

NiTi (Nickel Titanium)

NiTi wires were introduced as orthodontic wires due to their unique properties of shape memory and maintaining a constant force over a range of wire deflections to move teeth. RMO® offers many options for wires having low, medium, and high tooth-moving forces. The wire lines were designed with Thermaloy® having the lowest forces with a true heat-activation characteristic in the mouth. Thermaloy® Plus delivers medium forces, while still offering the feel of a thermal-activated wire. Orthonol® delivers high forces and has super elastic properties. Orthonol® has

been used to offer additional arch forms in the Ricketts® Penta-morphic shapes. Wires have been designed and manufactured in a logical and consistent way. In each wire line, a larger wire delivers a greater force. Among wire lines, for the same size wire (for example, 0.16" round or .017" x .025" rectangular), Thermaloy® delivers the lowest force; Thermaloy® Plus delivers a moderate force; and Orthonol® delivers the largest force. This gives the doctor a large number of options in selecting the type and size wire that is right for his/her practice.

Orthonol® Superelastic Nickel-Titanium

- Nickel-titanium alloys are shape memory alloys
- Orthonol® is superelastic nickel-titanium in preformed natural arch shapes
- Provides an ideal continuous gentle force at a constant, uninterrupted force level for tooth movement
- Reduces chair time by extending time between visits
- Permanent midline etchmarks: Three lines for a maxillary arch, one line for a mandibular arch

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary	Mandibular
Straight Lengths 7" (17.8cm)	.016 x .022	(0.406 x 0.559)	10		E01100

Preformed Natural Arches

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary	Mandibular
Round	0.012	(0.305)	10	A07011	A07031
	0.014	(0.356)	10	A07000	A07020
	0.016	(0.406)	10	A07001	A07021
	0.018	(0.457)	10	A07002	A07022
Square	.016 x .016	(0.406 x 0.406)	10	A07004	A07024
	.018 x .018	(0.457 x 0.457)	10	A07007	A07027
	.020 x .020	(0.508 x 0.508)	10	A07013	A07033
Rectangular	.016 x .022	(0.406 x 0.559)	10	A07005	A07025
	.017 x .025	(0.432 x 0.635)	10	A07006	A07026
	.018 x .025	(0.457 x 0.635)	10	A07008	A07028
	.019 x .025	(0.483 x 0.635)	10	A07009	A07029
	.021 x .025	(0.533 x 0.635)	10	A07010	A07030

Preformed Ideal Arches

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary	Mandibular
Round	0.012	(0.305)	10	A07400	A07420
	0.014	(0.356)	10	A07401	A07421
	0.016	(0.406)	10	A07402	A07422
	0.018	(0.457)	10	A07403	A07423
Square	.016 x .016	(0.406 x 0.406)	10	A07405	A07425
	.018 x .018	(0.457 x 0.457)	10	A07406	A07426
Rectangular	.016 x .022	(0.406 x 0.559)	10	A07407	A07427
	.017 x .025	(0.432 x 0.635)	10	A07408	A07428
	.018 x .025	(0.457 x 0.635)	10	A07409	A07429
	.019 x .025	(0.483 x 0.635)	10	A07410	A07430

Orthonol® Superelastic Nickel-Titanium Preformed Expanded Arch

- Broader than natural arch shape to provide greater expansion
- Superelastic nickel-titanium
- Universal- one arch wire for both maxillary and mandibular
- Permanent midline etchmarks

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary/Mandibular
Round	0.013	(0.330)	10	E07000
	0.015	(0.381)	10	E07001

Orthonol® Superelastic Nickel-Titanium Preformed Lingual Arches

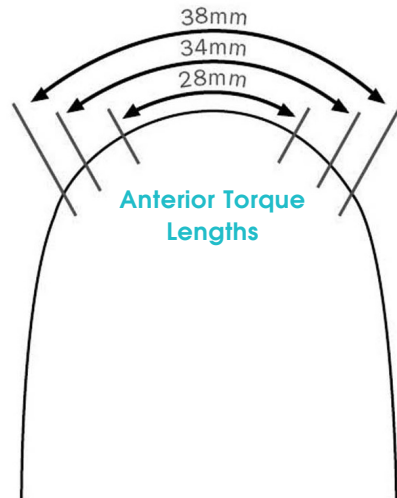
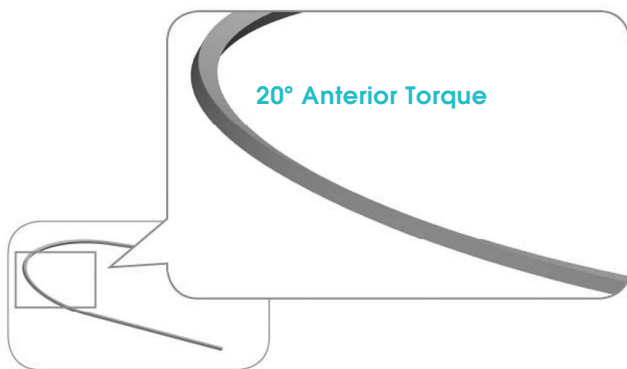
- Superelastic nickel-titanium
- Permanent midline etchmarks: three for maxillary, one for mandibula

Shape	Size (inch)	Size (mm)	Package Contains	Small	Medium	Large
Maxillary	0.012	(0.305)	10	E01720	E01723	E01726
Round	0.014	(0.356)	10	E01721	E01724	E01727
	0.016	(0.406)	10	E01722	E01725	E01728
Mandibular	0.012	(0.305)	10	E01740	E01743	E01746
Round	0.014	(0.356)	10	E01741	E01744	E01747
	0.016	(0.406)	10	E01742	E01745	E01748

Orthonol® Superelastic Nickel-Titanium Pre-Torqued Preformed Natural Arches

- Provides the addition of torque into the anterior region while maintaining non-torque in the posterior region
- Nickel-titanium alloys are shape memory alloys
- Provides 20° anterior torque. Three anterior torque lengths available: 28, 34 and 38mm
- Labial or lingual torque forces available by flipping wire orientation

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary 34mm	Maxillary 38mm	Mandibular 28mm
Rectangular	.016 x .022	(0.406 x 0.559)	5	A07803	A07806	A07800
	.017 x .025	(0.432 x 0.635)	5	A07804	A07807	A07801
	.019 x .025	(0.483 x 0.635)	5	A07805	A07808	A07802



Orthonol® Reverse Vector Arches

- Increases efficiency in closing anterior open bites and correcting excessive overbites
- Employs curve of spee to eliminate the need for step downs, step ups and other varieties of activating loops to correct overbites
- Leveling by extrusion (relative intrusion) can now be accomplished by one continuous reverse vector
- Minimizes molar rotation
- Controls incisor torque
- Permanent midline etchmarks: three lines for maxillary, one line for mandibular arch

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary	Mandibular
Round	0.016	(0.406)	10	A07051	A07071
	0.018	(0.457)	10	A07052	A07072
Square	.016 x .016	(0.406 x 0.406)	10	A07054	A07074
Rectangular	.016 x .022	(0.406 x 0.559)	10	A07055	A07075
	.017 x .025	(0.432 x 0.635)	10	A07056	A07076
	.019 x .025	(0.483 x 0.635)	10	A07059	A07079

Penta-Morphic® Arches (Ricketts®)

- Finishing arches for post-treatment provide long-term stability
- Five arch forms: normal, tapered, ovoid, narrow tapered and narrow ovoid
- Tooth size, facial type, and other morphological considerations have been built into the five forms
- Distal length for individualized bends or continuation to second molar
- Orthonol® (nickel-titanium) "dimpled" midline

Shape	Size (inch)	Size (mm)	Package Contains					
				Normal	Ovoid	Narrow Tapered	Tapered	Narrow Ovoid
Round	.014	(0.356)	10	E01500	E01501	E01502	E01503	E01504
	.016	(0.406)	10	E01505	E01506	E01507	E01508	E01509
	.018	(0.457)	10	E01510	E01511	E01512	E01513	E01514
Square	.016 x .016	(0.406 x 0.406)	10	E01520	E01521	E01522	E01523	E01524
Rectangular	.016 x .022	(0.406 x 0.559)	10	E01530	E01531	E01532	E01533	E01534
	.017 x .025	(0.432 x 0.635)	10	E01535	E01536	E01537	E01538	E01539