

**SILADENT** digital

**.e**series

# SilaMill **e**<sup>4</sup>

The smart solution for fast chairside treatments.



Innovation in dental technology.

# The **easy** Entry into Same-Day Dentistry.

In combination with an intraoral scanner of your choice, the SilaMill e4 becomes the centerpiece of a modern chairside workflow in your clinic.

## SilaMill e4 – perfection for your full-service clinic

The SilaMill e4 sets new standards in efficiency and user-friendliness for dental clinics. This system, specially developed for the fabrication of chairside ceramic restorations, enables you to provide fast and reliable patient care.

Ideal for getting started with CAD/CAM technology, the SilaMill e4 saves you time and money while improving the quality of your restorations. It is extremely easy to operate and always delivers results of the highest quality.

Thanks to its compact and quiet design, the SilaMill e4 fits into any clinic. You are therefore ideally equipped for the future and can offer your patients modern treatment at any time thanks to CAD CAM technology.

4 Axles

1 Block

7 Tools

 Dry + Wet

 Grinding + Milling

 incl. CAM Software

## Compact all-rounder

The SilaMill e4 impresses with its high material diversity and versatility.

Grind glass ceramics and composites with ceramic content wet, while grinding materials such as zirconia and PMMA dry.

Thanks to the easy switch between wet and dry processing, you benefit from maximum flexibility. The closed liquid circuit with PUREWATER technology enables problem-free wet grinding without the use of abrasive additives.





## Areas of use: **Materials & Indications**

Composites

PMMA

Wax

Glas Cermics

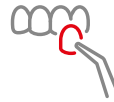
Zircon



Crowns & Pontics



Inlays & Onlays



Veneers



Abutments



Screwed Crowns



## CA - free thanks to AIRTOOL

The E4 sets new standards with its compressed air-free design: neither an external compressed air connection nor a built-in compressor is required. This is made possible by the patented AIRTOOL.

Due to the high speeds of the high-frequency spindle, the turbine blades of the AIRTOOL generate a strong air flow that removes chips and dust from the workpiece. These are then efficiently extracted. This keeps the working environment clean and free of material residues at all times.



# Technical Data

## GENERAL

Fields of application	Wet & Dry
Materials	Composites, PMMA, Wax, Glass Ceramics, Zircon • Blocks up to 45 × 20 × 20 mm
Indications	Crowns, Pontics, Inlays, Onlays, Veneers, Zircon-Abutments, Screwed Crowns
Holding System	Integrated Block-Holder

## BASE SYSTEM

Construction	Machine bed made of solid cast aluminum body
Housing	White high-gloss lacquer finish · upward opening lift door to the workroom
Number of axes	4
Linear axes X/Y/Z	Precision ball screws · Motors with resolution < 1 µm · Ground precision guides made of high-alloy steel · Repeatability ± 0.003 mm
Rotary axis	A axis Rotation angle: +190° to -10°
Control electronics	Control electronics with continuous path tracking and dynamic prediction Hardware-oriented real-time operating system with standardized command set · FPGA-integrated processor Updateable hardware · Real-time path calculation and real-time ramp calculation via dedicated hardware engines in the FPGA · Four-quadrant control of the motors for particularly smooth running · Multiple digital I/Os for controlling peripherals · Integrated converter for synchronous and asynchronous motors, electronic cut detection · Ethernet and USB interface
Lighting	Backlit work area with RGB LED lighting and status display

## SPINDEL

General	High-frequency spindle with electromechanical tool change
Speed	Up to 60,000 rpm
Power	Output power (P max): 800 watts · Peak power (S6): 400 watts · Continuous power (S1): 300 watts
Bearings	2 hybrid ceramic ball bearings
Collet	Tools with a 3 mm shank diameter and a maximum total length of 40 mm

## AUTOMATION

Tool change	Removable tool magazine for 6 tools with additional single slot for an AIRTOOL Length measurement and tool breakage monitoring via precision measuring probe Access via work area door, safety locked
Combination compartment access	Direct insertion of the coolant container or (optional) dry container into the compartment directly below the work area.

## PROCESSING MODES

Wet	2 liquid nozzles on the spindle · Integrated reservoir for cooling liquid PUREWATER Technology: no abrasive additives required
Dry	Compressed air-free operation through the use of AIRTOOLS · Hose connection for external suction device on the rear wall of the housing · 24 V switching output for controlling suction units Optional dry container required

## CONNECTION REQUIREMENTS

Power supply	100–240 volts · 50/60 Hz, 500 watts
Extraction system	Only for dry processing: Filter class M, 2,500 l/min air volume, 200 hPa negative pressure
Data	10/100/1000 Mbit/s BaseT port (automatic detection) Ethernet via RJ-45 socket

## ENVIRONMENTAL CONDITIONS

Temperature	between 10 °C and 35 °C
Humidity	max. 80 % (relative), non-condensing

## APPROVALS

All models	CE
North American model	UL 61010-1, CAN/CSA C22.2 No. 61010-1

## DIMENSIONS & WEIGHTS

Dimensions	(W/D/H) 360 × 370 × 490 mm with door closed · 360 × 420 × 490 mm with door open Footprint (W/D) 270 × 268 mm
Weight	28 kg

## SCOPE OF DELIVERY

CAM Software	DENTALCAM software included in scope of delivery
Accessories	Spindle service set · Calibration set incl. micrometer · Tool magazine insert (1 piece) Torx screwdriver set · Torque screwdriver 1.5 Nm · AIRTOOL for PMMA/wax Drill bits (tool positions) · Cleaning brush and microfiber cloth · TecPowder (3) · Foam filter Power cord · Ethernet network cable

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