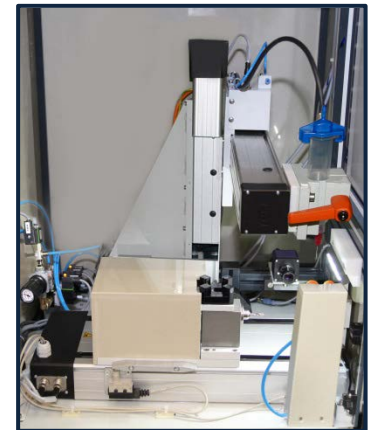


## Semi-Automatic Varnishing System TLA 1-D23/101

The semiautomatic varnishing system serves for varnishing or masking prior to the electro-plating process as well as for marking with colour rings of diamond dental burrs (types FG, H and RA) and grinding pins. It is equipped with a three-axis linear guide, a camera and monitor for visual control of varnishing, a PLC controller and a Touch screen operators' terminal for programming and backup of programs.



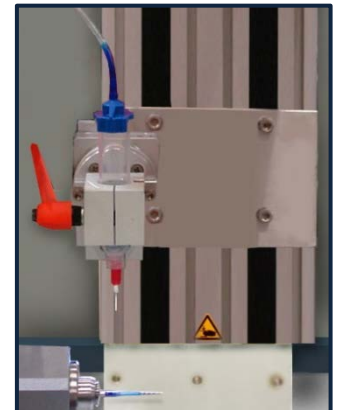
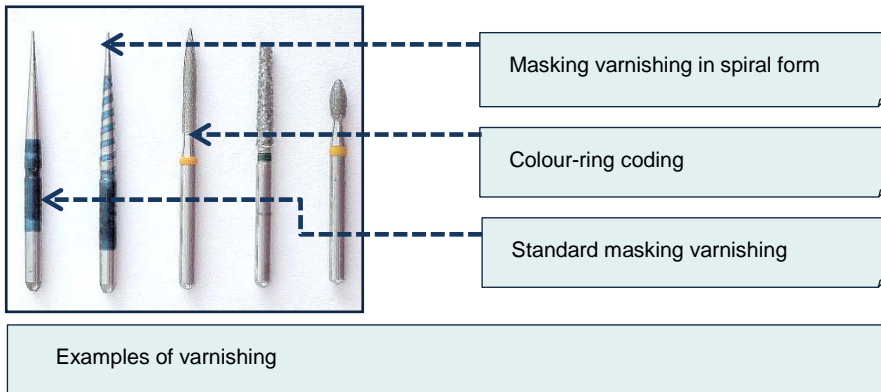
Varnishing unit with three-axes guide and pressure based varnish dosing system



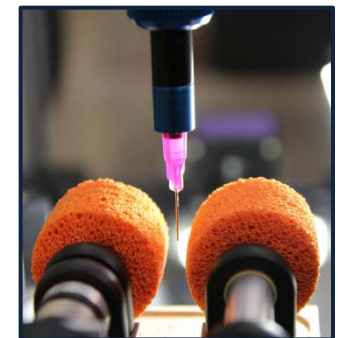
Monitor to check varnishing

**Note: All illustrations are examples.  
The product may vary from the illustrations.**

Technical Data	
Clamping diameter:	1,6 / 2,35 / 3 / 4 / 5 / 6 / 8 / 10 mm (other diameters available on request)
Clamping depth:	min. 4 mm
Varnishing range:	With three freely programmable axes: varnishing zone according to program
Varnishing capacity:	<b>For masking:</b> appr. 8 - 10 pcs/min. (Blank: FG; varnishing zone 10 mm, dosing needle Ø 0.25mm) <b>Colour-ring coding:</b> appr. 12 - 15 pcs/min (2-component varnish)
<b>Note:</b>	All information given depends on operator and quality and precision of blank, and may therefore vary .
Program memory:	appr. 2000 dental burr types depending on varnishing range and hard disk capacity
Mandrel speed:	max. 1000 rpm
Air pressure:	5 ... 7 bar, oil-free, dry
Power connection:	230 V, 50 Hz
System dimensions:	L x W x H appr. 1450 x 740 x 1450 mm



Pressure based varnish dosing system



Cleaning installation for dosing needle

## Basic equipment

- Holding frame welded of aluminium profiles and baking enamelled
- Table surface for varnishing unit made of aluminium, baking enamelled
- Headstock with collet holding fixture and pneumatic tension unit
- Freely programmable carriage
- Carriage guide for x-y-z-axes with step motor
- Driving motor for headstock, continuously speed controlled by PLC.
- Main control with switch box
- PLC-controller
 

Version:	CPU-module Q-series
Input/output addresses:	4096/8192
Storage media:	Program memory 120 kByte
Interfaces:	USB 100BASE-TX
- Graphics Display: with touch operation 8,4" 65536 colours
- LCD type: TFT Colour-LCD Resolution : 640 x 480
- Optical control of varnishing by camera and 19" monitor
- Safety housing incl. light barrier for machine safety
- Varnish dosing incl. pressure-regulation valve for varnish cartridges 5,10, 30 and 55 cc
- Cleaning installation for dosing needle

## Optional expansions TLA 1-D23/001

- Electronic hand wheel in connection to on-board PC for easier programming
- Laser-assisted precision zero-setting for better reproducible varnishing results
- Prearrangement of the TLA for integrating a robot for automation incl. servomotors for axes, motion controller and servo amplifier
- Volumetric dosing system for precision-dosing
- 6-axes varnishing robot for grinding points with vertical surfaces
- Enlargement of head stock fixture up to collet Ø 32 mm
- Change of power ratings to 120 V, 60 Hz