

Equipment.

For professional workmanship.



DENTAURUM
**ONLINE
SHOP**
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Certified quality made in Germany.

Dentaurum equipment has been developed, manufactured and tested in close collaboration with internal and external users. The focus is on easy handling and high quality, ensuring long durability.

Metal connections in orthodontics.

We offer a wide range of equipment for all types of metal connections in orthodontics, from mini gas burners to high-tech laser welding technology.



desktop Compact

Universal laser welding unit.

Laser Welder SL10

The entry-level model, ideal for orthodontics.

Spot welding unit

Assistent 3000.

Dual wheel model trimmer

Beautiful models – trimmed quickly and neatly.

Suction unit

For protection from vapor during processing.

activeblue

Gentle removal of plaque.

Spot welding unit.

For professional welding and soldering in orthodontics.

A suitable unit for everyone.

The Assistant 3000 is the right unit for welding and soldering tasks in orthodontics, working professionally and efficiently both in the orthodontic practice and in the laboratory. The function and selection of accessories available, along with the unit's ergonomic design, are all based upon years of experience in development and close collaboration with orthodontists.

Modern technology – excellent results.

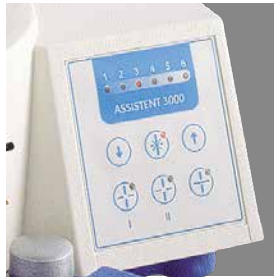
The Assistant 3000 achieves excellent welding and soldering results due to the modern electronic components used together with high quality mechanical elements. For example, the electronic welding adjustments or the extra wide hand rests make work easy, comfortable and effective.

Assistant 3000 – the comfortable unit for average use.

With the Assistant 3000, excellent results can be efficiently achieved with average use.

This unit's special features, amongst others, are

- 6 welding settings and 2 soldering settings.



Dentaurum laser technology.

For professional welding in orthodontics.

Laser welding – the modern joining technique.

Laser welding allows more efficient processing. In comparison with traditional soldering, you can save up to 80 % in time. New fabrications and repairs can be carried out better and faster by using a dental laser.

Your advantages:

- gentle on materials.
- biocompatible.
- corrosion resistant.



Maximum stability.

Laser-welded connections present a significantly higher mechanical resistance and are more durable than soldered connections. This means greater security and higher quality for the orthodontist and the patients.

Broad spectrum of application.

It is impossible to imagine the world of joining techniques without laser welding. Compared to soldering, laser welding offers a much wider range of applications.

Whether you want to process precious metal alloys with a high gold content, non-precious alloys or titanium: you can cover the whole range of dental materials using the laser welding units from Dentaureum.

Ergonomics – extremely user-friendly.

A special characteristic feature of the Dentaureum dental lasers is their special ergonomic design. Working becomes a relaxed and easy affair for you.

- The dental lasers demonstrate their excellent ergonomics in the optimal inclination of the laser axis. Thereby not only do you sit relaxed in front of the microscope, but you can also hold the workpiece at an optimal angle.
- The workpiece is always flushed with argon through the argon nozzle. This ensures an oxidation-free weld with high stability.
- The desktop Compact fulfills the highest of demands in all areas of dental prosthetics and orthodontics. The Laser Welder SL10 is the ideal entry model for laser technology.

Equipment and accessories



Power voltage	REF	Quantity
200 V - 240 V	090-578-50	1 piece

Technical data

max. power	60 W
Peak pulse output	5000 W
Pulse energy	50 J
Pulse duration	0.5 ms - 20 ms
Pulse frequency	single pulse - 25 Hz
Welding spot diameter	0.2 mm - 2.0 mm, infinitely variable motorized adjustment
Memory settings	39
Pulse shaping	4 pre-set pulse shapes
Argon nozzle	1 x flexible, 1 x fixed retractable
Air nozzle	integrated in welding chamber
Extraction	integrated with suspended particle filter (H14)
Microscope	stereo microscope with 16x magnification
Lighting	2 x 3,2 W LED
max. working height	88 mm
Electric fuse	T 16 A
Power frequency	50 Hz - 60 Hz
Weight	42 kg
Dimensions (W x H x D)	510 mm x 500 mm x 630 mm

desktop Compact

Laser welding – powerful and easy to use.

More than 30 years of dental laser welding technique accumulated in a compact table unit. From delicate, detailed welding to secure joints, the desktop Compact laser can be used for all areas of application in dental prosthetics and orthodontics. The finely adjustable dosage makes welding so much easier. Until now, such compact machine measurements were not available in this laser performance category. Simple machine operation prevents fatigue during work.

Advantages:

- extremely compact table top unit
- clear and user-friendly touchscreen
- high output reserve
- ergonomically designed – large working chamber with inclining laser axis
- high-quality microscope with a wide field of vision
- integrated pulse forming – 4 pre-set pulse shapes
- two inert gas nozzles, 1x flexible and 1x fixed retractable
- large pulse adjustment range – easy operation using joysticks
- integrated extraction and cool air nozzle

Further product information is available on request.

Laser Welder SL10

The Laser Welder SL10 from Siro Lasertec complements the desktop Compact as an economical entry-level model for the laser welding technique. It is ideal for smaller dental laboratories and orthodontic practices.

Product advantages:

- excellent price-performance ratio
- large color touch display
- particularly suitable for orthodontic appliances
- welding power suitable for all fields of dentistry
- easy to operate
- with microscope
- solid housing
- adjustment of welding parameters on touch panel
- color camera shows welding process on the display
- desktop design



Power voltage	REF	Quantity
230 V~	090-594-00	1 piece

Technical data

max. power	60 W
Peak pulse output	3800 W
Pulse energy	33 J
Pulse duration	0.1 ms - 10 ms
Pulse frequency	0,5 Hz - 20 Hz
Welding spot diameter	0.2 mm - 2.0 mm, infinitely variable motorized adjustment
Protective gas	Argon 99.996 % (Argon 4.6)
Pulse shaping	no
Argon nozzle	1 x flexible
Extraction	integrated with suspended particle filter
Microscope	stereo microscope with 16x magnification
Lighting	2 x 3 W LED
max. working height	200 mm
Electric fuse	T 16 A
Power frequency	50 Hz / 60 Hz
Weight	40.5 kg
Dimensions (W x H x D)	440 mm x 480 mm x 600 mm



Equipment and accessories



Electrically adjustable stand

The answer to unsurpassed ergonomics with the Dentaaurum desktop laser-welding units.

Advantages:

- this stand offers the user the best possible ergonomics
- the electrically adjustable stand enables the technician to change to their comfort level, via a foot switch, within seconds. This offers the most comfortable viewing level, and assures full concentration on the laser work
- the stand is designed to guarantee fatigue-free laser welding, even after extended periods of time
- can be used with all Dentaaurum desktop laser-welding units

Power voltage	REF	Quantity
230 V~	090-574-00	1 piece

Technical data

Power frequency	50 Hz
min. working height	740 mm
max. working height	1090 mm



Argon fitting

For laser.

For connecting the laser to the argon bottle.

Flow rate shown in liters.

REF 090-404-00

1 assortment



Armrest cushion

For laser.

REF 090-513-10

2 pieces

CoCr welding wire

Various dimensions to be used as a filling soldering wire for all CoCr alloys.

Norm: DIN EN ISO 28319

ø	Length	REF	Quantity
0.25 mm / 10	2 m	528-215-10	1 piece
0.35 mm / 14	2 m	528-210-10	1 piece
0.50 mm / 20	2 m	528-200-10	1 piece

Composition (percentage by mass)

Co	Cr	Mo
65.0	28.0	5.5

Additional elements < 1 %: Mn, N, Si

**NiCr welding wire**

For laser welding NiCr based alloys. Specifically for high grade alloys such as remanium® CSe and G-soft.

Norm: DIN EN ISO 28319

ø	Length	REF	Quantity
0.50 mm / 20	2 m	528-220-00	1 piece

Composition (percentage by mass)

Ni	Cr	Mo	Nb
63.0	22.0	9.0	3,5

Additional elements < 1 %: Al, Co, Fe, Ti

**rematitan® wire on coil**

Titanium grade 1

For laser welding of titanium frameworks.

Recommended as filler material for laser welding, e.g. with titanium RPE appliances (Titan hyrax® Maxi – 12).

Norm: DIN EN ISO 28319, DIN EN ISO 5832-2

ø	Length	REF	Quantity
0.40 mm / 16	2 m	528-039-50	1 piece
0.70 mm / 28	2 m	528-040-50	1 piece



Equipment and accessories



rematitan® straight wire

Titanium grade 1

For laser welding.

Norm: DIN EN ISO 28319, DIN EN ISO 5832-2

ø	Length	REF	Quantity
1.00 mm / 39	each 100 mm	528-041-00	10 pieces
1.20 mm / 47	each 100 mm	528-042-00	10 pieces



rematitan® straight wire

Titanium grade 4

For laser welding.

Recommended for axes of swing locks.

Norm: DIN EN ISO 28319, DIN EN ISO 5832-2

ø	Length	REF	Quantity
1.50 mm / 59	50 mm	528-050-00	1 piece



rematitan® straight wire

Titanium grade 1

For laser welding.

Norm: DIN EN ISO 28319, DIN EN ISO 5832-2

ø rolled	Length	REF	Quantity
0.50 mm x 1.5 mm / 20 x 59	each 100 mm	528-043-00	10 pieces



Spot welding unit Assistent 3000

- button for continuous soldering
- LED display
- automatic voltage detection
- current limitation if electrode is incorrect
- power saving device (stand-by mode if not used for 10 minutes)
- error indications for:
 - overheating
 - mix-up of electrodes
- connection for hand electrode
- connection for foot switch

Hand electrodes, holder for hand electrodes and foot switch are not included!



Power voltage	REF	Quantity
110 V~ / 240 V~	078-000-00	1 piece

Technical data

Output	140 W
Welding power	up to 2000 A
Welding stages	6 stages
Soldering stages	2 stages, continuous soldering
Electric fuse	T 3.15 A
Power frequency	50 Hz / 60 Hz
Weight	8 kg
Dimensions (W x H x D)	335 mm x 130 mm x 310 mm



Equipment

Equipment and accessories



Foot switch

To be used with the spot welding units Junior 3000, Assistant 3000 and Master 3000.

REF 080-116-00

1 piece



Hand electrode

Suitable for all Dentaureum spot welding units.

REF 081-101-00

1 piece



Holder for hand electrode

For the spot welding units Junior 3000, Assistant 3000 and Master 3000.

Version	REF	Quantity
for right and left side	081-204-00	2 pieces
for right side	081-205-00	1 piece
for left side	081-206-00	1 piece



Soldering carbon for hand electrode

Suitable for all Dentaureum spot welding units.
Copper casing.

REF 081-601-00

1 piece



Electrode, notched, for hand electrode

Suitable for all Dentaureum spot welding units.
For soft-annealing, tempering and welding.

REF 081-501-00

2 pieces



Clamping electrode for hand electrode

Suitable for all Dentaureum spot welding units.
For soft-annealing, tempering and welding.

REF 081-701-00

1 piece

Welding electrode

Suitable for all Dentaaurum spot welding units.
Material: copper

Welding electrode	Version	REF	Quantity
upper	round, fine	085-000-00	1 piece
upper	wide, flat	085-100-00	1 piece
upper	round, thick	085-200-00	1 piece
lower	round, fine	086-000-00	1 piece
lower	wide, notched	086-100-00	1 piece
lower	round, thick	086-200-00	1 piece
lower	wide, flat	086-300-00	1 piece



Soldering electrode

Suitable for all Dentaaurum spot welding units.
Carbon with holder.

REF 085-300-00	1 piece
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Carbon insert

For soldering electrode (REF 085-300-00).

REF 085-400-00	10 pieces
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Equipment

Equipment and accessories



Screw

For tightening electrodes on Dentaaurum spot welding units.

REF 084-100-00

10 pieces



File

For cleaning copper and carbon electrodes on spot welding units.

REF 083-300-00

10 pieces



Heat protection

Protects metal, plastic and ceramic parts against heat damage during soldering.

REF 380-070-00

100 g



Dentaflux® flux

- universal flux
- for all alloys
- especially for connections between precious and non-precious alloys

REF 681-100-00

50 g

Universal silver solder

- in rods
- ready fluxed
- cadmium free

Not permitted for intra-oral use.

Ø 1.0 mm - 1.1 mm

Working temperature 700 °C / 1292 °F

REF 380-604-50	1.2 g
REF 380-604-60	10 pieces 1.2 g each

Composition (percentage by mass)

Ag	Zn	Cu
59.0	24.0	16.0

**Universal silver solder**

- in coils
- without flux
- cadmium free

Not permitted for intra-oral use.

Ø 0.6 mm

Working temperature 700 °C / 1292 °F

REF 380-704-50	10 g
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Composition (percentage by mass)

Ag	Zn	Cu
59.0	25.0	16.0

**White gold solder**

- in rods
- ready fluxed
- purity: ct 18.6
- cadmium free

Not permitted for intra-oral use.

Ø 1.0 mm - 1.1 mm

Working temperature 950 °C / 1742 °F

REF 380-600-50	1.6 g
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Composition (percentage by mass)

Au	Ni	Zn
77.0	16.0	6.0



Equipment and accessories



activeblue cleaning unit

With activefluid cleaning fluid.

For the gentle removal of plaque from orthodontic removable appliances.

Included:

- 1 x cleaning fluid, 1000 ml (REF 150-020-00)
- 1 x cleaning cup, white
- 1 x cleaning pins, 75 g (REF 098-001-00)
- 1 x tweezers
- 1 x holding magnet
- 1 x power cable (230 V)

Technical data

Power voltage	100 V~ - 240 V~ at 50 Hz / 60 Hz
Turning rotations	1200 min ⁻¹ / 1600 min ⁻¹ / 2000 min ⁻¹
Electric fuse	T 1.6 A L 250 V
Noise level	< 70 dB (A)
Weight	3 kg
Dimensions (W x H x D)	150 mm x 240 mm x 280 mm

REF 098-000-00

1 piece



Cleaning pins for activeblue

For activeblue cleaning unit.

REF 098-001-00

1 container 75 g each



activefluid cleaning fluid

For activeblue cleaning unit.

REF 150-020-00

1000 ml

Polyclav®

Pressure vessel for polymerization of cold-curing polymers, induction-compatible.
With safety valve.

Without pressure hose.

Capacity: 4.5 l

REF 070-010-00

1 piece

**Pressure hose**

For Polyclav® (REF 070-010-00).

Connection plug nipple to fit inlet valve and standard coupling for compressed air sockets.

Length: 1.5 m

Pmax: 8.0 bar

REF 070-015-00

1 piece

**Heating plate**

For Polyclav® (REF 070-000-00 and 070-010-00).

Power voltage	REF	Quantity
230 V~	070-900-00	1 piece

Technical data

Output	125 W
Thermostat for water temperature	43 °C / 109.4 °F
Power frequency	50 Hz / 60 Hz
Weight	2.6 kg
Dimensions (W x H x D)	240 mm x 240 mm x 75 mm

**Suction apparatus with charcoal filter**

For protection against vapor during processing of acrylics in the laboratory.

- controlled by a photoelectric sensor (automatic switch on/off)
- includes hour meter
- easy-change filter (replace the filter cartridge, REF 072-001-40, after approx. 50 operating hours)

Power voltage	REF	Quantity
230 V~	072-001-00	1 piece
115 V~	072-002-00	1 piece

Technical data

Output	100 W
Power frequency	50 Hz
Weight	6 kg
Dimensions (W x H x D)	220 mm x 260 mm x 260 mm



Equipment and accessories



Dual wheel model trimmer

For plaster models.

Coarse and fine corundum grinding wheels. Can be used on either side. Separately controlled motor switches with 450 W capacity. Individually controlled water pressure by a magnetic water valve. Work area with squaring and angulation devices.

Power voltage	REF	Quantity
230 V~	091-100-00	1 piece

Technical data

Output	2 x 450 W
Turning rotations	1400 min ⁻¹
Power frequency	50 Hz / 60 Hz
Weight	39 kg
Dimensions (W x H x D)	530 mm x 400 mm x 385 mm

Corundum disc

For Dentaureum dual wheel model trimmer (REF 091-100-00).

Grain size	REF	Quantity
46 = coarse	091-101-00	1 piece
120 = fine	091-102-00	1 piece

**Diamond disc, coarse**

For Dentaureum dual wheel model trimmer (REF 091-100-00).

- long operating life
- extremely high abrasive capacity
- minimal force required

REF 091-105-00	1 piece
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**Mini-Torch**

Ignition and flame adjustment is easy and uncomplicated (automatic, with a flick of your finger). Refill as easy as filling a lighter. Adjustable nozzle.


Technical data

Max. temperature	1300 °C / 2372 °F
Filling quantity	65 ml
Weight	280 g

REF 097-400-01	1 piece
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Equipment and accessories

	Designation	REF	Quantity
	Wax knife, small	089-602-00	1 piece
	Wax knife, large	089-605-00	1 piece
	Modeling tip, fine	089-603-00	1 piece
	Modeling tip, medium	089-604-00	1 piece
	Modeling spoon	089-606-00	1 piece



Handpiece with cable
For Thermomat (REF 089-620-00).

REF 089-612-00	1 piece
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