

Deflex[®]

TERMO-INJECTABLE MATERIALS

Polymers for removable and fixed Dentures

EVOLUTION TOWARDS DENTISTRY WITHOUT METAL



THERMO-INJECTABLE MATERIALS

MATERIALS

7 innovative thermoplastic polymers

APPLICATION

Removable and fixed metal free dentures

PROPERTIES

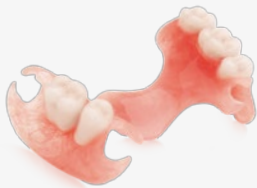
High strength, elastic memory and monomer free

TECHNOLOGY

Materials molded in a micro-injector by temperature + pneumatic pressure

REMOVABLE DENTURES

APPLICATIONS



PARTIAL DENTURES



FULL DENTURES



PARTIAL DENTURES COMBINED WITH CHROMIUM



TEMPORARY DENTURES



AESTHETIC RETAINERS



OVERDENTURES



OCCUSAL SPLINTS



PARTIAL DENTURE FRAMEWORKS



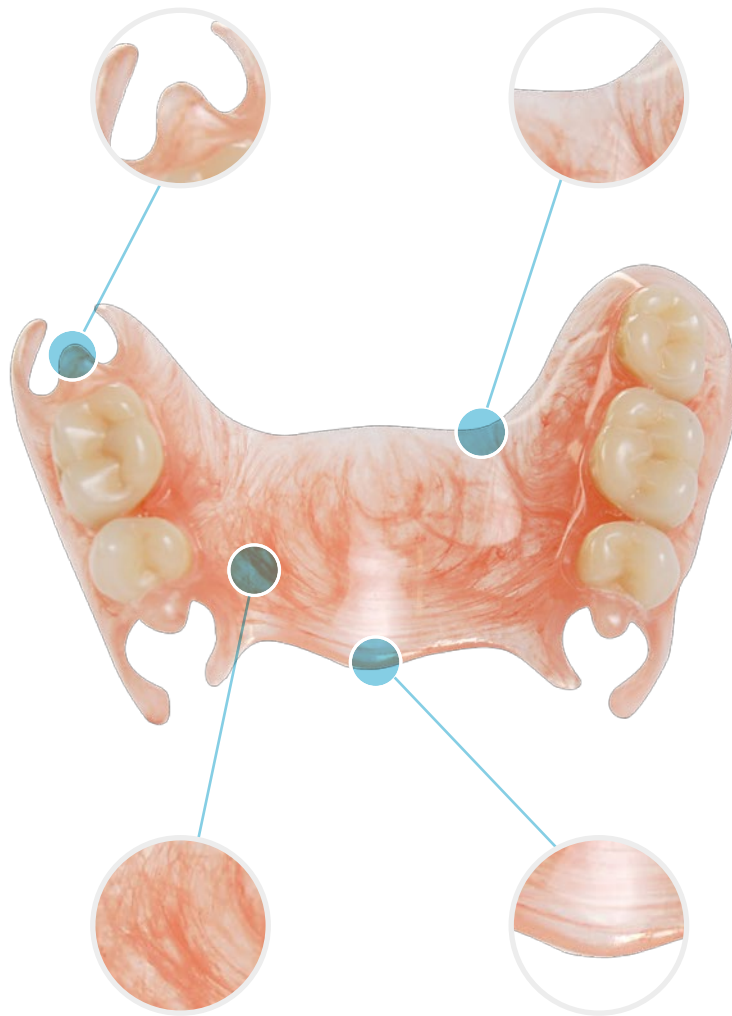
IMPLANT BAR FOR OVERDENTURES

OCCUSAL RESTS

Preventing dentures from being intruded.

HIGH TRANSLUCENCY

Translucent pink shades allow dual adaptation to teeth and gums



FREEDOM OF DESIGN

All types of designs in RPD's, including palatal bars and free ends.

SUPER EASY POLISHING AND BRIGHT SHINE

The dentures will not retain odor or loose color over time

Thermo-plastics technology continues to evolve, and applications in dentistry are expanded with increasingly surprising results.

BENEFITS



AESTHETICALLY PLEASING

Translucent inconspicuous retainers in partial dentures.



LIGHTWEIGHT

Allows for reduced thickness.



RESISTANT

Highly resistant to blows and falls.



BIOCOMPATIBLE

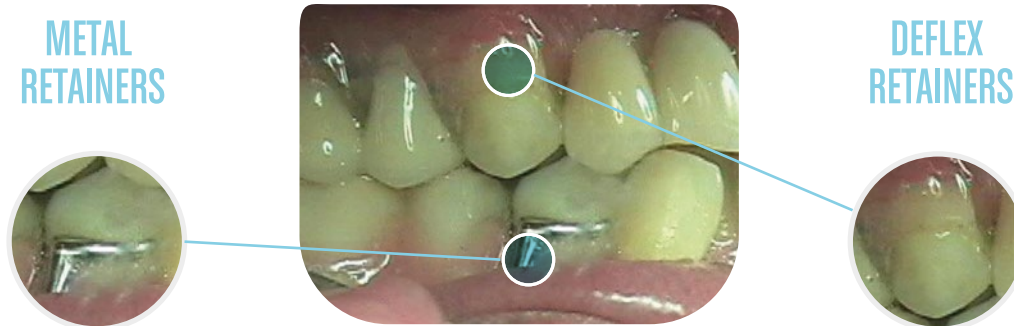
Monomer free.
Metal free.



LOW LIQUID ABSORPTION

Impermeability to oral fluids.
They do not take odor.
Keep their original color over time.

TRANSLUCENT RETAINERS BLEND IN WITH TEETH AND GUMS.



EQUATION BETWEEN FLEXIBILITY AND RIGIDITY (IN RPD'S)



FLEXIBILITY ADVANTAGES

It favors an **effect "breaking strength"**, preventing the lever arm on the abutment teeth, preserving them better.

Flexibility and elastic memory of the retainer facilitates **insertion of the prosthesis** and an **excellent retentivity**, the main reason that allows a prosthesis to be comfortable.



ADVANTAGES OF STIFFNESS

Adds functionality allow distribution of the masticatory loads and making occlusal rests, preventing damage and tissue retraction.

It provides stability and design freedom, which is linked to patient comfort. A stable denture offers comfort, and that certain minimum level of stiffness is needed. A very flexible denture that is unstable when chewing, will no longer be comfortable and insecurity in the patient awake.

The high resistance of thermo-injectable Deflex allows to reduce thicknesses, improving comfort and phonetics.

MATERIALS FOR REMOVABLE DENTURES

FAVORITE FOR PARTIAL DENTURES

CLASSIC SR

Semi-rigid polyamide



OPTIMAL BALANCE BETWEEN FLEXIBILITY AND STIFFNESS

CLASSIC SR presents an ideal balance between flexibility and stiffness. With an appropriate design we will get a denture that complies with the principles of support, fixation and stability.

OCCLUSAL RESTS

It was the first thermoplastic of injected denture that allowed the preparation of occlusal supports with the material itself.

HIGH BRIGHTNESS AND TRANSLUCENCY

The combination of brightness, color and translucence contributes to a more aesthetic denture, better adapted to the color of the patient's gums and teeth.

FLUENCE SR

Semi-rigid polyamide



SIMILAR QUALITY TO CLASSIC SR

FLUENCE SR offers a bit more elasticity and resistance than **CLASSIC SR**. It has a lower degree of translucency, but still very high. Polishing and gloss become virtually identical.

SLIGHTLY MORE FLEXIBLE

It maintains a recommended balance between flexibility and stiffness (low elasticity), allowing to offer aesthetically pleasing and functional partial dentures.

MORE FLUID INJECTION

Easy to inject; suitable for a wide range of injection molding machines.



PALE
PINK



SOFT
PINK



MEDIUM
PINK



DARK
PINK



TRANSPARENT



MEDIUM
PINK



TRANSPARENT

***Aesthetically pleasing and functional RPD's,**
metal free, for temporary or permanent use*

FAVORITE FOR PARTIAL DENTURES

SUPRA *SF*

Semi-flexible polyamide



MEDIUM FLEXIBILITY

For clinical cases requiring greater elasticity without losing stability. For example, cases with diverging teeth pillars.

VERY HIGH FRACTURE RESISTANCE

Makes it possible to reduce thickness.

EXTREMELY FLUID INJECTION

Suitable for injection into all kinds of equipment.

SUPERIOR ELASTIC MEMORY

Compared with the other materials of similar flexibility available in the market, the yield strength (elastic memory) of **SUPRA *SF*** is superior, avoiding distortion and loss of functionality over time.



MEDIUM
PINK

*The recommended option when
greater flexibility is needed*

CHOSEN FOR COMPLETE DENTURES

M10 XR

Extra-rigid polymer

 **CHEMICAL BOND ***



HIGH STIFFNESS AND STRENGTH

It enables very reduced thickness.

CHEMICAL BONDING WITH ACRYLIC

Possibility of relining and additions using conventional materials and techniques. Ideal for full dentures, overdentures and temporary dentures.

SUPER EASY POLISHING AND HIGH GLOSS

Economizes working time.
Optimal end result.

ACRILATO FD

Injectable acrylic

 **CHEMICAL BOND ***



MORE RESISTANT AND LIGHTWEIGHT FULL DENTURES THAN CONVENTIONAL ACRYLIC

High impact resistance.
Accepts reduced thickness.

VERY LOW SHRINKAGE

Volume stability that makes it suitable for complete, occlusal splints and overdentures.

Hypoallergenic **

Why make a full dentures with Deflex thermo-injectable materials?

- They are hypo-allergenic
- Have greater resistance, therefore allow smaller thickness, lighter prosthesis, and very low fracture rate
- They have a very low rate of volumetric shrinkage



SOFT
PINK



TRANSLUCENT
SOFT PINK



MEDIUM
PINK



TRANSPARENT



MEDIUM
PINK



TRANSPARENT

Note: Materials **CLASSIC SR**, **FLUENCE SR** and **SUPRA SF** **don't** have chemical bonding. Repairs should be effected by mechanical retention.

(*) Apt for additions and relines using conventional materials and techniques.

(**) Meets the requirements of residual content of monomer established in EN ISO 20795-1_2013 (base polymers for dental prostheses)

AESTHETIC RETAINERS AND FRAMEWORKS. METAL FREE

ACETAL AC

Injectable acetal



SUITABLE FOR PARTIAL DENTURES FRAMEWORKS AND AESTHETIC RETAINERS

Tooth-colored acetal resin.

STIFFNESS, AND HIGH SURFACE HARDNESS

Position it as a valid alternative for chromium-cobalt frameworks.

LOW LIQUID ABSORPTION:

It is not impregnated, does not change color.



DEFLEX PEEK

Injectable



HIGH PERFORMANCE POLYMER BASED ON PEEK (POLYETHER ETHER KETONE).

DEFLEX PEEK is specially suitable for infra-structure of bridges and crowns, but is also a very interesting option for the manufacture of removable partial frameworks, especially for its exceptional strength and biocompatible nature.

Its hardness and strength position it as an alternative that competes with the chromium-cobalt framework, with the differential of being a material free of metal.

GREAT HARDNESS AND HIGH WEAR RESISTANCE

BIOCOMPATIBLE AND HYPO-ALLERGENIC **

LOW THERMAL CONDUCTIVITY

100% METAL FREE



Thermo-plastics replacing metal

(**) Meets the requirements of residual content of monomer established in EN ISO 20795-1_2013 (base polymers for dental prostheses)

MATERIALS AND APPLICATIONS GUIDE

PARTIAL DENTURES



CLASSIC SR

Semi-rigid poliamyde



FLUENCE SR

Semi-rigid poliamyde



SUPRA SF

Semi-flexible polyamide

- In order, from the most rigid to the most flexible.
- Select according to flexibility need of the denture.
- More rigid dentures are easier to polish and shine.

FULL DENTURES - TEMPORARY DENTURES - OCCLUSAL SPLINTS - OVERDENTURES



M10 XR

Extra-rigid polymer



ACRILATO FD

Injectable acrylic

- Both with chemical bond with the conventional Acrylic resin, and very low shrinkage.

AESTHETIC RETAINERS



ACETAL AC

Injectable Acetal

- Injectable acetal with tooth-colored retainers.
- CLASSIC SR and FLUENCE SR can also be used to make translucent pink aesthetic retainers.

PARTIAL DENTURE FRAMEWORKS



ACETAL AC

Injectable Acetal



DEFLEX PEEK

Injectable

- ACETAL AC is easy to inject and polish.
- DEFLEX PEEK offers even more resistance and stiffness than ACETAL AC.

ELASTICITY CHART



CLASSIC SR

Reference
value = 0



SUPRA SF

-63% ↓



FLUENCE SR

-6% ↓



ACRILATO FD

-6% ↓



M10 XR

+44% ↑



ACETAL AC

+81% ↑



DEFLEX PEEK

+125% ↑



GREATER RIGIDITY



GREATER FLEXIBILITY

The flexibility of materials varies according to thicknesses, shapes and applications

FIXED DENTURES

INJECTABLE
PEEK

DEFLEX PEEK

Injectable

DEFLEX PEEK (Polyether ether ketone) is the most biocompatible thermoplastic for dental use nowadays, with high performance mechanical properties, enormous resistance to wear and a valuable combination of stiffness and elasticity that resembles bone. Free of metal, free of monomer, inert and virtually unchanged in the oral environment.

LESS ABRASIVE TO
OPPOSING TEETH

HIGH PERFORMANCE POLYMER

COATABLE WITH
COMPOSITE RESIN

PERFECT BALANCE OF
HARDNESS AND ELASTICITY



BIOCOMPATIBLE.
METAL FREE.

It's possible to make a bridge or crown with only the Deflex Injector, a special ring with supplement (provided by Deflex), a casting furnace and light curing oven. Ceramic oven, CAD/CAM system or pantograph are no needed.

COMMERCIAL PRESENTATION

CONTENTS

Material pellets in bulk, 20g or 40g dose (packed in plastic tubes).



ADDITIONAL PRODUCTS

Empty aluminum tubes and caps must be purchased in order to inject it.

COLORS



BEIGE

PINK



APPLICATIONS



INFRA-STRUCTURE OF
BRIDGE IN DEFLEX PEEK



BRIDGE COVERED
WITH COMPOSITE

Infra-structure bridges and crowns, coatable with
composite (1-2 intermediate elements)

Anatomical structure of bridges and crowns (1-2 intermediate elements)

Telescopic crowns and UEC crowns

Implant bar for overdentures

Super-implant supported structures

Hybrid dentures

RPD's frameworks (freedom of design)



BENEFITS

High resistance to mechanical
wear and cracking

Less impact of chewing
on dental implants

Tensile Modulus =
3.6 - 4.1 GPa.

Chemically inert, unalterable
against acids and oral agents

Allows a fine polish, avoiding the
adhesion of bacterial plaque

Allows to build lightweight and
resistant structures

Coatable with
composite resin

Rigidity similar
to cortical bone

Good anti-
rotational grip

Neutral
flavor

High tenacity
and resistance

Low thermal and
galvanic conductivity

Waterproof (minimal
liquid absorption)

INJECTION PARAMETERS

<i>M10 XR</i>	<i>CLASSIC SR</i>	<i>FLUENCE SR</i>	<i>SUPRA SF</i>	<i>ACRILATO FD</i>	<i>ACETAL AC</i>	<i>DEFLEX PEEK</i>
🌡 305°C +/- 10°C	🌡 280°C +/- 10°C	🌡 275°C +/- 10°C	🌡 260°C +/- 10°C	🌡 265°C +/- 10°C	🌡 230°C +/- 5°C	🌡 *
⌚ 15' min	⌚ 15' min	⌚ 15' min	⌚ 12' min	⌚ 15' min	⌚ 15' min	⌚ *
⌚ 1' min	⌚ 1' min	⌚ 1' min	⌚ 1' min	⌚ 1' min	⌚ 1' min	⌚ *
🌀 6 kg/cm ² +/- 1 = 86 PSI +/- 14	🌀 6 kg/cm ² +/- 1 = 86 PSI +/- 14	🌀 4,5 kg/cm ² +/- 0,5 = 64 PSI +/- 7	🌀 3,5 kg/cm ² + 1 = 50 PSI + 14	🌀 6 kg/cm ² +/- 1 = 86 PSI +/- 14	🌀 6 kg/cm ² +/- 1 = 86 PSI +/- 14	🌀 *

🌡 TEMPERATURE ⌚ INJECTION TIME ⌚ HOLDING TIME 🌀 AIR PRESSURE

Note: Injection parameters indicated for Deflex injection. For other injection machine consult the manufacturer or supplier of the equipment.

* Some injection parameters for **DEFLEX PEEK** depend on the applied model and injection technique. Refer complete technical indications for different techniques and applications.

CARTRIDGES

CODES AND DESCRIPTIONS



Thermo-injectable materials presented in the form of small granuls or tablets.
Pre-dried, colored and packed in aluminum tubes, free of impurities.

Available in two different diameters: 22mm y 25mm

SMALL CARTRIDGES	MEDIUM CARTRIDGES	LARGE CARTRIDGES
suitable for very small RPD's and aesthetic retainers	for conventional RPD's, frameworks and occlusal splints	for full dentures, large RPD's and overdentures

Cartridges ready to be injected, except DEFLEX PEEK which comes in bulk and must be loaded into an aluminum tube
Expiration Date: 24 months / For very large prosthesis where the cartridge is not large enough, consult for special refill cartridges.
Check availability of materials, colors and complementary products in your country.
The measurement values are nominal.

AC01	ACRILATO	22x85 - medium - Medium pink	24 G	FL01	FLUENCE	22x55 -small - Medium pink	13,7 G	SU01	SUPRA	22x55 -small - Medium pink	14 G
AC02	ACRILATO	22x85 - medium - Transparent	24 G	FL02	FLUENCE	22x55 - small - Transparent	13,7 G	SU03	SUPRA	22x85 - Medium - Medium Pink	21,3 G
AC03	ACRILATO	22x120 - large - Medium pink	32,8 G	FL03	FLUENCE	22x85 - medium - Medium Pink	20,5 G	SU05	SUPRA	22x120 - Large - Medium Pink	29,6 G
AC04	ACRILATO	22x120 - large - Transparent	32,8 G	FL04	FLUENCE	22x85 - medium - Transparent	20,5 G	SU07	SUPRA	25x70 - medium - Medium Pink	22,3 G
AC05	ACRILATO	25x70 - medium - Medium pink	24,5 G	FL05	FLUENCE	22x120 - large - Medium Pink	27,3 G	SU09	SUPRA	25x90 - large - Medium Pink	28 G
AC06	ACRILATO	25x70 - medium - Transparent	24,5 G	FL06	FLUENCE	22x120 - large - Transparent	27,3 G	SU11	SUPRA	25x50 - Small - Medium Pink	14,8 G
AC07	ACRILATO	25x90 - large - Medium pink	31,3 G	FL07	FLUENCE	25x70 - medium - medium pink	20,8 G	AT00	ACETAL	22 - small - A2	13 G (1 tablet)
AC08	ACRILATO	25x90 - large - Transparent	31,3 G	FL08	FLUENCE	25x70 - medium - Transparent	20,8 G	AT01	ACETAL	22 - small - A3	13 G (1 tablet)
CL01	CLASSIC	22x55 - small - Soft pink	13,7 G	FL09	FLUENCE	25x90 - large - Medium pink	26,5 G	AT02	ACETAL	22 - small - A3,5	13 G (1 tablet)
CL25	CLASSIC	22x55 - small - Pale pink	13,7 G	FL10	FLUENCE	25x90 - large - Transparent	26,5 G	AT03	ACETAL	22 - small - B3	13 G (1 tablet)
CL26	CLASSIC	22x55 - small - Medium pink	13,7 G	FL11	FLUENCE	25x50 - small - Medium pink	14 G	AT04	ACETAL	22 - small - C3	13 G (1 tablet)
CL03	CLASSIC	22x85 - small- Dark pink	13,7 G	FL12	FLUENCE	25x50 - small - Transparent	14 G	AT05	ACETAL	22 - small - Med. Pink	13 G (1 tablet)
CL04	CLASSIC	22x85 - small - Transparent	13,7 G	MI00	M10	22x55 - small - Soft pink	15,6 G	AT06	ACETAL	22 - medium - A2	26 G (2 tablets)
CL05	CLASSIC	22x85 - medium - Soft pink	19,9 G	MI01	M10	22x55 - small - Medium Pink	15,6 G	AT07	ACETAL	22 - medium - A2	26 G (2 tablets)
CL27	CLASSIC	22x85 - medium - Pale pink	19,9 G	MI03	M10	22x55 - small - Trans. Soft pink	15,6 G	AT08	ACETAL	22 - medium - A3,5	26 G (2 tablets)
CL28	CLASSIC	22x85 - medium - Medium pink	19,9 G	MI04	M10	22x55 - small - Transparent	15,6 G	AT09	ACETAL	22 - medium - B3	26 G (2 tablets)
CL07	CLASSIC	22x85 - medium - Dark pink	19,9 G	MI05	M10	22x85 - medium - Soft Pink	23,9 G	AT10	ACETAL	22 - medium - C3	26 G (2 tablets)
CL08	CLASSIC	22x85 - medium - Transparent	19,9 G	MI06	M10	22x85 - medium - Medium pink	23,9 G	AT11	ACETAL	22 - med. - Med. pink	26 G (2 tablets)
CL09	CLASSIC	22x120 - large - Soft pink	27,4 G	MI08	M10	22x85 - medium - Trans. Soft pink	23,9 G	AT12	ACETAL	25 - small - A2	26 G (2 tablets)
CL29	CLASSIC	22x120 - large - Pale pink	27,4 G	MI09	M10	22x85 - medium - Transparent	23,9 G	AT13	ACETAL	25 - small - A3	17,3 G (1 tablet)
CL30	CLASSIC	22x120 - large - Medium pink	27,4 G	MI10	M10	22x120 - large - Soft pink	32,8 G	AT14	ACETAL	25 - small - A3,5	17,3 G (1 tablet)
CL11	CLASSIC	22x120 - large - Dark pink	27,4 G	MI11	M10	22x120 - large - Medium Pink	32,8 G	AT15	ACETAL	25 - small - B3	17,3 G (1 tablet)
CL12	CLASSIC	22x120 - large - Transparent	19,6 G	MI13	M10	22x120 - large - Trans. Soft pink	32,8 G	AT16	ACETAL	25 - small - C3	17,3 G (1 tablet)
CL13	CLASSIC	25x70 - medium - Soft pink	19,6 G	MI14	M10	22x120 - large - Transparent	32,8 G	AT17	ACETAL	25 - small - Med. Pink	17,3 G (1 tablet)
CL21	CLASSIC	25x70 - medium - Pale pink	19,6 G	MI15	M10	25x70 - Medium - Soft pink	24 G	AT18	ACETAL	25 - medium - A2	34,6 G (2 tablets)
CL23	CLASSIC	25x70 - medium - Medium pink	19,6 G	MI16	M10	25x70 - Medium - Medium Pink	24 G	AT19	ACETAL	25 - medium - A3	34,6 G (2 tablets)
CL15	CLASSIC	25x70 - medium - Dark pink	19,6 G	MI18	M10	25x70 - Medium - Trans. Soft pink	24 G	AT20	ACETAL	25 - medium - A3,5	34,6 G (2 tablets)
CL16	CLASSIC	25x70 - medium - Transparent	19,6 G	MI19	M10	25x70 - Medium - Transparent	24 G	AT21	ACETAL	25 - medium - B3	34,6 G (2 tablets)
CL17	CLASSIC	25x90 - large - Soft pink	25,8 G	MI20	M10	25x90 - Large - Soft Pink	30,8 G	AT22	ACETAL	25 - medium - C3	34,6 G (2 tablets)
CL22	CLASSIC	25x90 - large - Pale pink	25,8 G	MI21	M10	25x90 - Large - Medium pink	30,8 G	AT23	ACETAL	25 - med. - Med. Pink	34,6 G (2 tablets)
CL24	CLASSIC	25x90 - large - Medium Pink	25,8 G	MI23	M10	25x90 - Large - Trans. Soft pink	30,8 G	OS07	DEFLEX PEEK	Beige	20 G
CL19	CLASSIC	25x90 - large - Dark pink	25,8 G	MI24	M10	25x90 - Large - Transparent	30,8 G	OS08	DEFLEX PEEK	Beige	40 G
CL20	CLASSIC	25x90 - large - Transparent	25,8 G	MI35	M10	25x50 - Small - Soft pink	16,5 G	OS16	DEFLEX PEEK	Pink	20 G
CL31	CLASSIC	25x50 - medium - Soft pink	14,2 G	MI36	M10	25x50 - Small - Medium Pink	16,5 G	OS17	DEFLEX PEEK	Pink	40 G
CL32	CLASSIC	25x50 - medium - Medium Pink	14,2 G	MI37	M10	25x50 - Small - Trans. Soft pink	16,5 G				
CL33	CLASSIC	25x50 - medium - Pale pink	14,2 G	MI38	M10	25x50 - Small - Transparent	16,5 G				
CL34	CLASSIC	25x50 - medium - Dark pink	14,2 G								
CL35	CLASSIC	25x50 - medium - Transparent	14,2 G								

DEFLEX INJECTORS

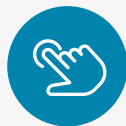
EFFECTIVENESS AND PRACTICALITY



POWERFUL PNEUMATIC
CYLINDER



MAXIMUM TIME
SAVING



*AUTOMATIC AND
DIGITAL PANEL



PREHEATING OF THE
MUFLE



INTEGRATED
OVEN



EASY TO INSTALL,
EASY TO OPERATE

* Applies to models MAD1300 and MAD1400
Ask for available injector models, diameter and voltage according to your country.

INJECTOR MODEL			
	MAD 1300	MAD 1400	MD 1500
INJECTION MODE	AUTOMATIC	AUTOMATIC	SEMI-AUTOMATIC
TYPE OF CYLINDER	Pneumatic		
TEMPERATURE	Digital - Programmable		
AIR PRESSURE	Adjustable		
INJECTION OVEN	Integrated		
PROGRAMS	7 pre-configured PRG + 7 free PRG	FREE PRG	FREE PRG
FLASK COVER	YES	YES	YES
INJECTION BLOCK SENSOR	YES	NO	NO
ADJUSTING HANDLE	1	1	3
HEIGHT X WIDTH X DEPTH	62 CM X 15 CM X 30 CM		64 CM X 20 CM X 35 CM
WEIGHT	22 KG. / 48.5 LB.		
VOLTAGE	220V OR 110V		
DIAMETER	22MM OR 25MM		
CE CERTIFICATION	YES	YES	NO

COMPLEMENTARY PRODUCTS



SHADE GUIDE



SILICONED DEMOULDER AGENT



POLISHING WHEEL



POLISHING PASTE



DEFLEX PEEK KIT OF ACCESORIES



RESIN MODEL



PREFORMED WAX TUBES



ALUMINUM MUFFLE

LEARN MORE ABOUT OUR PRODUCTS



INJECTABLE MATERIALS

Removable & fixed dentures



CAD/CAM MATERIALS

For milling of bridges and crowns



ZIRCONIA



PMMA



PEEK



WAX



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