

ENDURA

A Superior Class of Opalescent Composite Resin Teeth





ENDURA

SHOFU'S proven line of artificial teeth, **ENDURA** assures predictable performance, natural aesthetics and ease of fabricating durable, removable prostheses. **ENDURA** harmonizes the edentulous and dentulous oral condition by combining the benefits of unique high density micro-particles filled composite resin* with natural tooth forms and shades that cater to the current aesthetic demands in denture prostheses.

ENDURA enables you to create dentures that look vital and simulate the natural oral conditions for cases with varying levels of complexity from partial, full to implant supported overdentures.

ENDURA Anterio's superior physical structure radiates natural translucency with opalescence and its unique mould design – "Shofu Harmony Form", easily mimics the aesthetics of natural teeth.

ENDURA Posterio allows the desired degree of freedom for occlusal adjustment to suit individual patient case. Excellent anatomical design and precise intercuspation ensures easy arrangement of teeth and accurate functional efficiency. Its base surface comprises a special formulation of highly compatible acrylic resin material for a reliable bond to the denture base resin.

**Japanese Patent 11521326*

FEATURES

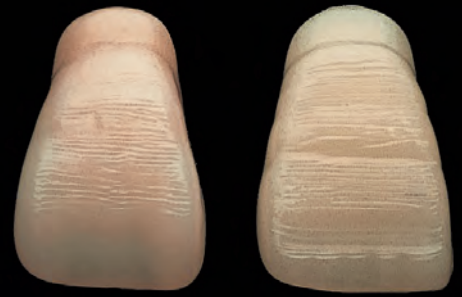
Optimal Hardness and Superior Wear Resistance

The micro-particle filled resin imparts superior mechanical properties to the enamel and dentine layers. Its wear resistance is 6 times higher than conventional acrylic resin teeth and has a vickers hardness (Hv) of 30.0 for anterior and 29.6 for posterior teeth.

Opalescent Effect of Natural Teeth

Optical characteristics of natural teeth have been difficult to replicate in both porcelain and resin teeth. The inclusion of special micro-particle fillers in Endura with optimal refractive indices facilitate the simulation of natural translucency, opalescent effect and glow seen in natural teeth.

ABRASION RESISTANCE TEST (Brushing / 60,000 cycles)



Endura

Acrylic
Resin Teeth

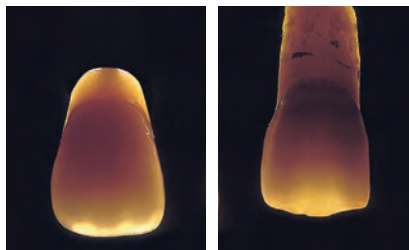
REFLECTION



Endura Anterio

Natural Teeth

TRANSMISSION



Endura Anterio

Natural Teeth

Easy Denture Fabrication

Endura Anterio and Posterio exhibit as strong a bond to acrylic denture base as seen with resin teeth.

Superior Toughness

The enamel and dentine layers of Endura Posterio are strengthened by balancing the tensile, flexural and compressive strengths to attain sufficient durability while overcoming problems associated with hardness and brittleness.

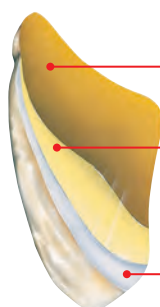
Effective Grinding Characteristics

Optimal workability and cusp design of Endura teeth mimic those of porcelain teeth to ensure effective and appropriate grinding.

Three Layered Structure

The Base, Dentine and Enamel layers have adequate thickness to allow adjustment or grinding without losing their physical structure or properties.

Endura Anterio



BASE

High quality, compatible acrylic resin for reliable bonding to denture resin.

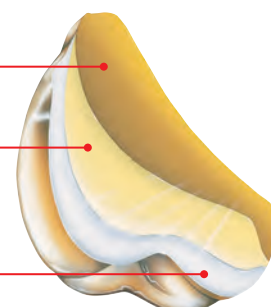
DENTINE

Highly cross-linked hard resin with life-like aesthetics and high wear resistance. Newly developed composite resin same as enamel.

ENAMEL

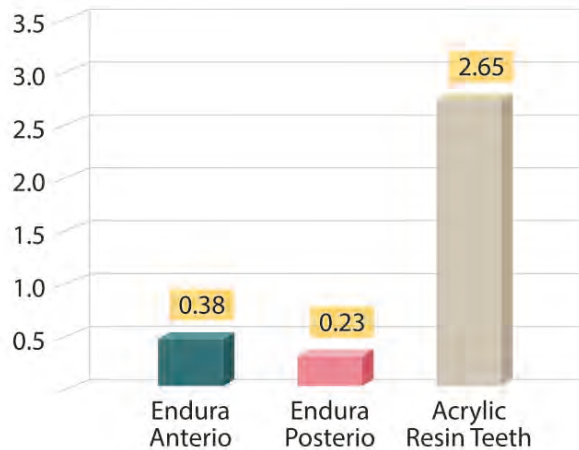
Newly developed composite filled resin.

Endura Posterio

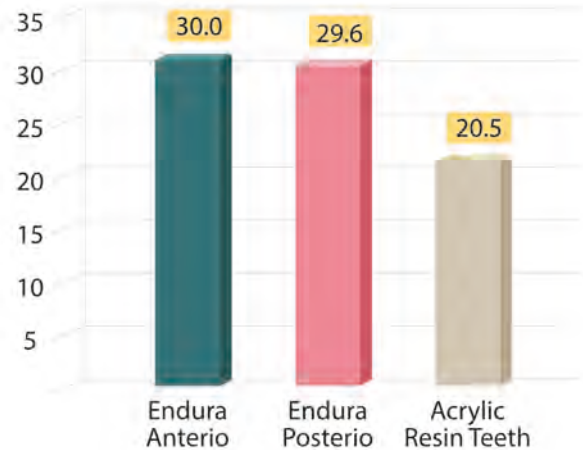


PHYSICAL PROPERTIES

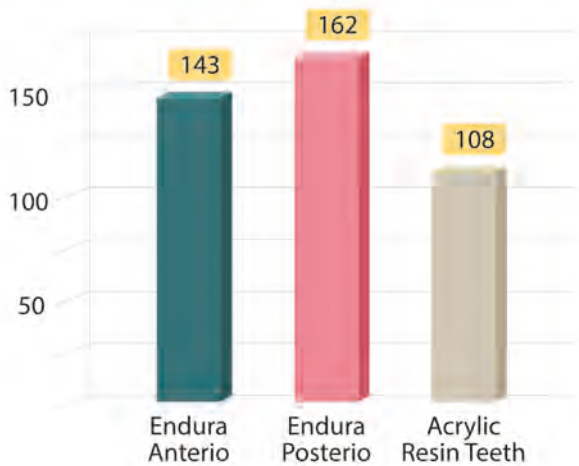
▼ Toothbrush Wear (Brushing / 30,000 cycles by weight %)



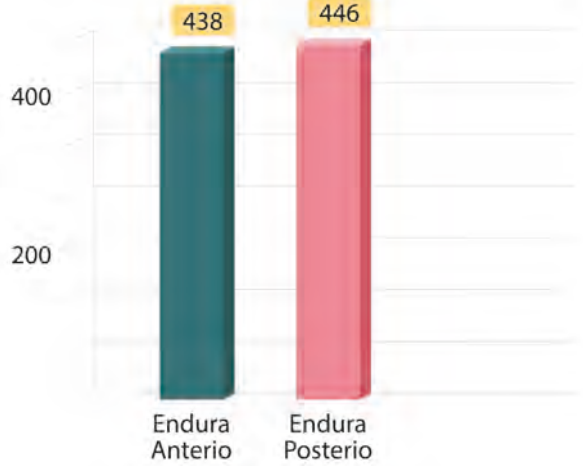
▼ Vickers Hardness (Hv)



▼ Flexural Strength (MPa)



▼ Compressive Strength (MPa)



NOTE:

- If the contour has been modified, finish and polish the enamel or dentin layers adequately with Shofu Dura Green, Dura White and Composite points.
- Instruct patients on good oral hygiene, as food debris, bacteria and calculus may adhere to teeth.
- In case of slight stains or tarnish, clean the specific portion thoroughly to avoid further staining.
- Refrain from using strong alkaline solvents.

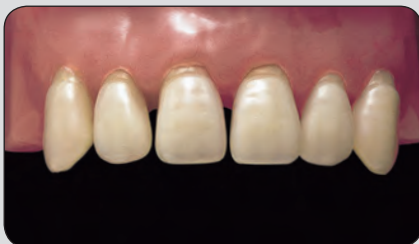
HARMONY FORMS OF ENDURA ANTERIO

Endura Harmony Form is designed to match the facial appearance and oral conditions of individual patients. The natural Harmony form of Endura Anterio has been developed on the basis of the form analysis of several thousands of natural teeth.

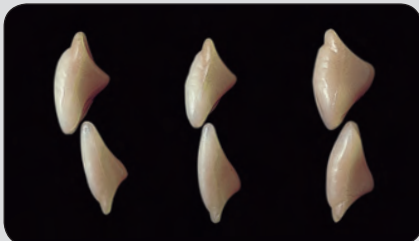
Standard Arrangement
Female Dentition (Middle Age)



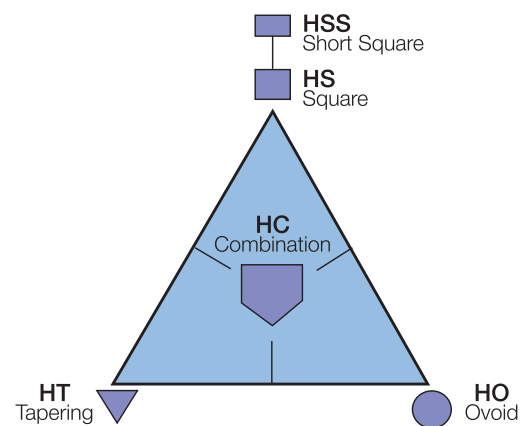
Characterized Arrangement I
Male Dentition (Old Age)



Characterized Arrangement II



5 Harmony Forms Available



NATURAL APPEARANCE

The harmony form of Endura Anterio reflect characteristic forms of developmental grooves, unique to square, ovoid and tapering natural teeth, such that the set of 6 anterior teeth blend harmoniously with the basic arrangement for a 3 dimensional, life-like appearance.

CENTRAL AND LATERAL INCISORS

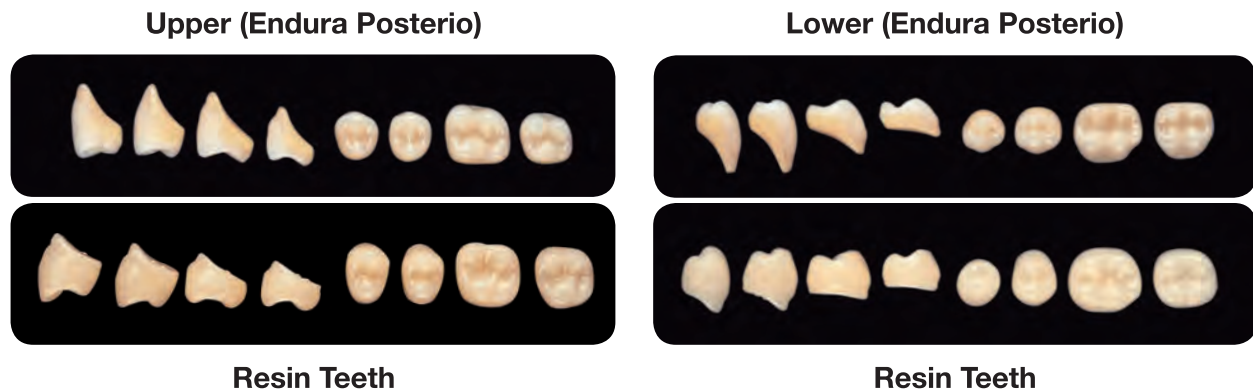
They are characterized with naturally occurring developmental lobes on the labial surface to simulate the 3 dimensional life-like appearance of natural anteriors.

CUSPIDS

The cuspid is considered elemental to creating natural anatomical appearance of denture prostheses and is designed with a central developmental lobe similar to the natural cuspid with adequate labiolingual dimension, which allows for variation in the arrangement as necessitated by patient specific cases.

FUNCTIONAL FORMS OF ENDURA POSTERIO

Endura Posterior Teeth are designed with functional cusps and fossae which have natural contact points for quick occlusal adjustment. Further additional adjustment can also be done if required to match the individual mandibular movements of each patient. Point contact occlusion exerts less force on the alveolar ridge during mastication as compared to those teeth with area contact occlusion.



Endura Posterior have longer crown length for a more natural aesthetics and narrower buccolingual dimension with functional occlusal form.

(Refer to Fig.1, 2 and 3 for occlusion pictures)

Easy arrangement is possible with the guidance of cusps and fossae.

Occlusal force is diverted more to the lingual side as compared to conventional teeth for greater denture stability.

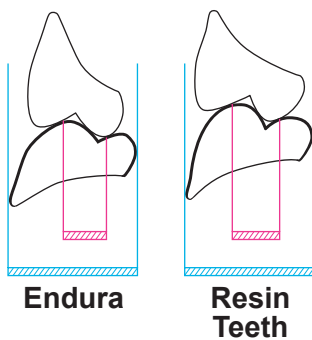


Fig.1

The bucco-lingual width of the upper molar is shorter so any unbalanced force is easily diverted away from the buccal area.

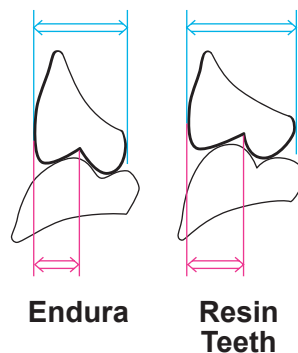


Fig.2

Lower first premolar has perfect central occlusal contact for precise denture stability.

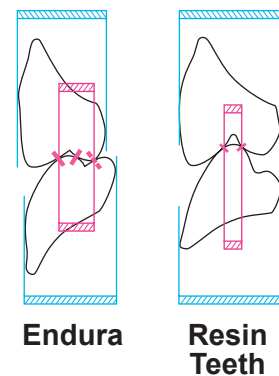
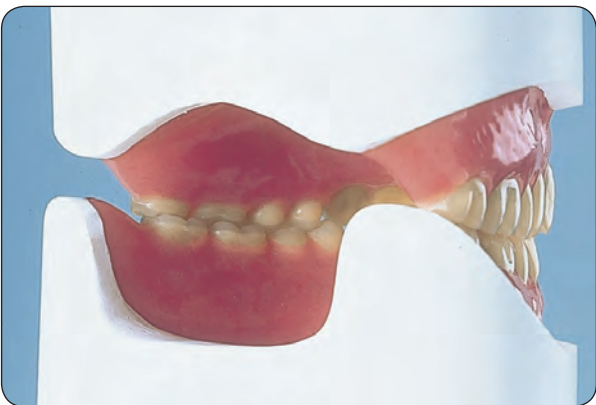


Fig.3

NATURAL AESTHETICS



The natural flow of the cervical line from anterior to posterior teeth creates an excellent aesthetic appearance.

The distinct design of the labial and buccal surface simulate the natural life-like contour from labial to buccal direction.



MOULD CHART

OF ENDURA ANTERIO

Square

HS3

10.0
7.5
41.0
46.5

9.0
33.0
36.5



HS4

10.5
8.0
44.5
50.0

9.5
34.5
38.0



Tapering

HT3

9.5
7.5
39.0
43.0

8.5
31.5
34.5



HT4

10.5
8.0
41.5
46.0

9.0
32.5
36.5



Ovoid

HO3

9.5
7.5
40.5
45.5

8.5
30.5
32.5



HO4

10.0
8.0
42.0
47.0

9.0
32.5
36.0



Short Square

HSS3

9.0
7.5
39.5
45.0

8.0
31.5
36.0



HSS4

9.5
8.0
42.0
48.0

8.5
33.0
38.0



Combination

HC3

9.5
7.5
40.0
45.5

8.5
33.0
37.0



HC4

10.5
8.0
43.5
49.5

9.0
34.5
38.5



Measurement
[mm]

UPPER

Length of central incisor (minus collar)
Width of central incisor
Width of 6 anteriors (flat)
Width of 6 anteriors (curve)

LOWER

Length of central incisor (minus collar)
Width of 6 anteriors (flat)
Width of 6 anteriors (curve)

Above pictures show the standard combination of the upper and lower anteriors. Any combination of the upper and lower anteriors can be chosen and ideally matched depending on the clinical case.

HS5

11.0
8.5
47.5
53.0

10.0
37.0
41.0



HS6

12.0
9.0
50.0
56.5

10.5
40.0
44.0



HT5

11.0
8.5
44.5
50.0

10.0
34.5
38.0



HT6

11.5
9.0
47.0
55.0

10.5
37.0
41.0



HO5

10.5
8.5
45.0
51.5

9.5
35.0
38.5



HO6

11.0
9.0
47.5
54.5

10.5
37.0
40.5



HSS5

10.0
8.5
44.0
50.0

9.0
35.5
40.5



HSS6

11.0
9.0
47.5
54.0

10.0
38.0
43.5



HC5

11.0
8.5
45.5
51.5

9.5
36.0
41.0



HC6

11.5
9.0
48.0
54.5

10.0
38.5
43.5



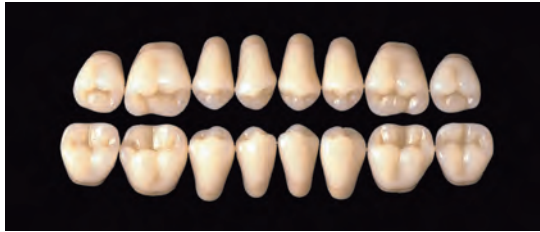
MOULD CHART

OF ENDURA POSTERIO

M28

28.0
8.5

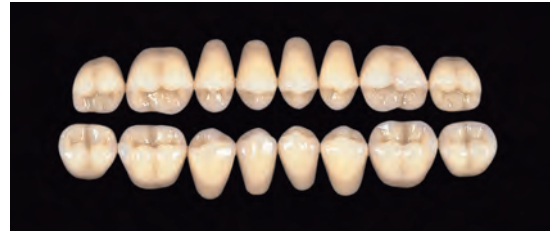
30.5
8.5



S28

28.0
7.5

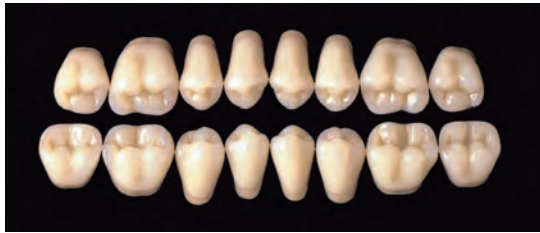
30.5
7.5



M30

30.0
9.0

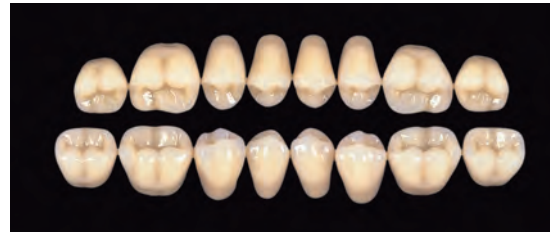
32.5
9.0



S30

30.0
8.0

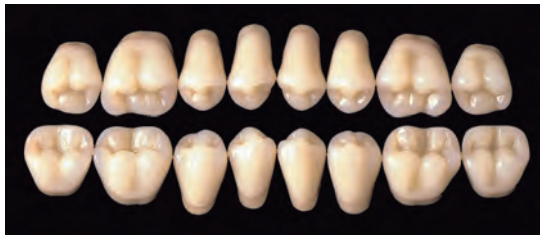
32.5
8.0



M32

32.0
10.0

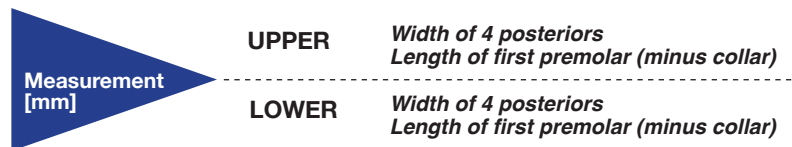
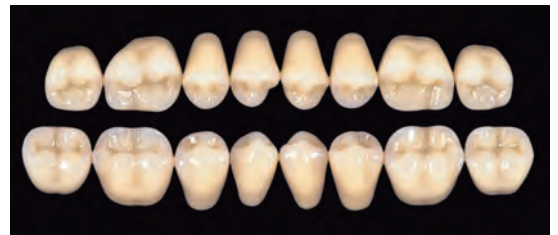
34.5
10.0



S32

32.0
9.0

34.5
9.0



ANATOMICAL DEGREES

Cuspid Angle	20°
Degree of Sagittal Condyle Path	25°
Degree of Lateral Path	15°
Degree of Inclination of Sagittal Condyle Path	15°
Lateral Wing of Incisor Path	12°

• The cuspid angles are designed based on the above angles of the jaw movement factors.

RECOMMENDED

ENDURA ANTERIO / POSTERIO

SIZE COMBINATION CHART

Endura Anterio	Endura Posterio	Endura Anterio	Endura Posterio
HS3	S28 M28	HS5	S30 M30 S32 M32
HT3		HT5	
HO3		HO5	
HSS3		HSS5	
HC3		HC5	
HS4	S28 M28 S30 M30	HS6	S32 M32
HT4		HT6	
HO4		HO6	
HSS4		HSS6	
HC4		HC6	

VARIETY OF LIFE-LIKE SHADES

Endura exhibit opalescent effect and fluorescence just like healthy natural teeth. The three layered structure creates remarkable life-like shade appearance. The anterior shades are based on international standard shades. The color of cuspid differs from the incisors as seen in natural dentition, in order to create a 3 dimensional multi-blended shading effect.

Endura Anterio

#A1, #A2, #A3, #A3.5, #B2, #B3

Endura Posterio

#A2, #A3, #A3.5, #B3

Endura Anterio	Endura Posterio
#A1	#A2
#A2	#A2
#A3	#A3
#A3.5	#A3.5
#B2	#B3
#B3	#B3

* Recommended shade combination for Endura Anterio & Posterio



ORDER INFORMATION



ENDURA ANTERIO

Packed in a set of 6's (16 sets per box)



ENDURA POSTERIO

Packed in set of a set 8's (12 sets per box)

RELATED PRODUCTS



Quick Resin

Quick Resin A (Powder 50gm),
Quick Resin A+B (Liquid 50gm)
Quick Resin B (Powder 100gm)



Province

Powder 50gm & 250gm,
Liquid 100ml & 250ml



Acrylic Contouring & Finishing Kit

AcryPoint x 8, Coarse Grit x 4,
Medium Grit x 2, Fine Grit x 2,
Robot Carbide Burs x 4



Denture Liner

Powder 80gm & Liquid 50ml, Adhesive
10ml, Hardener (Accelerator 1gm x
50pkt), Mixing Cup, Measuring Jar,
Brush, Spatula, Dropper



Tissue Conditioner II

Powder 120gm & Liquid 100ml, Mixing
Spatula, Measuring Cup, Mixing Cup,
Dropper



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