Low Voltage Directive" 2014/35/UE, the "Electromagnetic Compatibility" Directive 2014/30/UE and the RoHS Directive 2011/65/UE, following the technical reference standards EN ISO 12100, EN 61010-1, EN 61029-1, EN 61029-2-4, EN 60326-1, EN 55014-1, EN 55014-2.

Date: 01/06/2016

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1 - STANDARDS AND GENERAL PRECAUTIONS

1.1 - INTRODUCTION

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1.2 - DESCRIPTION OF THE APPLIANCE

The appliance in question is, depending on the installed tool, a buffing machine, a polishing machine or a grinding machine designed, respectively, for cleaning and buffing, for polishing and for removing material or sharpening tools.

1.3 - REFERENCE STANDARDS

1.3.1 - Obligatory compliance

- Directive 2006/42/CE – Machinery Directive
- Directive 2014/35/UE – Low voltage Directive
- Directive 2014/30/UE relative to Electromagnetic Compatibility (EMC)
- Rohs Directive 2011/65/CE

1.3.2 - Voluntary compliance

- EN 292 (1992) Machine safety – Basic concepts; general design principles – Part 1 – Basic terminology and methods (EN 292-1) /Part 2 – Specifications and technical principles (EN 292-2).
- EN 60204-1 Machine safety – Machine electrical equipment - Part 1: General requisites



1.4 - RESPONSIBILITIES OF THE CUSTOMER

The user must install the appliance in a suitable place equipped with an electrical system that complies with established legislation.

The appliance must be installed in a dry environment that is illuminated in accordance with the requirements of established legislation.

NOTE: The expression "established legislation" refers to the laws in force in the user's country.

1.5 - REQUESTS FOR SERVICE AND SPARE PARTS

For all electrical maintenance requirements, contact CARLO DE GIORGI of Baranzate, Via Tonale, 1.

In the case of faults, notify CARLO DE GIORGI technical personnel of the exact nature of the problem, specifying also the lot number shown on the label affixed to the rear of the appliance.

2- TECHNICAL FEATURES

2.1 - TECHNICAL FEATURES

		MAP 1	MAP 2	LUX 1 SX/DX	LUX 2	LUX FLEX LUX OR
Voltage	V	230/120	230/120	230/120	230/120	230/120
Frequency	Hz	50/60	50/60	50/60	50/60	50/60
Installed power	W	500	500	300	300	300
Tool speed	rpm	2,800	1,400 2,800	2,800	1,400 2,800	2,800
Mass	kg	10	10.5	6	6.4	6
Noise level in no-load condition	dB	60	60	60	60	60

3 - COMPONENTS

The package supplied contains:

- a) the appliance;
- b) right-hand and left-hand spindles (only 1 spindle for LUX 1 DS/SX);
- c) right-hand grinding wheel chuck;
- d) user instructions.

Due to its intrinsic characteristics, the appliance can be moved by hand



4 - OPERATION AND USE

4.1 – POSITIONING AND CONNECTION

The appliance should be placed on a work table in front of the operator at a convenient height to reduce fatigue and unnecessary effort.

Fix the appliance to the work table by inserting 4 M6 screws (2 screws in the case of LUX models) through the holes in the baseplate and securing them under the work table by means of nuts.

Fit the tapered spindles supplied with the machine on the right-hand side (1) and left-hand side (2) (the left-hand spindle is identified by means of a notch), the spindles are designed to accept the various tools compatible with the appliance (rag wheels, etc.).

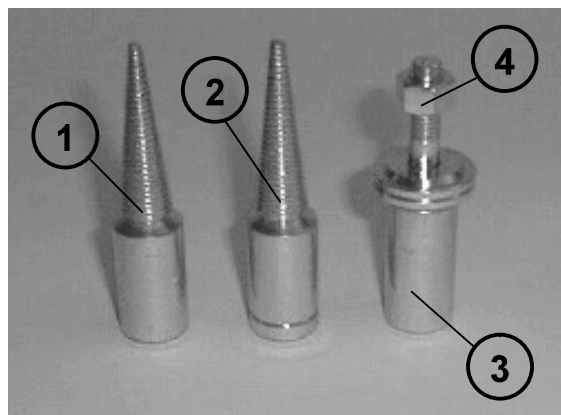


Fig. 1

When using circular brushes without a threaded insert, fit the chuck (3) with locking nut (4) on the right-hand side

NOTE THAT OPERATORS ARE REQUIRED TO USE INDIVIDUAL PROTECTION DEVICES AT ALL TIMES (SAFETY GLASSES).

After positioning the appliance ensure the main power switch is set to OFF and then connect the power supply by inserting the power cable plug into a mains socket outlet. The relative mains circuit must be equipped with overcurrent protection devices.

Operation of the appliance is obtained by setting the main power switch to ON.

Always switch OFF the appliance after use.

Remove the spindles by unscrewing spindle extractor (5).

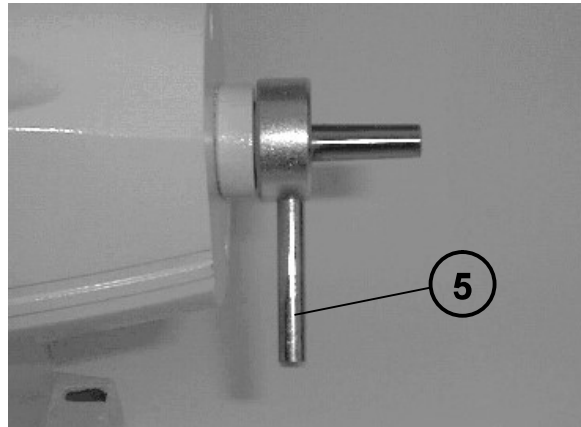


Fig. 2

4.2 - OPERATOR

The operator starts the appliance by means of a voluntary command thereby assuming direct control of its operation.

4.3 – INTENDED USE

The dental lathe is designed for use in dental laboratories, jewellers' workshops and tool shops. The type of work performed depends on the type of tool installed.

The appliance is not designed for any uses other than those specified by the manufacturer.

4.4 - SAFETY WARNINGS

- The appliance must be used exclusively by skilled personnel who are aware of the potential hazards;
- do not use the appliance in the vicinity of inflammable materials or gases;
- do not open or disassemble the appliance when it is in operation;
- do not subject the appliance to excess workloads to prevent rapid deterioration of the tools, degradation of performance levels or overheating of the motor;
- ensure the right-hand and left-hand spindles are correctly fitted (the left-hand spindle can be identified by the presence of a notch); if the spindles are incorrectly installed the tool may disengage while the appliance is operating;



- do not wear clothing with loose fitting sleeves, scarves, chains or necklaces, bracelets, etc. which could become entrapped by moving parts of the appliance;
- always wear safety glasses and, in the event of prolonged use, suitable hearing protection devices (hearing defenders, earplugs, etc.);
- when working with grinding wheels, and whenever the appliance is utilized for removing workpiece material, the use of safety screens is mandatory;
- in the case of work that generates dust that can be diffused in the air and otherwise contaminate the working area, a suitable exhauster system must be installed.

5 - OPERATOR INSTRUCTIONS

5.1 - CONTROLS

The dental lathes are equipped with the following control devices on the front:

- a) main power ON/OFF switch (white) (for single speed versions);
- b) main I/OFF/II power/speed selector (black) (for two-speed versions).

5.2 - INSTRUCTIONS FOR USE

5.2.1 - Setting into operation

After performing the installation procedures, the appliance can be set into operation:

- by setting the main power switch (white) to ON (for single speed versions);
- by setting the main power switch (black) to speed I or speed II (for two-speed versions).

5.2.2 - Normal stopping and emergency stop procedures

The appliance can be stopped as follows:

- by setting main power switch to OFF, thereby disconnecting the electrical power supply;
- by unplugging the power cable from the electrical socket outlet.



5.2.3 - Warnings

In relation to the workpiece material, the user must adopt personal protective equipment (facemask, gloves, etc.) and/or an efficient exhauster system.

DO NOT LEAVE THE APPLIANCE UNATTENDED WHILE IT IS RUNNING AND REMEMBER TO SWITCH IT OFF WHEN YOU FINISH WORKING WITH IT AND FOLLOWING ALL STOPPAGES, IRRESPECTIVE OF THE MOTIVE.

IF YOU NOTICE MALFUNCTIONS STOP THE APPLIANCE IMMEDIATELY AND DISCONNECT IT FROM THE ELECTRICAL POWER SUPPLY. BEFORE RECONNECTING THE POWER SUPPLY FIND THE CAUSE OF THE FAULT AND REMEDY IT. IN THE CASE OF PROBLEMS, CONSULT CARLO DE GIORGI. WHEN USING GRINDING WHEELS, ALWAYS POSITION THE WORKPIECE REST SUPPLIED WITH THE APPLIANCE AT A DISTANCE NO GREATER THAN 2 mm FROM THE EDGE OF THE GRINDING WHEEL AND WORK WITH THE SAFETY SCREEN IN POSITION.

6 - MAINTENANCE

All work on electrical components accessible only after removing the casing must be performed exclusively by properly authorized and trained personnel. Certain parts of the unit constitute a source of danger during maintenance work if performed when the appliance is powered up.

6.1 - Cleaning and lubrication

The appliance does not require any particular maintenance operations, with the exception of regular cleaning of the working areas: before cleaning the appliance always disconnect it from the power supply.

7 - DIAGNOSTICS

If malfunctions and faulty operation persist, set the main power switch to OFF, unplug the appliance and consult CARLO DE GIORGI.

WARNING!

ALL WORK ON THE APPLIANCE MUST BE PERFORMED WITH
THE POWER SUPPLY DISCONNECTED



8 - VARIANTS

8.1 Single extension shaft

LUX model buffing machines can be supplied with a single extension right-hand or left-hand shaft.

8.2 - Grinder

The LUX model dental lathe can be supplied with a grinder (LUX OR) complete with guard, safety screen and adjustable workpiece rest.

9 - ACCESSORIES

9.1 - LEFT-HAND CHUCK

Brush-holder chuck with lock nut for attachment to the left-hand side of the appliance (the appliance is supplied as standard with a right-hand chuck)

9.2 - FLEXIBLE SHAFT FOR LUX OR or LUX FLEX

LUX OR or LUX FLEX models are equipped with an attachment for the installation of flexible shafts supplied by CARLO DE GIORGI.

10 - DISPOSAL

The crossed out wheelie bin symbol indicates that the apparatus must not be disposed of with other ordinary waste.

The differentiated disposal of this apparatus at the end of its life-cycle is organized and managed by the manufacturer.

When the user wishes to throw this appliance away he must contact and follow the system adopted by the manufacturer to dispose of it correctly.

Differentiated disposal to enable possible recycling or environmentally compatible elimination, helps to limit undesirable effects on health and the environment and promotes the reuse and/or recycling of the materials which make up the appliance.

Sanctions, in accordance with the relative legislation in force in the country of use, will be imposed on the holder if the apparatus is disposed of illegally.

