



The Inventors of Hardened Plastic Teeth



Imperial[®]
The Professional's Choice

MOLD CHART

Creating Beautiful Smiles...

All Around the World!



Highly Cross Linked / Intersectional Polymer Network • Wear Resistant • Vacuum Processed • Fluorescent / Photogenic
No diatoric retention is necessary. 100% bondability with methyl methacrylate denture base material.
Justi Imperial hardened plastic teeth comply with ANSI/ADA Specification 15, ISO 3336, BS 3990, NF S91-213, DIN 13914

ARTICULATES TO

ARTICULATES TO

<div>■</div> <div>IG</div> <div>11.2 9.7</div> <div></div> <div></div> <div>U</div> <div>57.0 52.6</div>	<div>▼</div> <div>3S</div> <div>10.5 8.1</div> <div></div> <div></div> <div>Y,YS, YL</div> <div>47.0 43.0</div>
<div>■</div> <div>IL</div> <div>10.5 9.1</div> <div></div> <div></div> <div>V,VS, VL</div> <div>54.0 49.6</div>	<div>■</div> <div>4M</div> <div>10.0 9.0</div> <div></div> <div></div> <div>W</div> <div>52.5 48.8</div>
<div>■</div> <div>IM</div> <div>9.5 8.7</div> <div></div> <div></div> <div>W</div> <div>51.0 46.8</div>	<div>■</div> <div>4N</div> <div>9.3 8.5</div> <div></div> <div></div> <div>X</div> <div>50.0 45.6</div>
<div>▼</div> <div>IN</div> <div>9.2 8.0</div> <div></div> <div></div> <div>X</div> <div>47.0 43.4</div>	<div>■</div> <div>4S</div> <div>8.7 8.1</div> <div></div> <div></div> <div>Y,YS, YL</div> <div>47.0 43.0</div>
<div>▼</div> <div>IS</div> <div>8.6 7.6</div> <div></div> <div></div> <div>Y,YS, YL</div> <div>44.7 41.2</div>	<div>▼</div> <div>5G</div> <div>13.2 9.7</div> <div></div> <div></div> <div>U</div> <div>57.5 53.0</div>
<div>▼</div> <div>IT</div> <div>8.0 7.2</div> <div></div> <div></div> <div>Z</div> <div>42.0 38.6</div>	<div>▼</div> <div>5L</div> <div>11.8 9.0</div> <div></div> <div></div> <div>V,VS, VL</div> <div>54.0 49.4</div>
<div>■</div> <div>2M</div> <div>10.8 9.4</div> <div></div> <div></div> <div>W</div> <div>54.8 50.0</div>	<div>▼</div> <div>5M</div> <div>11.2 8.3</div> <div></div> <div></div> <div>W</div> <div>49.5 45.4</div>
<div>■</div> <div>2N</div> <div>10.2 8.6</div> <div></div> <div></div> <div>X</div> <div>50.3 46.0</div>	<div>▼</div> <div>5N</div> <div>10.1 7.7</div> <div></div> <div></div> <div>X</div> <div>47.0 43.2</div>
<div>■</div> <div>2S</div> <div>9.8 8.1</div> <div></div> <div></div> <div>Y,YS, YL</div> <div>47.0 43.0</div>	<div>▼</div> <div>5S</div> <div>9.8 7.4</div> <div></div> <div></div> <div>Y,YS, YL</div> <div>45.0 41.2</div>
<div>▼</div> <div>3M</div> <div>12.0 9.1</div> <div></div> <div></div> <div>W</div> <div>53.5 48.8</div>	<div>▼</div> <div>5T</div> <div>9.0 6.9</div> <div></div> <div></div> <div>Z</div> <div>42.0 38.4</div>
<div>▼</div> <div>3N</div> <div>11.2 8.5</div> <div></div> <div></div> <div>X</div> <div>50.0 45.6</div>	<div>▼</div> <div>7M</div> <div>11.0 8.8</div> <div></div> <div></div> <div>W</div> <div>53.0 48.8</div>

Photographs of teeth are within plus or minus 3% of actual size.

Justi Imperial 17 Upper Anterior Molds



ARTICULATES TO

▼	7N			X 49.0 44.6 ()
▼	7S			Y,YS, YL 45.2 41.4 ()
▼	8M			W 51.5 47.0 ()
▼	8N			X 48.0 43.8 ()
▼	8S			Y,YS, YL 44.5 40.4 ()
▼	9G			U 57.7 52.6 ()
▼	9L			V,VS, VL 53.5 49.0 ()
▼	9M			W 51.0 46.6 ()
▼	9N			X 48.0 44.0 ()
▼	9S			Y,YS, YL 45.5 41.4 ()
▼	9T			Z 41.5 38.0 ()


▼	10M			W 50.5 46.4 ()
▼	10N			X 47.5 43.6 ()
▼	10S			Y,YS, YL 44.5 41.0 ()
▼	12M			W 51.0 46.8 ()
▼	12N			X 48.0 43.8 ()
▼	12S			Y,YS, YL 45.0 41.2 ()











Justi Imperial 21 Posterior Molds

0°

33Z			7.57 8.66
31Z			6.94 8.48
29Z			7.02 8.25







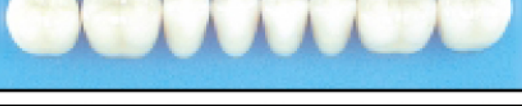





Justi Imperial 10 Lower Anterior Molds

		ARTICULATES TO	
U		G	45.6 42.0
11.3 6.4			
V		L	43.2 39.4
10.7 6.0			
W		M	42.0 38.6
10.4 6.0			
X		N	39.5 36.4
9.7 5.5			
Y		S	36.7 33.8
9.5 5.1			







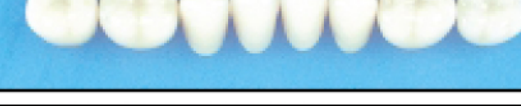





		ARTICULATES TO	
Z		T	33.7 31.2
9.0 4.6			
VL		L	42.2 39.0
13.6 5.9			
VS		L	42.2 39.0
8.3 6.0			
YL		S	36.7 33.8
12.2 5.1			
YS		S	36.3 33.2
7.7 5.0			

Justi Imperial 21 Posterior Molds

20°

33 XX			8.52
32.8			9.18
35.0			
31 XX			8.35
30.7			8.56
32.9			
29 XX			7.86
29.6			8.69
32.3			

33° Anatomical Short Bite

34S			9.17
34.0			9.08
38.2			
32S			8.29
31.5			8.24
34.3			
30S			8.27
30.2			8.73
32.4			

33° Anatomical Medium

34M			9.60
34.3			10.38
38.0			

32M			9.16
32.0			9.32
35.5			

30M			9.13
29.6			9.35
33.0			

28M			8.06
28.3			8.93
31.4			

10°

33° Anatomical Long

34L			9.82
33.8			9.78
37.4			

32L			9.20
31.3			9.36
34.4			

30L			9.21
29.9			9.20
32.3			

28L			8.06
28.2			9.06
31.9			

10°

34X			9.09
33.0			10.14
36.5			

33X			9.87
32.0			9.99
34.0			

32X			8.63
31.0			9.28
33.5			

30X			8.49
30.0			8.84
33.0			

Justi Imperial® Hardened Plastic Teeth Articulation Chart

MOLD CLASSIFICATION SYMBOLS



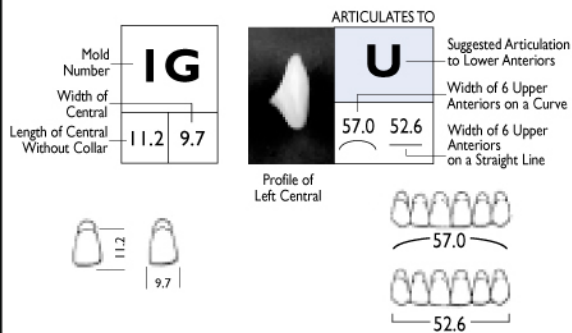
Combined Symbols



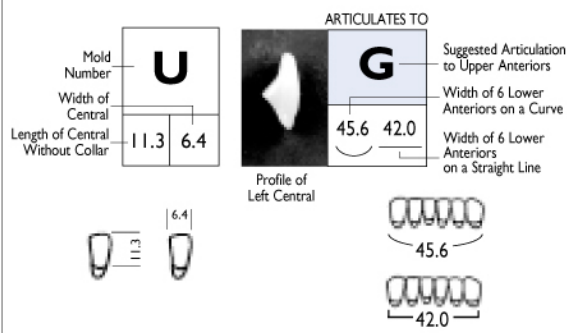
Upper Anterior	Lower Anterior	Zero Plane Posterior Medium	10° Posterior	20° Posterior Medium	33° Posterior - Anatomical Short*, Medium, Long
G	U	33	34	33	34
L	V,VS,VL	33	34-33	33	34
M	W	31	33-32	31	32
N	X	31	32	31	30
S	Y,YS,YL	29	30	29	28
T	Z	29	30	29	28

Bite relation will obviously alter the size requirements for lower teeth. As a general rule, the table above will provide posterior molds and sizes which are approximately correct. *28 short posterior is not available.

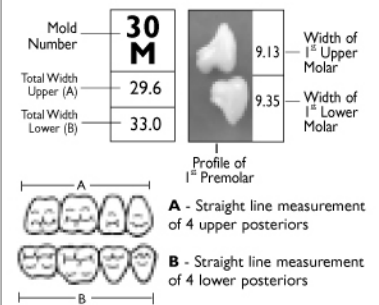
UPPER ANTERIORS



LOWER ANTERIORS



POSTERIORS



Tooth measurements are within plus or minus 5% of stated value.

Selecting Imperial Teeth

This is a guideline on how Justi originally suggested the selection of size and mold when considering Imperial teeth for a case. This information can be photocopied and reproduced for your customers.

As you know, we have introduced our **Justi Artificial Tooth Mold Selector** to aid in the selection of the appropriate molds. Although the selector is the ultimate recommended device, it is essential that you know the background of the **Imperial molding system**. The following information is recommended to complete our presentation of the new **Imperial Mold Chart**.

Tooth Size

Justi Imperial Anterior Teeth

Imperial upper anterior teeth are designated in size by letter: G - giant, L - large, M - medium, N - normal, S - small, T - tiny. Imperial lower anteriors are designated by the letters U-V-W-X-Y-Z and are progressively smaller in that order. VL is V width, but longer (for cases with excessive alveolar loss); YL is Y width, but longer; VS is V width, but short; YS is Y width, but short.

Justi Imperial Posterior Teeth

Imperial posterior teeth come in six types. Four of them differ in occlusal design to give a posterior tooth for each of the principal theories of articulation, full anatomical (M), semi-anatomical (XX), shallow cusps (X), and cusplless (Z).

0° Posteriors.... designated by the letter Z, i.e., 29Z, 31Z and 33Z.

These are cusplless carvings which eliminate much of the lateral stress during use. Many prosthodontists prefer Zero's in all full cases. They are particularly beneficial in cases of cross-bite, flabby alveolar ridges and those mouths where the alveolus has resorbed so that little lateral stability exists. For full dentures only.

NEW! 10° Posteriors... designated by the letter X, i.e., 30X, 32X, 33X, and 34X. Functional and aesthetic occlusal surface make them easy to set up and occlude. They may be set up to function similar to 0 degree or a "three point contact" arrangement with minimal cusp interference. A shallow facet inclination of the occlusal surface will inhibit tilting of the denture while in a balanced or working excursion. Having more stability in function will give the denture more retention.

20° Posteriors... designated by the letters XX, i.e., 29XX, 31XX, 33XX.

An occlusal carving which gives a minimum of lateral thrust, improved chewing efficiency and great adaptability of recarving after occlusal adjustments.

33° Anatomical Short Bite Posteriors... designated by the letter S, i.e., 30S, 32S, 34S.

Anatomical occlusal carvings with a short body especially on the lingual. To reduce tedious time spent in "grinding in" posterior teeth when the intermaxillary space is small. Most useful to reduce time in lingual bar cases.

33° Anatomical Medium Posteriors... designated by the letter M, i.e., 28M, 30M, 32M, 34M.

The number indicates the distance in millimeters from the mesial of the first bicuspid to the distal of the second molar. These are natural cusp teeth carved to perfect working occlusion.

33° Anatomical Long Posteriors... designated by the letter L, i.e., 28L, 30L, 32L, 34L.

Anatomical occlusal carvings with extra length from occlusal to gingival. Will give full tooth length to full denture cases where space permits and is especially useful in partial denture cases where excessive resorption has occurred.

Imperial Shade Guide - The "New Age" Shade System

Shade number according to age.

Imperial Eterna Shade Guide ITEM # 084-51-0425



The **Imperial Shade Guide** has these shades (20, 25, 35, 45, 50, 59, 60, 62, 64, 65, 66, 67, 68, 69, 70, 77, 81 & 82) which represent the shades most often found in beautiful natural dentition. The selection of these shades is based on the Justi Eterna System which is a patented system to facilitate reading shades. The shade number is related to the ideal shade for the age of the patient. The Shade Guide comes with the Kroma Shield and one sample of the patented Kroma Tab. The Kroma tabs are available in packages of 50. For shade comparisons with other major brands, see the conversion chart next to the order form.

Size Selection

Final decision on the size of teeth can only be made by viewing the entire setup. Size selection for the original setup can be quickly and easily done by measuring the space available for 28 teeth on the edentulous models. Mark where you wish to place the distal of the second molars on the upper model. This is usually about 5mm anterior to the hamular notch.

With a flexible millimeter ruler, measure around the outside of the alveolus. Record this measurement.

On the lower model, mark where you wish to place the distal of the second molar - just anterior to the retromolar pad. This measurement is again made, recorded and totalled with the upper. Study of models of natural teeth show us that 1/5 of this total space is devoted to the six upper anteriors. Dividing the total by 5 gives us a figure that indicates the IMPERIAL size for the case.

under 38 (rare) = T (tiny) size
38 - 42 = S (small) size
42 - 46 = N (normal) size
46 - 48 = M (medium) size
above 48 (rare) = L or G (large or giant) size

One-seventh of the total is devoted to four posterior teeth (2 bicuspid and 2 molars). The size of posterior teeth is designated by the millimeter distance from the mesial of first bicuspid to the distal of the second molar, i.e., 28 - 30 - 32 - 34. By dividing the total by seven, you get the desired size of the posterior.

Lower anteriors are determined by the following conversion table:

Upper Anterior	Lower Anterior
G (giant) size	U
L (large) size	V
M (medium) size	W
N (normal) size	X
S (small) size	Y
T (tiny) size	Z

Obviously, a change from normal maxillo-mandibular relationship can alter this requirement. In a prognathic case, the anteriors may have to be placed edge to edge which would necessitate a larger lower anterior. Conversely, a large horizontal overlap may call for a smaller tooth.

Example:

Upper Measurement	110mm
Lower Measurement	100mm
Total:	210mm
210 ÷ 5 = 42	= N size upper anterior
210 ÷ 7 = 30	= 30 size posterior
N size upper anterior	= X lower anterior
	(Overbite changed this to Y)

Posterior teeth are available in three lengths: long, medium and short (i.e., 30L - 30M - 30S). In full dentures, we use the longest tooth possible with the intermaxillary space available. Frequently, a long first upper bicuspid can be used even when a medium is used throughout. There is sometimes an unnatural drop in the gingival line from the cuspid to the adjacent bicuspid.

It is always advisable to select a shorter tooth than to grind-in a posterior in the case of close bites. Excessive grinding removes the color in the bulk of the tooth and makes a drastic shade change.

Justi celebrates over 50 years of manufacturing hardened plastic teeth!

In September 1940, Justi introduced the first hardened plastic tooth line, worldwide, at the ADA Convention in Cleveland. Since then, many other manufacturers in the USA and other parts of the world have been manufacturing artificial resin teeth. For over 50 years Justi has been a leader in this field.

In 1964, Justi introduced the Imperial line. Over the years, improvements have been made to make Imperial the "Professional's Choice" due to their high quality and the fact that they are trouble-free and easy to work with.

Mold Selection

Upper anterior teeth are best chosen by the use of photographs or pre-extraction records, if they are available. In their absence, we must resort to scientific experience to give us the clue to a tooth that will be harmonious to the whole patient. Anthropology tells us that the shape of teeth and bones, being embryologically related, are in harmony of proportion. Thus, a tall slender person will have long, slender bones and teeth that are narrower and longer. Conversely, a short, stocky person will have shorter and heavier bones and teeth that are broader and shorter. Justi IMPERIAL anterior teeth can be selected to follow this natural scheme by referring to the chart below:

Frame Harmony TYPE SELECTION OF UPPER ANTERIORS

Patient's HEIGHT	WIDTH PATIENT'S FRAME		
	NARROW	MEDIUM	WIDE
TALL 6' or more	TYPE 5 	TYPE 12 	TYPE 9
MED. 5'6" - 6'	TYPE 3 	TYPE 2 	TYPE 1
SHORT 5'6" or less	TYPE 7 	TYPE 8 or 10 	TYPE 4

Acquired flesh must be disregarded. (Naturally, the most delicate female patients will fall into the more delicate forms on the left and lower parts of the chart, such as types 3-7-8).

Mold Selector

A unique and comprehensive slide chart system designed to aid the dentist and the laboratory professional in the selection of specific Just tooth molds. It will allow you to set up a denture or partial case with 100% accuracy of your mold selection.

- **Fast & practical with logical mold groupings.**
- **Seven selection/reference categories.**
- **Categories established from accepted dental publications.**
- **Provides arch size, length, width & shape.**
- **Suggests posterior mold articulation.**
- **Color coded for easy reference.**
- **Simple to use! Complete instructions.**

Group/Item # 077-65-0011



What has Justi done to achieve the Imperial quality?

1. Wear resistance has been greatly increased. Thirty four years of clinical experience has shown that Imperial teeth do not wear below the occlusal level in balanced occlusion. The polymers used in the formulation of Imperial powders have been greatly improved. After diligent research by chemists, two special polymers were prescribed by Justi. These polymers were then made in a manufacturing plant totally devoted to dental plastic production. Molds and machinery were designed to automatically produce the ultimate properties from these high molecular weight polymers.
2. Cross-linking of the tooth was developed using a special monomer to tie the molecular chains together at intervals. Thus, the intersectional polymer network was created. This provided additional resistance to wear, solvent action and flaming.
3. The body of the tooth is fabricated with a similar powder but with additional characteristics of being tough and bondable to the base material. **Imperial teeth have 100% bondability with methyl methacrylate denture base material (such as Justi High Impact Denture Base).**

Mold Comparison Chart

Justi Imperial®	Bioblend® Bioform®	Justi Imperial®	Bioblend® Bioform®
UPPER ANTERIORS			
3M	11H*	3S	24F*
12N	12E*, 12ES	12M	25G*
2N	12F	3N	31F*, 31FS
1M	12G*	2S	32E*
2S	13D	7N	35E
2S	13E*	2N	36F
5S	21C*	12S	42D*
3S	21D	8N	42F*, 42FS
5N	21F	8M	42G*
9G	21J*	1S	43D*
8N	22E*	4N	43F*
2N	22G*	3S	44E*
7N	44F	12M	62G*
8M	45F*	5N	64F
10M	45H*, 45HS	12N	65E
8N**	46E	12M	65G*
8M	51F	12M	65H
1T**	52C*	12N	74E
12N	54F*	5L	74H
2S**	55D*	7N	75E*
12N	55F*	12M	75G
1M	56G	8S	76D
12S	62D*	1M	76G
8N	62E	3S**	A84*
LOWER ANTERIORS			
Z	B	Z	H*
Z	C*	Y	J
Z	D*	Z	K*
Z	E*	W	KI*
Z	F*	Z	L
Y	G	Y	M*
Y	N*	X	U*
Y	O*	X	V
Y	P*	X	W*
X	R*	YS	X
X	S*	YS	Y
W	T	V	Z*

*Bioblend molds. **Requires alteration.
NOTE: There is no exact duplication.
Substitution is based on size and outline alone. Where modification is suggested, simple grinding will bring exact duplication.

Shade Comparison Chart With the Most Popular Shade Guides

JUSTI IMPERIAL	BIOFORM	VITA	BIOBLEND
20	B59	B1	100
25	B51	A1	100
35	-	-	-
45	B91	C1	100
50	B95	C3	113
59	B59	B1	100
60	B52	C1	100
62	B62	A1	100
64	B54	D2	104
65	B65	D3	106
66	B66	A2, A3	102, 104
67	B67	B2, B3	108
68	B55	-	109
69	B69	C2, C4	110
70	B95	B4, C3	113
77	B77	-	112, 113, 114
81	B81	-	116
82	B85	A4	118

This shade comparison chart is to be used in selecting approximate color matches. Slight variations occur due to the difference in the texture and character of the respective materials. This chart should be used as an aid to the skill and preferences of the dentist or technician who must make the final shade choice.

Instructions for use of synthetic resin teeth

NOTE: If you would like written instructions for obtaining optimum results with our teeth, contact:

Justi Products, Marketing Dept.
A Brand Division of American Tooth Industries

1200 Stellar Dr. • Oxnard, CA 93033-2404
Toll Free (800) 235-4639 • CA (805) 487-9868

Justi Imperial® ORDER FORM

Date: _____ Order # _____

Bill to: _____

Address: _____

City, State, Zip: _____

Phone: () _____ Fax: () _____

Ship to: _____

Address: _____

City, State Zip: _____

☐ 1 x 6 39 MOLDS UPPER ANTERIORS ☐ BOXES

MOLD	20	25	35	45	50	59	60	62	64	65	66	67	68	69	70	77	81	82
1G																		
1L																		
1M																		
1N																		
1S																		
1T																		
2M																		
2N																		
2S																		
3M																		
3N																		
3S																		
4M																		
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8M																		
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8S																		
9G																		
9L																		
9M																		
9N																		
9S																		
9T																		
10M																		
10N																		
10S																		
12M																		
12N																		
12S																		
TOTAL																		

ANTERIOR CARDS (1 X 6) 20 cards/box

POSTERIOR CARDS (1 X 8) 20 cards/box

TOTAL
Upper Anteriors 1 x 6

TOTAL
Upper Posteriors 1 x 8

TOTAL
Lower Anteriors 1 x 6

TOTAL
Lower Posteriors 1 x 8

GRAND TOTAL
Anteriors 1 x 6
Item #083-50-0102

GRAND TOTAL
Posteriors 1 x 8
Item #083-50-0202

This is a sample of our tooth order form.
You may use a photocopy of this form for your first order.

Distributed by:

☐ 1 x 6 10 MOLDS LOWER ANTERIORS ☐ BOXES

MOLD	20	25	35	45	50	59	60	62	64	65	66	67	68	69	70	77	81	82
U																		
V																		
W																		
X																		
Y																		
Z																		
VL																		
VS																		
YL																		
YS																		
TOTAL																		

☐ 1 x 8 21 MOLDS UPPER POSTERiors ☐ BOXES

MOLD	20	25	35	45	50	59	60	62	64	65	66	67	68	69	70	77	81	82
34M																		
32M																		
30M																		
28M																		
34L																		
32L																		
30L																		
28L																		
34S																		
32S																		
30S																		
33Z																		
31Z																		
29Z																		
34X																		
33X																		
32X																		
30X																		
33XX																		
31XX																		
29XX																		
TOTAL																		

☐ 1 x 8 21 MOLDS LOWER POSTERiors ☐ BOXES

MOLD	20	25	35	45	50	59	60	62	64	65	66	67	68	69	70	77	81	82
34M																		
32M																		
30M																		
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33Z																		
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30X																		
33XX																		
31XX																		
29XX																		
TOTAL																		