

# Orthodontic Products Update

## Removable Quadhelices and Transpalatal arches

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### Introduction

The quadhelix and transpalatal arch (TPA) have some similar functions including anchorage reinforcement, molar rotation/torque/intrusion/expansion/contraction and digit dissuasion. Additional functions of the quadhelix include total arch expansion, unilateral expansion, selective canine/premolar/incisor expansion. Numerous makes of removable preformed quadhelices/TPA's are now available, aimed at reducing laboratory costs, simplifying clinical adjustment and improving orthodontic mechanics due to altered design or metallurgy.

### Quadhelix

The majority of preformed quadhelices are constructed of 0.9mm stainless steel with four helices to increase flexibility (Fig 1). Dentaurum manufacture a removable quadhelix constructed of Blue Elgiloy for increased flexibility/adjustability and an Elgiloy based system called ORTHORAMA® (Fig 2) which includes a preformed palatal arch with a mesially orientated midline adjustment loop and extension arms for buccal/labial expansion. Both are supplied un-heat treated, but can be heat treated at 400-500°C in segments or in their entirety to increase rigidity if required. Rocky Mountain Orthodontics also produce a non heat treated Blue Elgiloy based palatal expander, called a 3D® (Wilson®) Multiaction Palatal appliance (Fig 3). The main design differences are that it inserts into vertical lingual tubes via vertical extensions on the expander and that the wire tapers from .038" to .029" anteriorly, thus reducing force in the incisor region. Ortho Organizers now manufacture a second generation Nitanium® Palatal Expander<sup>2</sup> (Fig 4) which is less bulky than the original and has been redesigned to reduce the risk of fracture of the stainless steel (Orthology) extension arms. The preprogrammed ability to expand to a set width is the result of the transition temperature and shape memory of the transpalatal loop. When cooled below the transition temperature of 34°C the thermal nickel titanium wire becomes very flexible due to weakening of interatomic forces. This allows easier clinical insertion, but as it reaches the transition temperature within the mouth, the interatomic forces bind the atoms tighter and the expander returns to its preset width. This expansion is claimed to be more efficient and less painful compared to other palatal expanders, it is also self limiting to a prescribed width. It is however recommended not to exceed more than 6mm initial expansion. Aerosols containing a freezing

(-26.2°C) spray of tetrafluoroethane, or ethyl chloride sprays are available to facilitate rapid cooling of these thermodynamic components prior to insertion, making them "dead soft" for easy placement.

### Trans Palatal Arch

The majority are made of 0.9mm stainless steel and some manufacturers heat treat the wire to increase tensile strength and rigidity. Midline adjustment loops are either mesially or distally orientated (Fig 5,6). The claims made for the former include improved tongue action which is said to increase anchorage, better patient tolerance and a reduced likelihood of damage to the palatal soft tissues. G.A.C. manufacture a transpalatal arch with 45° terminal ends, which is claimed to aid insertion into lingual sheaths. Recent variations on the traditional form of the TPA have included Ortho Organizers Nitanium® Molar Rotator<sup>2</sup> (Fig 7) and Rocky Mountain Orthodontics 3D® (Wilson®) Palatal appliance (Fig 8). The Nitanium® Molar Rotator<sup>2</sup> was primarily developed to correct molar rotation, it utilizes thermodynamic nickel titanium wire with a transition temperature of 35°C in a similar way to the Nitanium® Palatal Expander<sup>2</sup>. It will also perform the other functions of a palatal arch if desired, but torquing adjustments can be difficult. If molars are very rotated initially this may preclude efficient insertion and construction of any type of quadhelix in these cases the Nitanium® Molar Rotator<sup>2</sup> is helpful to derotate such molars prior to fitting a quadhelix.

The 3D® (Wilson®) Palatal appliance inserts into vertical lingual tubes and has additional distal extensions (0.25" stainless steel) that act as occlusal rests on the distal marginal ridges of second molars, increasing resistance to distal tipping.

### Lingual Sheaths

There are multiple types of lingual attachments for the insertion of preformed palatal appliances. The majority are orientated for horizontal insertion of appliances with curved mesial-distal flanges for spot welding to bands and have internal dimensions which allow insertion of doubled 0.9mm wire. Insertion into solid sheaths (Fig 9) is claimed to be more difficult than with windowed/slotted sheaths (Fig 10). Some form of locking indent (Fig 11) on the terminal end of the sheath is recommended for retention of an appliance. While the additional ability to ligate an

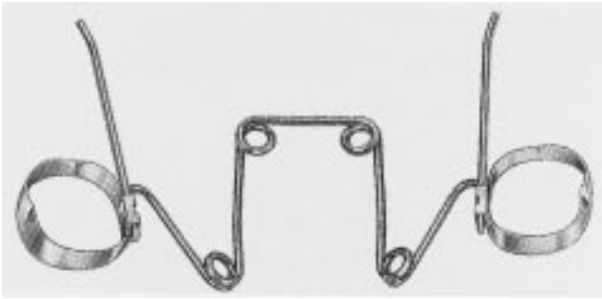


FIG. 1 Conventional quadhelix

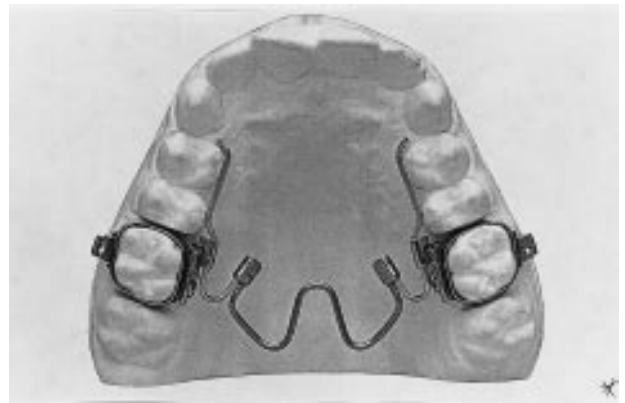


FIG. 4 Nitanium® Palatal Expander<sup>2</sup>



FIG. 2 ORTHORAMA® palatal expander



FIG. 5 Mesially orientated Transpalatal arch

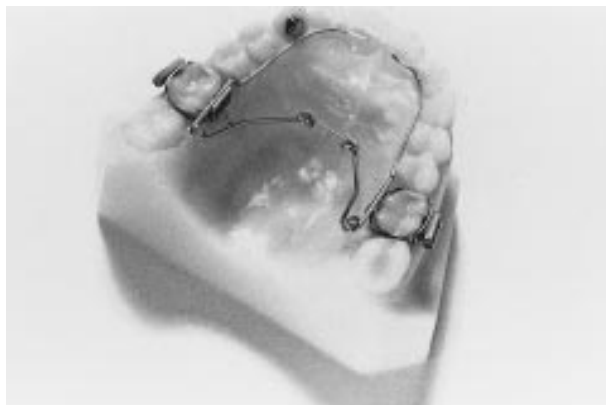


FIG. 3 3D® (Wilson®) Multiaction Palatal appliance



FIG. 6 Distally orientated Transpalatal arch

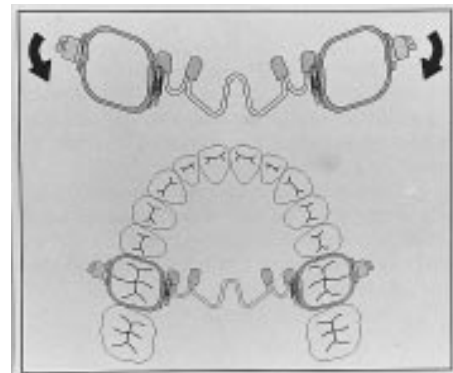


FIG. 7 Nitanium® Molar Rotator<sup>2</sup>

appliance to either a mesial-distal bar (Fig 12) or ball hook (Fig 13) is an added safety component. Mesial offsets are incorporated into some sheaths to allow easier insertion of palatal appliances. If a sheath is ordered with a ball hook or indent with a mesial-distal bar, it is no longer universal and requires to be ordered in left/right format. Hooks and

mesial-distal bars also allow the engagement of palatal elastics for orthodontic movements if required. Most ball hooks are attached to the distal end of a sheath to facilitate easier ligation.

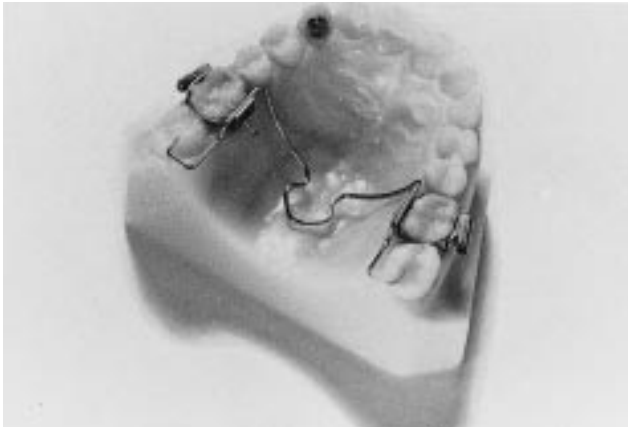


FIG. 8 3D® (Wilson®) Palatal appliance



FIG. 9 Solid lingual sheath



FIG. 10 Windowed/slotted lingual sheath



FIG. 11 Lingual sheath with locking indent

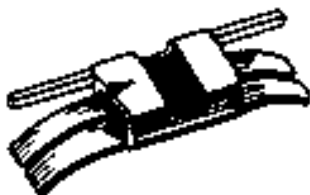


FIG. 12 Lingual sheath with mesial-distal bar

It is advisable to take impressions of the uncemented bands to allow accurate placement of lingual sheaths. This step also allows laboratory adjustment of preformed appliances to a model if desired. Although all types of sheaths and preformed palatal appliances can be fitted/adjusted at the chairside if required, this can be time consuming depending on the malalignment of the arches.



FIG. 13 Lingual sheath with ball hook



FIG. 14 3D® twin lingual vertical tube

ORTHORAMA® appliances insert into horizontal lingual sheaths and the 3D® (Wilson®) system appliances insert into a 3D® twin lingual vertical tube (Fig 14) which it is claimed improves control of rotational, torquing and tipping movements. Both can be ordered with a transfer system incorporating retention bands/sheaths and transfer jigs, allowing indirect transfer of the cemented band/sheath position to a laboratory model. This means that impressions can be taken during treatment with no need to remove the cemented bands and increases the accuracy of fit of a laboratory adjusted appliance. Most manufacturers will supply bands prewelded with lingual sheaths, but this can complicate inventory, increase costs and limit adjustability of appliances.

Appliance and lingual attachments are usually supplied in set quantities in packs, although many suppliers are willing to supply individual components on request. Prices (in pounds sterling) are exclusive of VAT and not directly comparable as prices quoted vary between pack sizes and breakdown individual unit costs. All appliances are made of non-heat treated stainless steel unless otherwise specified.

U.K. Supply house: **American Orthodontics** Ltd, Forge Works, Lane End, High Wycombe, Bucks. HP14 3HJ. Tel 01494 882561 Fax 01494 883351 Manufacturer: American Ortho U.S.A.

**Transpalatal Arch** packs of 5

Size	Width (mm)	Loop	Order no.	Cost (each)
1	34	Distal	852-521	1.32
2	37	Distal	852-522	1.32
3	41	Distal	852-523	1.32
4	45	Distal	852-524	1.32
5	47	Distal	852-525	1.32
6	49	Distal	852-526	1.32
7	52	Distal	852-527	1.32
Kit* 20 pieces (4 × sizes 34-47)			852-530*	26.40*

Size	Width (mm)	Loop	Order no.	Cost (each)
1	37	Mesial	852-541L	1.49
2	40	Mesial	852-542L	1.49
3	43	Mesial	852-543L	1.49
5	49	Mesial	852-545L	1.49
6	52	Mesial	852-546L	1.49
Kit* 30 pieces (5 × each size)			852-540L*	44.52*

**Lingual Sheath** packs of 10 (5 right/5 left)

Design	Order No.	Cost (each)
Window/indent/ mesial-distal bar	852-143	1-15
Window/ 7° offset/ distal ball hook	852-146	2-14

U.K. Supply house: **Eurodontic Ltd.** 85 Harwood street, Sheffield S2 4SE Tel 0114 2766813 Fax 0114 2758385 Manufacturer: Rocky Mountain Orthodontics U.S.A.

**3D\* (Wilson\*) quadhelix.** Blue Elgiloy tapering -038"→-029" packs of 3

Size	Width (mm)	Order no.	Cost (pack)
1	32	A-1210	36-25
2	36	A-1211	36-25
3	40	A-1212	36-25
4	44	A-1213	36-25
5	50	A-1214	36-25
6	56	A-1215	36-25
Kit*6 pieces (1 × each size)		K-698*	75-57*

**3D\* (Wilson\*) Multiaction Palatal appliance** (Blue Elgiloy tapering -038"→-029") Packs of 3

Size	Width (mm)	Order no.	Cost (pack)
1	32	A-4175	31-48
2	36	A-4176	31-48
3	40	A-4177	31-48
4	44	A-4178	31-48
5	50	A-4188	31-48
6	56	A-4189	31-48
Kit*6 pieces (1 × each size)		K-719*	69-62*

**3D\* (Wilson\*) Palatal appliance** (Stainless steel tapering -036"→0-25") Packs of 3

Size	Width (mm)	Order no.	Cost (pack)
1	32	A-4170	28-10
2	36	A-4171	28-10
3	40	A-4172	28-10
4	44	A-4173	28-10
5	50	A-4184	28-10
6	56	A-4185	28-10
Kit*6 pieces (1 × each size)		K-718*	62-07*

**3D\* (Wilson\*) Lingual (vertical) Tube** packs of 10

Design	Order No.	Cost (pack)
No hook	A-4115	21-07
Central gingival hook	A-4114	23-42
3D® Transfer insert	A-4198	7-97
3D® Transfer tube	A-4199	25-29

U.K. Supply house: **Forestadent Ltd.** 21 Carters Lane, Kiln Farm, Milton Keynes, MK11 3HL. Tel 01908 568922 Fax 01908 560611 Manufacturer: Forestadent, Germany.

**Quadhelix** packs of 10

Size	Width (mm)	Order no.	Cost (each)
1	34	315-1001	4-90
2	37	315-1002	4-90
3	41	315-1003	4-90
4	45	315-1004	4-90
Kit* 40 pieces (10 × each size)		315-0101*	184-90*

**Transpalatal Arches** packs of 10

Size	Width (mm)	Loop	Order no.	Cost (each)
1	34	Distal	313-1934	1-29
2	37	Distal	313-1937	1-29
3	41	Distal	313-1941	1-29
4	45	Distal	313-1945	1-29
Kit* 40 pieces (5 × size 1,4. 15 × size 2, 3)			313-0101*	49-37*

**Lingual Sheath** pack of 10

Design	Order No.	Cost (pack)
Window/indent	760-0081	11-56
Window/indent/ mesial-distal bar	left 760-0084 right 760-0085	17-96
Window/indent/ distal ball hook	left 760-0086 right 760-0087	17-96

U.K. Supply house: **Hawley Russell and Baker Ltd** 3 Station Close, Potters Bar, Herts. EN6 1TL Tel 01707 655579 Fax 01707 651268 Manufacturer: Dentaurum, Germany.

**Quadhelix** (Remaloy®/ Blue Elgiloy 0-9mm) packs of 10.

Size	Width (mm)	Order no	Cost(pack)
1	38	728-100	44-31
2	40	728-101	44-31
3	42	728-102	44-31

**Transpalatal Arch** (Remanium®/ Stainless steel 0-9mm) packs of 10.

Size	Width (mm)	Loop	Order no.	Cost (pack)
1	37	mesial	728-021	20-86
2	40	mesial	728-022	20-86
3	43	mesial	728-023	20-86
4	46	mesial	728-024	20-86
5	49	mesial	728-025	20-86
6	52	mesial	728-026	20-86
Kit* 30 pieces (5 × each size)			728-020*	55-08*

**Lingual Sheath** packs of 10

Design	Order No.	Cost (each)
Window/indent	728-010	1-12
Solid/indent	728-110	0-81
Window/indent/ mesial-distal bar	left 728-012 right 728-011	1-20
Solid/indent/ mesial-distal bar	left 728-112 right 728-111	1-20

**ORTHORAMA** (Remaloy®/ Blue Elgiloy 0-9mm HEAT TREATABLE 400-500°C, supplied untreated)

Palatal arch (modified TPA with mesial loop and extended arms for expansion) pack of 10

Size	Width (mm)	Order no.	Cost (pack)
1	40	728-200	65-55
2	45	728-201	65-55
3	50	728-202	65-55
4	55	728-203	65-55
5	60	728-204	65-55
Kit* 10 pieces (2 × each size/ruler)		728-205*	65-55*
Transfer system		728-400	32-37 (10 retention bands/lingual sheaths/transfer jigs)

U.K. Supply house: **Masel Direct** 2701 Bartram Rd Bristol PA 19007-6892 U.S.A. Tel 1-215-785-1600 Fax 1-215-785-1680  
 Manufacturer: Masel U.S.A.

### Transpalatal Arch packs of 5

Width	Order no.	Cost (pack)
34	4624-034	4-84
37	4624-037	4-84
41	4624-041	4-84
45	4624-045	4-84
Kit*(5 × each size)	4624-400*	18-26*

U.K. Supply house: **Minerva Dental Ltd** Courtney House, Oxford Street, Cardiff CF2 3DT Tel 01222 490504 Fax 01222 482193 Manufacturer: Leone S.p.a.

### Transpalatal Arch packs of 5

Size (mm)	Loop	Order no	Loop	Order no	Cost (pack)
34	distal	C0570-34	mesial	C0576-34	9-00
36	distal	C0570-36	mesial	C0576-36	9-00
38	distal	C0570-38	mesial	C0576-38	9-00
40	distal	C0570-40	mesial	C0576-40	9-00
42	distal	C0570-42	mesial	C0576-42	9-00
44	distal	C0570-44	mesial	C0576-44	9-00
46	distal	C0570-46	mesial	C0576-46	9-00
48	distal	C0570-48	mesial	C0576-48	9-00
50	distal	C0570-50	mesial	C0576-50	9-00
52	distal	C0570-52	mesial	C0576-52	9-00
Kit* 50 pieces (5 × each size + ruler)*	distal	CO570-96*	mesial	C0576-96*	90-08*

### Lingual Sheath packs of 10

Design	Order No.	Cost (pack)
Window/ indent/ distal ball hook	left G2845-03 right G2845-02	29-18
Window/ indent/ mesial-distal bar	left G2844-03 right G2844-02	18-84

U.K. Supply house: **3M Unitek** U.K. PO Box 1, Bradford W. Yorkshire BD5 9UY Tel 01274 392222 Fax 01274 392297  
 Manufacturer: 3M Unitek U.S.A.

**Quadhelix** MIA (mobile intraoral arch) Supplied individually (curved arms for easy insertion)

Size	Order no.	Cost (each)
1 curved retention	EP 3431	10-26
2 curved retention	EP 3432	10-26
3 curved retention	EP 3433	10-26
Kit* 10 pieces	EP 3410*	266-00

### Transpalatal Arch packs of 5.

Width (mm)	Loop	Order no.	Cost (each)
34	Distal	HL 373	11-96
37	Distal	HL 374	
41	Distal	HL 375	
43	Distal	HL 376	
45	Distal	HL 377	
47	Distal	HL 378	
Kit*50 pieces		HL 372*	74-75

### Lingual Sheath packs of 10

Design	Order No.	Cost (each)
Solid	EP 0810	1-52

U.K. Supply house: **Optident** Butterfield Dental Centre, Acorn Buisness Park, Keighley Road, Skipton, North Yorkshire BD23 2UE Tel 01756 796606 Fax 01756 796776  
 Manufacturer: Ormco-Corp U.S.A.

### Lingual Sheath packs of 10

Design	Order No.	Cost (each)
window/indent	672-3672	0-98
window/indent/ mesial-distal bar	left 673-3672 right 674-3672	1-08
window/indent/ long distal ball hook	left 676-3672 right 675-3672	2-01
window/indent/ short distal ball hook	left 676-3671 right 675-3671	1-95
window/indent/ short mesial ball hook	left 676-3673 right 675-3673	1-95
window/indent/ 6° mesial offset/ short distal ball hook	left 677-3672 right 678-3672	4-50
Radio-opaque plastic sheath insert for comfort when arch not in use	672-3000	11-03 (pack)

U.K. Supply house: **Ortho-Care** U.K. Ltd 5 Oxford Place, Bradford, W. Yorkshire BD3 0EF. Tel 01274 392017 Fax 01274 734446 Manufacturer: Ortho-Care U.K.

**Quadhelix** Supplied individually (curved arms for easy insertion)

Size	Width (mm)	Order no.	Cost (each)
1	40	5000-311	9-95
2	45	5000-312	9-95
3	50	5000-313	9-95

### Transpalatal Arch packs of 10

Size	Width (mm)	Order no.	Cost (pack)
1	34	5000-315	13-75
1	37	5000-316	13-75
1	41	5000-317	13-75
1	45	5000-318	13-75

Kit\* 40 pieces (10 × each size + 10 sheaths) 5000-319\* 57-20\*

### Lingual Sheath packs of 10

Design	Order No.	Cost (pack)
Solid/indent/curved length to use with Quad	5000-314	18-00
Solid/indent/use with palatal arch	5000-320	15-70

U.K. Supply house: **The Orthodontic Company**, 12 Badminton Rd, Downend, Bristol BS16 6BQ. Tel 0117 9755533 Fax 0117 9755575 Manufacturer: G.A.C. U.S.A.

### Transpalatal Arch packs of 10

Size	Loop	Order no.	Loop	Order no.	Cost (each)
35	Mesial	49-531-35	Mesial + 45° terminal	49-532-35	1.60
37	Mesial	49-531-37	Mesial + 45° terminal	49-532-37	1.60
39	Mesial	49-531-39	Mesial + 45° terminal	49-532-39	1.60
41	Mesial	49-531-41	Mesial + 45° terminal	49-532-41	1.60
43	Mesial	49-531-43	Mesial + 45° terminal	49-532-43	1.60
45	Mesial	49-531-45	Mesial + 45° terminal	49-532-45	1.60
47	Mesial	49-531-47	Mesial + 45° terminal	49-532-47	1.60
49	Mesial	49-531-49	Mesial + 45° terminal	49-532-49	1.60
51	Mesial	49-531-51	Mesial + 45° terminal	49-532-51	1.60
53	Mesial	49-531-53	Mesial + 45° terminal	49-532-53	1.60
55	Mesial	49-531-55	Mesial + 45° terminal	49-532-55	1.60
35	Distal	49-530-35			1.50
37	Distal	49-530-37			1.50
39	Distal	49-530-39			1.50
41	Distal	49-530-41			1.50
43	Distal	49-530-43			1.50
45	Distal	49-530-45			1.50
41	Distal	49-530-41			1.50
43	Distal	49-530-43			1.50
45	Distal	49-530-45			1.50

Kits\* (40 mixed pieces + flexible ruler)

Loop	Sizes*	Order No.*	Cost*
Mesial	4 × each size 37→55	49-500-40	52.22*
Mesial/ 45° terminal	(3 × 37,53) (4 × 39,41,51)	49-700-40	52.22*
Distal	(2 × 35,47,49,51,53,55) (4 × 37) (6 × 39,41,43,45)*	49-600-40	52.22

### Lingual Sheath individually ordered

Design	Order No.	Cost (each)
Window/indent/ distal post	left 21-602-19 right 21-601-19	2.40
Window/indent/ distal post/ mesial 8° offset	left 21-602-20 right 21-601-20	2.78
Window/Indent	left 21-601-60 right 21-601-60	1.05
For Bicuspid	left 21-601-22 right 21-601-21	2.46
Ice sprays for use on NiTi Expanders etc. also supplied:		
Endo-Ice 6oz aerosol	17-123-45	17.49
Ortho Ice 12oz aerosol	17-123-55	8.10

U.K. Supply house: **Orthologic** Summit House, Summit Rd, Potters Bar, Herts EN6 3EE Tel 01707 646434/5 Fax 01707 646426 Manufacturer: "A" Company

### Lingual Sheath packs of 25

Design	Order No.	Cost (pack)
2 Ball hooks/ 5° mesial offset	left 089-811 right 089-810	31.44
No hook/ 5° mesial offset	left 089-831 right 089-830	31.44
Window/ mesial- distal bar	089-510	31.44
Window	089-610	31.44
Vertical slot	089-720	31.44

U.K. Supply house: **Precision Orthodontics** Dove House, 2 Esher Rd, Walton-on-Thames, Surrey KT12 4JY Tel 01932 882600 Fax 01932 882601 Manufacturer: Ortho Organisers

### Transpalatal Arch packs of 5

Width (mm)	loop	Order no.	Cost (pack)
34	distal	033-091	9.55
37	distal	033-092	9.55
41	distal	033-093	9.55
45	distal	033-094	9.55
47	distal	033-095	9.55

### Lingual Sheaths packs of 10

Design	Order no.	Cost (pack)
Window/ indent	971-032	12.65
Window/ indent/ mesial-distal bar	left 971-035 right 971-034	15.78
Window/ indent/ distal ball hook	left 971-037 right 971-036	19.86

**Nitanium® Palatal Expander<sup>2</sup>** (supplied in individual sealed packs)

Width (mm)	loop	Order no.	Cost (each)
26	mesial	101-761	24.84
28	mesial	101-762	24.84
30	mesial	101-763	24.84
32	mesial	101-764	24.84
34	mesial	101-765	24.84
36	mesial	101-766	24.84
38	mesial	101-767	24.84
40	mesial	101-768	24.84
42	mesial	101-769	24.84
44	mesial	101-770	24.84

Kit\* 10 pieces

(1 × each size/ ice spray)	101-760*	243.60*
Ice spray (6oz can)	100-789	10.25
Expander adjustment plier	200-450	47.76

Expander has size permanently stamped. Kit comes with instruction manual. Recommended lingual sheath no-971-032

**Nitanium® Molar rotator**<sup>2</sup> (supplied in individual sealed packs)

Width (mm)	Loop	Order no.	Cost (each)
26	mesial	101-781	13-84
28	mesial	101-782	13-84
30	mesial	101-783	13-84
32	mesial	101-784	13-84
34	mesial	101-785	13-84
36	mesial	101-786	13-84
38	mesial	101-787	13-84
40	mesial	101-788	13-84
42	mesial	101-789	13-84
44	mesial	101-790	13-84

Kit\* 10 pieces

(1 × each size + ice spray) 101-780\* 143-20\*

U.K. Supply house: **TP Orthodontics** U.K. 12 Bruncliffe Way  
Morley, Leeds LS27 0JG Tel 0113 2539192 Fax 0113 2539193  
Manufacturer: TP Orthodontics Inc.

**Transpalatal Arch** packs of 5

Width (mm)	Loop	Order no.	Cost (pack)
37	mesial	352-037	9-88
40	mesial	352-040	9-88
43	mesial	352-043	9-88
46	mesial	352-046	9-88
49	mesial	352-049	9-88
52	mesial	352-052	9-88

Kit\* 30 pieces

(5 × each size + ruler) 352-100\* 59-27\*

**Lingual Sheath** packs of 10

Design	Order No.	Cost (pack)
Window	328-101	14-90
Window/indent	328-104	15-29
Window/indent/ mesial-distal bar	left 328-103L right 328-103R	15-68
Window/indent/ mesial ball hook	left 328-102L right 328-102R	15-68
Window/indent/ distal ball hook	left 328-105L right 328-105R	15-68

**Acknowledgements**

I would like to thank all the Orthodontic supply companies for their help in supplying the details of their products and discussing their design.

## Trade Products News

**An Oriental Perspective**

GAC has recently introduced the Oriental Preadjusted Appliance (OPA) to the UK. The prescription was developed in Japan by Dr Kosaka to meet the physiological requirements of Japanese and East Asian patients. The exact values of tip and torque are detailed below and include reduced values for angulation compared with a standard straight wire appliance. Other features of the OPA bracket include a wedged torque base and a two layer 'supermesh' bonding surface.

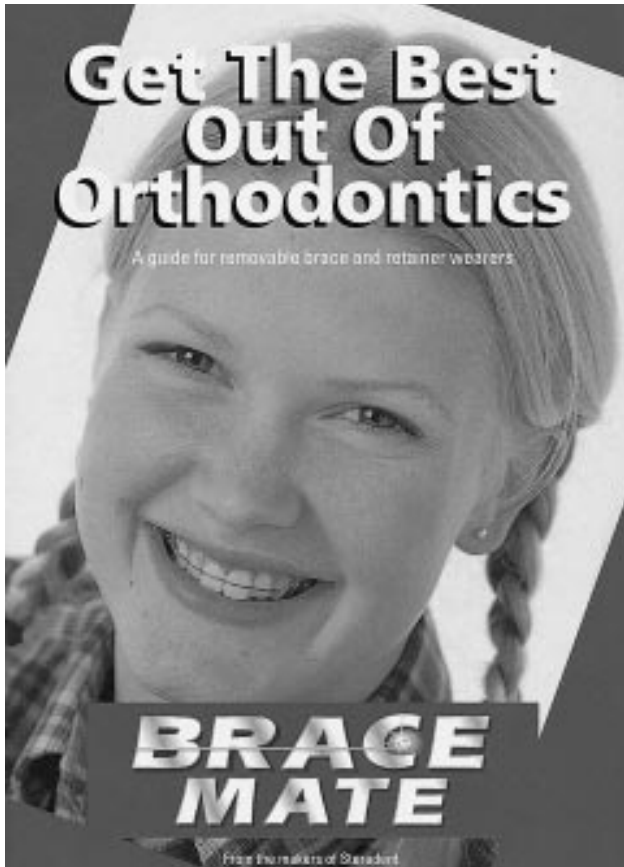
Tooth	Torque (degrees)	Angulation (degrees)	Offset (degrees)
Max. central	12	3	0
Max. lateral	8	6	0
Max. canine	-3	7	0
Max. first premolar	-7	2	0
Max. second premolar	-7	2	0
Max. first molar	-9	0	10D
Max. second molar	-9	-2	7D
Mand. incisor	1	0	0
Mand. canine	-6	3	0
Mand. first premolar	-12	2	0
Mand. second premolar	-20	2	0
Mand. first molar	-25	2	0
Mand. second molar	-25	2	0

For further details please contact The Orthodontic Company (TOC), 12, Badminton Road, Downend, Bristol, BS16 6BQ. Tel. 0117 975 5533 or fax 0117 975 5575.

**Chill Out ...**

Thermally active nickel titanium archwires are becoming increasingly popular. Their formability when chilled and ability to return to the manufactured archform when heated, is not only useful, but also impresses patients and parents! A number of manufacturers are now producing refrigerant sprays which can be used to chill thermally active nickel titanium archwires and thus aid the tying-in of displaced teeth. Orthocare have recently introduced 'Green ENDO-ICE' which, the environmentally conscious will note, does not contain CFCs. Needless to say, this type of product should only be used outside the mouth.

For further details contact Orthocare, 5, Oxford Place, Bradford, BD3 0EF. Tel. 01274 721567 or fax 01274 734446.



### Bracemate

Reckitt and Colman, the manufacturers of Steradent, have recently introduced an effervescent removable appliance cleaner called Bracemate. The active ingredients include 2 oxidising agents, potassium monopersulphate and sodium perborate, and a corrosion inhibitor. Bracemate is designed to be used with warm water and the manufacturers have also produced 'sparkley' (which should appeal to the younger customers) brace pots with a separate lift-out section into which the appliance fits. The brace pots are large enough for a functional appliance.

Also supplied with Bracemate are patient information leaflets designed for patients entitled 'Get the best out of Orthodontics', which have been designed in conjunction with the British Dental Health Foundation (BDHF).

Members of the dental team can obtain free samples of Bracemate and of the Bracemate Brace Pots by telephoning 0800 111 345 or by contacting Reckitt and Colman Products Limited via Mark Schmid/Charlotte Armitage, Holmes and Marchant Counsel, 15-17 Huntsworth Mews, London, NW1 6DD, or by accessing their World Wide Web Site, <http://www.bracemate.co.uk>.

### Compact Monair Fume Cabinet

*Ideal for use in both the laboratory and the dental practice*

Based on recirculatory technology pioneered by Astec Environmental Systems Ltd, the new Monair Miniflow 8 fume cabinet has been designed to provide maximum



operator protection for routine work without the need for expensive ducting and installation costs.

The Monair Miniflow 8 is ideal when small amounts of chemicals are being used or weighed out. Fourteen different filter blocks are available which include speciality filters for vapours of acids, mercury and formaldehyde.

### Space Saving

In the knowledge that space is at a premium in most laboratories and dental practices, Astec has designed the Miniflow 8 to be as compact as possible, making it easy to position on almost any benchtop.

The unit's cut away sides provide easy access to the work surface.

### Easy to Clean

The use of stainless steel in the construction of the Miniflow 8 ensures that the unit is easy to clean which means that its stain free appearance can be maintained.

### Operator Safety

The Downflow action of the Miniflow 8 takes the contaminated air away from operator. Two replaceable filters are integral to the unit, consisting of a poly-fibre prefilter and a main filter block of activated carbon.



The new model features both a built-in lighting and alarm system and operates at extremely low noise levels.

*Protecting the Environment*

Because the Miniflow 8 uses recirculatory technology pioneered by Astec Environmental Systems, expensive

conditioned and/or heated air is not wastefully pumped into the atmosphere via ducting. And neither are harmful fumes, ensuring maximum environmental protection as well.

For further information on the Astec Monair Miniflow 8 contact Environmental Systems Ltd, 30-31 Lynx Crescent, Weston-super-Mare, North Somerset, BS22 9BP. Tel: 01934 418685. Fax: 01934 419033. Email: [sales@asteces.co.uk](mailto:sales@asteces.co.uk)