

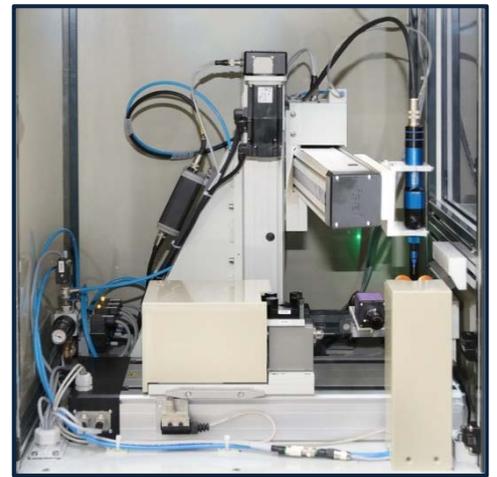
半自动上漆点胶系统 TLA 1-D23/102 Semiautomatic Varnishing System TLA 1-D23/102

该半自动上漆点胶系统 TLA 用于电镀前金刚石牙钻（型号 FG,H 与 RA）的保护涂层，以及金刚石牙钻、种植钻头、旋转装置的编码。

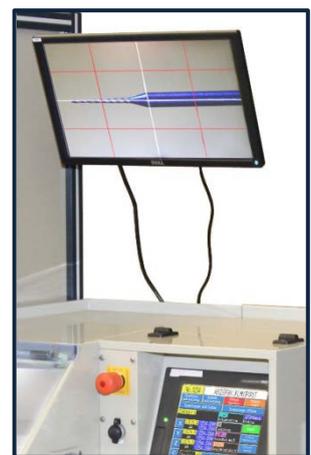
该系统配有精密的上漆配量，三轴导轨，一个摄像头和用于视控喷涂的显示屏，一个 PLC 控制器以及一个用于编程和程序备份的终端操作触摸屏。

The semiautomatic varnishing system TLA is for masking varnishing of diamond dental burrs (types FG, H and RA) prior to the electro-plating process as well as for coding with colour rings of diamond dental burrs, implant drills and rotating instruments.

It is equipped with a precision varnish dosing, three-axis linear guide, camera and monitor for visual control of varnishing, PLC controller and a Touch screen operators' terminal for programming and backup of programs.



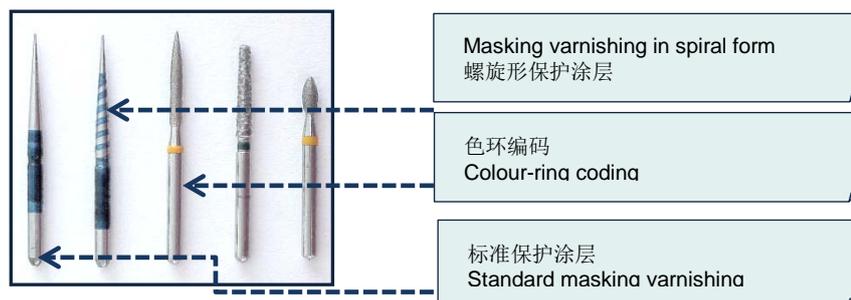
带有 3 轴导轨与容积配量系统的上漆装置
Varnishing unit with three-axes linear guide
and volumetric paint dosing



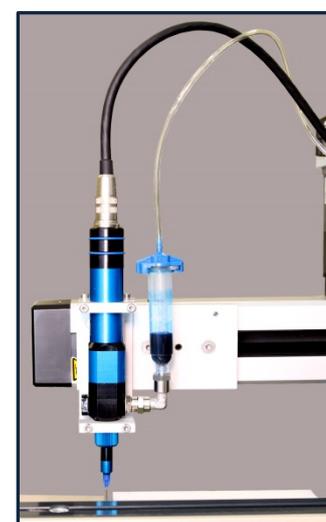
用于监控上漆的显示屏
Monitor to check varnishing

注:所有图片均是示例，实际产品可能与图片有差别。
Note: All illustrations are examples.
The product may vary from the illustrations.

Technical Data 技术参数	
夹持直径 Clamping diameter:	1,6 / 2,35 / 3 / 4 / 5 / 6 / 8 / 10 mm (可应要求提供其他尺寸) 1,6 / 2,35 / 3 / 4 / 5 / 6 / 8 / 10 mm (other diameters available on request)
夹持深度 Clamping depth:	至少4mm min. 4 mm
上漆范围 Varnishing range:	带有三个可自由编程的轴: 按照程序确定上漆区 With three freely programmable axes: varnishing zone according to program
上漆能力 Varnishing capacity:	上绝缘漆:约8 - 10个/分钟 (毛坯: FG;上漆区10mm, 配量针直径0.25mm,) 色环编码:约12 - 15个/分钟 (双组份漆料) For masking: appr.8 - 10 pcs/min. (Blank: FG; varnishing zone 10 mm, dosing needle Ø 0.25mm) Colour-ring coding: appr. 12 - 15 pcs/min (2-component varnish)
备注: Note:	所有提供的数据与操作员, 毛坯的质量与精度有关并可能因此产生差异。 All information given depends on operator and quality and precision of blank, and may therefore vary .
程序存储器 Program memory:	根据上漆范围和硬盘容量约有2000个牙钻类型 appr. 2000 dental burr types depending on varnishing range and hard disk capacity
心轴转速 Mandrel speed:	最大 1000 转每分钟 max. 1000 rpm
气压 Air pressure:	5 ... 7 巴, 无油, 干燥 5 ... 7 bar, oil-free, dry
连接电源 Power connection:	230 V, 50 Hz
设备规格 System dimensions:	长x 宽 x 高 约1450 x 740 x 1640 毫米 L x W x H appr. 1450 x 740 x 1640 mm



保护层与牙钻色环编码示例
Examples of masking varnishing and colour-ring coding on dental burrs



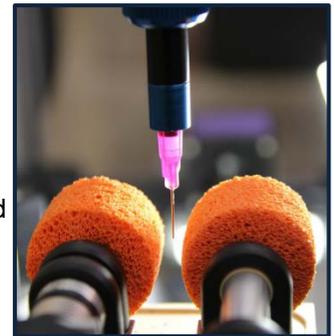
容积上漆配量系统
Volumetric paint dosing system



种植钻头上色环编码示例
Examples of colour-ring coding on implant drills

基本设备 Basic equipment

- 烤漆铝型材质的固定框架
Holding frame welded of aluminium profiles and baking enamelled
- 上漆装置的桌面由烤漆铝型材制成
Table surface for varnishing unit made of aluminium, baking enamelled
- 主轴承带有夹头的支撑夹具和气动夹紧装置
Headstock with collet holding fixture and pneumatic clamping unit
- 可自由编程的托架
Freely programmable carriage
- 带有步进电动机的X-Y-Z轴导引托架
Carriage guide for x-y-z-axes with step motor
- 主轴承的电动机，通过PLC可持续调速
Drive motor for headstock, continuously speed controlled by PLC.
- 主控制开关盒 Main control with switch box
- PLC控制器 PLC-controller
版本Version: CPU-module Q-series
输入/输出地址Input/output addresses: 4096/8192
存储介质Storage media: Program memory程序存储器 120 kByte
接口Interfaces: USB 100BASE-TX
- 图像显示屏:
Graphics Display: 触摸操作8.4寸65536色
液晶屏类型: TFT彩色LCD, 分辨率: 640 x 480
LCD type: TFT Colour-LCD, Resolution : 640 x 480
- 通过摄像头和19寸显示屏视控上漆
Optical control of varnishing by camera and 19" monitor
- 安全间包括确保设备安全的挡光板
Safety housing incl. light barrier for machine safety
- 用于精确配量的容积配量系统
Volumetric dosing system for precision application of varnish
- 激光辅助精密置零，用于改进上漆效果
Laser-assisted precision zero-setting for improved reproducible varnishing results
- 连接设备电脑的电子手轮，更方便程序设置
Electronic hand wheel in connection with on-board PC for easier programming



加药针清洗设备
Cleaning device
for dosing needle

可选扩展项 Optional expansions TLA 1-D23/102

- 在TLA系统为实现自动化整合机器人时的准备包括轴的伺服电动机，运动控制器和伺服放大器。
Prearrangement of the TLA for integrating a robot for automation incl. servomotors for axes, motion controller and servo amplifier
- 为磨棒垂直表面上漆的6轴机器人
6-axes varnishing robot for grinding points with vertical surfaces
- 主轴承可扩大至直径为32毫米的夹头
Enlargement of head stock fixture up to collet Ø 32 mm
- 可更改电流接入值为120 V, 60 Hz
Change of power ratings to 120 V, 60 Hz