



Australian orthodontic appliances



History

A.J. WILCOCK PTY. LTD. was founded in 1946 by the Late Arthur J, Wilcock (Senior) who had previously been employed at the Melbourne University Metallurgy School. He involved himself in many war time research projects such as Tungsten wire production from the ore Wolframite.

The earlier years saw the main thrust of the Company involved in the manufacture of metallurgical research equipment.

A spin off from this era was the development of high tensile Stainless Steel wire for bite opening purposes and auxiliary devices used in orthodontics.

Today, A.J. Wilcock Australian Wire is an international household word in orthodontics and sets the standard against all other stainless steel orthodontic round or rectangular wires.

The Company's product range also includes; Orthodontic Springs, Preformed Arch Wires, Variable Cross-Section Wires and the unique (Pulse Straightened) Straight Lengths of wire for unmatched resiliency and smoothness.

A.J. Wilcock. Australian wire has now moved premises, and has been brought under the umbrella of Webster and Horsfall Ltd its long time raw material supplier. The purpose of this merger is to continue the produce Australian wire to the highest standards using the same machinery, materials and techniques.



Contents

Hard Drawn Stainless Steel Wires	1
Hard Drawn Stainless Steel Wires Pulse Straightened	2
Hard Drawn Stainless Steel Wires Pulse Straightened in Convenient Tubes	3
Mini Springs / Upright Springs	4
Wire - Reel and Coil	5
Stainless Steel Combination Wires	6
Stainless Steel Combination Wires In Straight Lengths	7
Plain Arch Wires	8
Pre Formed Arch Wires	9
Australian Wire Arches	10
NiTi Thermal Active Archwires	11
NiTi Super Elastic Archwires	12-13
Wire Bending High Tensile Pliers	14

A J Wilcock world famous "Australian Wire"

Although our wires have been imitated by many manufacturers over the years, A J Wilcock Australian wire remains the global market leader in high tensile stainless steel archwires.

For over fifty years, "Australian Wire" has been a household name in orthodontics. The extraordinary properties of these wires are due to the research and fine engineering skills employed in the processing of the wires. Wilcock wires are well known for their resilience and ability to withstand masticatory forces as well as being able to maintain their shape even when auxiliaries and elastics are used. There is no other wire which opens the bite as effectively as Wilcock wire.



The wires on this page are listed in order of resilience. The Regular and Regular Plus are easily formed and are excellent wires for general use and utility wires. The Special, Special Plus and Premium wires are ideal for bite opening and where high resilience is required. The finer wires such as Premium Plus and Supreme are ideal for auxiliaries.

Hard Drawn Stainless Steel Wire



Spools (25ft)

Product No.	Diameter	Grade
229-000	0.012"	Regular
230-100	0.014"	Regular
231-300	0.016"	Regular
232-400	0.018"	Regular
233-500	0.020"	Regular
234-600	0.022"	Regular
235-700	0.024"	Regular
229-010	0.012"	Regular Plus
230-110	0.014"	Regular Plus
231-310	0.016"	Regular Plus
232-410	0.018"	Regular Plus
233-510	0.020"	Regular Plus
229-020	0.012"	Special
230-120	0.014"	Special
231-320	0.016"	Special
232-420	0.018"	Special
233-520	0.020"	Special
229-030	0.012"	Special Plus
230-130	0.014"	Special Plus
231-330	0.016"	Special Plus
232-430	0.018"	Special Plus
233-530	0.020"	Special Plus
234-630	0.022"	Special Plus
235-730	0.024"	Special Plus
229-040	0.012"	Premium
230-140	0.014"	Premium
231-340	0.016"	Premium
232-440	0.018"	Premium
233-540	0.020"	Premium
228-050	0.010"	Premium Plus
228-150	0.011"	Premium Plus
229-050	0.012"	Premium Plus
230-150	0.014"	Premium Plus
231-350	0.016"	Premium Plus
232-450	0.018"	Premium Plus
226-060	0.008"	Supreme
227-060	0.009"	Supreme
228-060	0.010"	Supreme
228-160	0.011"	Supreme



Pulse Straightened wires have a smooth low friction surface with the same resilient properties as the coiled product, giving the added benefit of saving time to straighten the arch posterior segments and provide ease of use. Available only in Special Plus, Premium, Premium Plus and Supreme.

Stainless Steel Wire Pulse Straightened



Product No.	Diameter	Grade
230-132	0.014"	Special Plus
231-332	0.016"	Special Plus
232-432	0.018"	Special Plus
233-542	0.020"	Premium
228-052	0.010"	Premium Plus
228-152	0.011"	Premium Plus
229-052	0.012"	Premium Plus
230-152	0.014"	Premium Plus
231-352	0.016"	Premium Plus
232-452	0.018"	Premium Plus
226-062	0.008"	Supreme
227-062	0.009"	Supreme
228-062	0.010"	Supreme
228-162	0.011"	Supreme
229-062	0.012"	Supreme



Convenient to use and easy to store, these Pulse Straightened wires come 30 pieces per tube and are available in every grade and dimension. This is one of most popular products and especially valuable when time is a factor.



Cut Straight 10" Lengths



30 x 10" per tube (25ft)

Product No.	Diameter	Grade
229-001	0.012"	Regular
230-101	0.014"	Regular
231-301	0.016"	Regular
232-401	0.018"	Regular
233-501	0.020"	Regular
234-601	0.022"	Regular
235-701	0.024"	Regular
229-011	0.012"	Regular Plus
230-111	0.014"	Regular Plus
231-311	0.016"	Regular Plus
232-411	0.018"	Regular Plus
233-511	0.020"	Regular Plus
229-021	0.012"	Special
230-121	0.014"	Special
231-321	0.016"	Special
232-421	0.018"	Special
233-521	0.020"	Special
229-031	0.012"	Special Plus
230-131	0.014"	Special Plus
231-331	0.016"	Special Plus
232-431	0.018"	Special Plus
233-531	0.020"	Special Plus
234-631	0.022"	Special Plus
235-731	0.024"	Special Plus
229-041	0.012"	Premium
230-141	0.014"	Premium
231-341	0.016"	Premium
232-441	0.018"	Premium
233-541	0.020"	Premium
228-051	0.010"	Premium Plus
228-151	0.011"	Premium Plus
229-051	0.012"	Premium Plus
230-151	0.014"	Premium Plus
231-351	0.016"	Premium Plus
232-451	0.018"	Premium Plus
226-061	0.008"	Supreme
227-061	0.009"	Supreme
228-061	0.010"	Supreme
228-161	0.011"	Supreme



Wilcock Mini-Springs are world famous for their ability to upright teeth due to the built in superior energy storage capacity wire processing and its unique design. The Mini-Springs are easy to insert and do not irritate the lips. Available with short or long legs.



Universal Uprighting Spring made from 0.012 Premium Plus Grade to suit Edgewise Brackets with Vertical Slot.

Springs

Packets of 10

Mini Springs formed from "Supreme" Wilcock wire

Product No.	Quadrant	Wire Size	Length of Leg
222-170	Lower Left C/Clockwise	0.010"	Short
222-171	Lower Right Clockwise	0.010"	Short
223-170	Lower Left C/Clockwise	0.010"	Long
223-171	Lower Right Clockwise	0.010"	Long
222-174	Lower Left C/Clockwise	0.011"	Short
222-175	Lower Right Clockwise	0.011"	Short
222-176	Lower Left C/Clockwise	0.011"	Long
222-177	Lower Right Clockwise	0.011"	Long
333-190	Lower Left C/Clockwise	0.010"	Long
333-191	Lower Right Clockwise	0.010"	Long
333-192	Lower Left C/Clockwise	0.010"	Short
333-193	Lower Right Clockwise	0.010"	Short

Upright Springs formed from "Premium Plus" Wilcock wire.

Product No.	Quadrant	Wire Size	Length of Leg
222-113	Lower Left C/Clockwise	0.012"	Short
222-114	Lower Right Clockwise	0.012"	Short
222-143	Lower Left C/Clockwise	0.012"	Long
222-144	Lower Right Clockwise	0.012"	Long
222-115	Lower Left C/Clockwise	0.014"	Short
222-116	Lower Right Clockwise	0.014"	Short
222-145	Lower Left C/Clockwise	0.014"	Long
222-146	Lower Right Clockwise	0.014"	Long

Universal Vertical Slot Uprighting Springs

Product No.	Quadrant	Wire Size	Length of Leg
222-160	Left	0.012"	Long
222-161	Right	0.012"	Long



Wire - Reel and Coil

Silver Solder Wire

Product No.	Diameter
810-026 (5ft)	0.026"
810-126 (25ft)	0.026"

Laboratory Wire

Size sold in 500gsm weights

Product No.	Diameter
050 - 500	0.5mm
060 - 500	0.6mm
070 - 500	0.7mm
080	0.8mm
090	0.9mm
100	1mm
110	1.1mm
120	1.2mm

Brass Separating Wire (8oz Reel)

Product No.	Diameter
820-018	0.018"
820-020	0.020"

Stainless Combination Wires

Special Plus Grade Square

Tubes of 10

Rectangular Combination

Product No.	Wire Size
651-622	0.016" x 0.022" ANT
651-822	0.018" x 0.022" ANT
661-725	0.017" x 0.025" ANT
661-825	0.018" x 0.025" ANT
651-925	0.019" x 0.025" ANT
662-125	0.021" x 0.025" ANT
652-127	0.0215" x 0.027" ANT

Square Combination

Product No.	Wire Size
611-616	0.016" x 0.016"
611-717	0.017" x 0.017"

Preformed Lingual Arches Combination

Anterior sizes 22mm to 50mm

Product No.	Wire Size
671-622	0.016" x 0.022" ANT
671-822	0.018" x 0.022" ANT
671-725	0.017" x 0.025" ANT
671-825	0.018" x 0.025" ANT
671-925	0.019" x 0.025" ANT
672-125	0.021" x 0.025" ANT
672-127	0.0215" x 0.027" ANT

Preformed Labial Arches Combination

Anterior sizes 22mm to 50mm

Product No.	Wire Size
771-622	0.016" x 0.022" ANT
771-822	0.018" x 0.022" ANT
771-725	0.017" x 0.025" ANT
771-825	0.018" x 0.025" ANT
771-925	0.019" x 0.025" ANT
772-125	0.021" x 0.025" ANT
772-127	0.0215" x 0.027" ANT

These unique Special Plus Grade stainless steel wires are ideal for maintaining arch shape even if other auxiliaries and elastics are being used. Combination wires are rectangular in the anterior segment to maintain torque while the round posterior segments allow sliding mechanics.

Stainless Combination Wires Straight Lengths

Special Plus Grade Rectangular

Tubes of 10

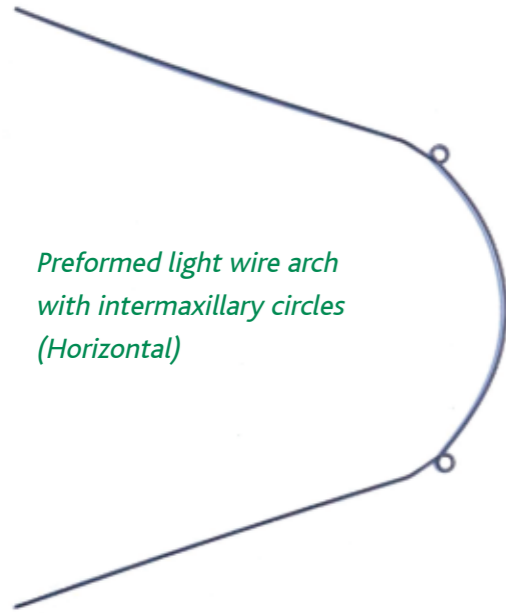
Product No.	Wire Size
720-622	0.016" x 0.022"
720-722	0.017" x 0.022"
720-725	0.017" x 0.025"
720-7525	0.0175" x 0.025"
720-822	0.018" x 0.022"
720-825	0.018" x 0.025"
720-922	0.019" x 0.022"
720-925	0.019" x 0.025"
720-125	0.021" x 0.025"
720-1527	0.0215" x 0.027"

Special Plus Grade Square

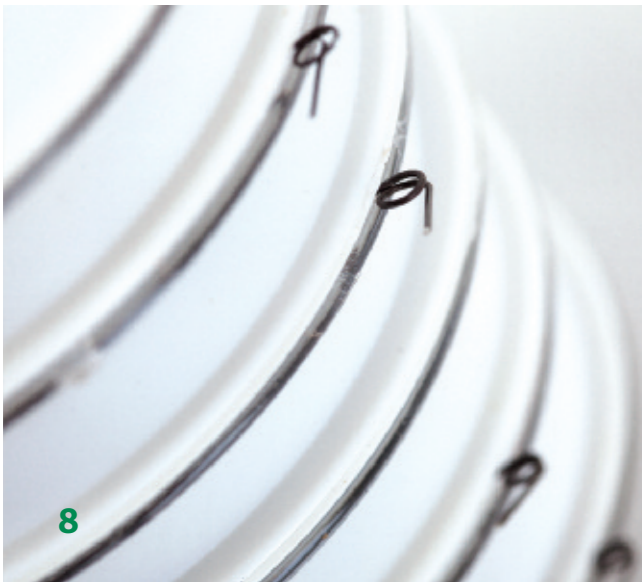
Tubes of 10

Product No.	Wire Size
620-616	0.016" x 0.016"
620-717	0.017" x 0.017"
620-818	0.018" x 0.018"

The A.J. Wilcock Stainless Steel rectangular wires are manufactured using a unique ageing process giving the wire unmatched resiliency and energy storage.



Preformed light wire arch with intermaxillary circles (Horizontal)



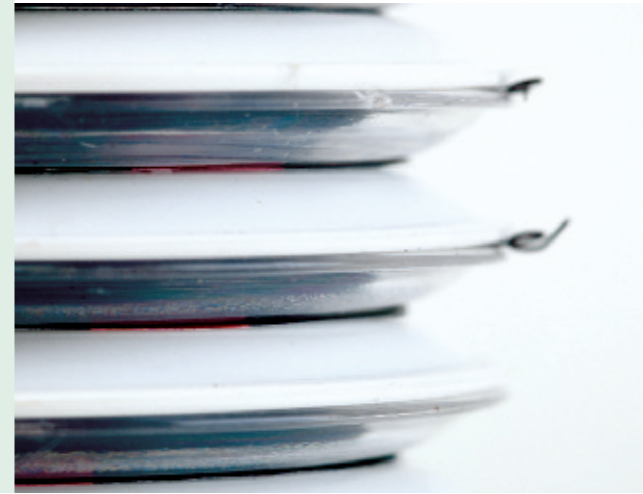
Plain Archwires Special Plus Grade with Horizontal Loops

Packets of 2

Product No.	Diameter	Grade	Product No.	Diameter	Grade
781-428	0.014"	28	781-028	0.020"	28
781-430	0.014"	30	781-030	0.020"	30
781-432	0.014"	32	781-032	0.020"	32
781-434	0.014"	34	781-034	0.020"	34
781-436	0.014"	36	781-036	0.020"	36
781-438	0.014"	38	781-038	0.020"	38
781-440	0.014"	40	781-040	0.020"	40
781-442	0.014"	42	781-042	0.020"	42
781-444	0.014"	44	781-044	0.020"	44
781-446	0.014"	46	781-046	0.020"	46
781-448	0.014"	48	781-048	0.020"	48
781-450	0.014"	50	781-050	0.020"	50
781-628	0.016"	28	781-228	0.022"	28
781-630	0.016"	30	781-230	0.022"	30
781-632	0.016"	32	781-232	0.022"	32
781-634	0.016"	34	781-234	0.022"	34
781-636	0.016"	36	781-236	0.022"	36
781-638	0.016"	38	781-238	0.022"	38
781-640	0.016"	40	781-240	0.022"	40
781-642	0.016"	42	781-242	0.022"	42
781-644	0.016"	44	781-244	0.022"	44
781-646	0.016"	46	781-246	0.022"	46
781-648	0.016"	48	781-248	0.022"	48
781-650	0.016"	50	781-250	0.022"	50
781-828	0.018"	28			
781-830	0.018"	30			
781-832	0.018"	32			
781-834	0.018"	34			
781-836	0.018"	36			
781-838	0.018"	38			
781-840	0.018"	40			
781-842	0.018"	42			
781-844	0.018"	44			
781-846	0.018"	46			
781-848	0.018"	48			
781-850	0.018"	50			



Preformed light wire arch with intermaxillary circles (Inclined)

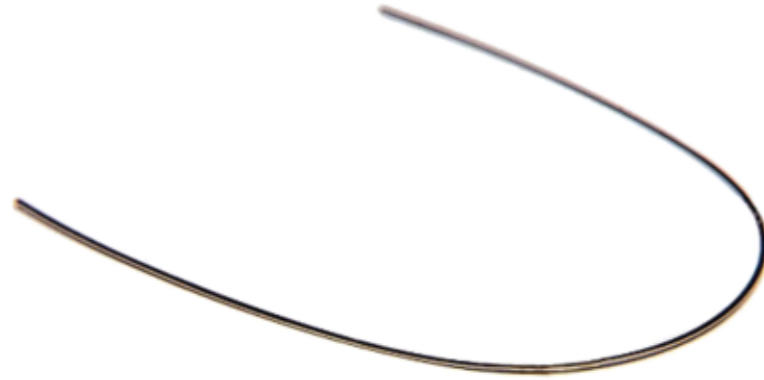


Plain Archwires Special Plus Grade with Vertical Loops

Packets of 2

Product No.	Diameter	Grade	Product No.	Diameter	Grade
781-428	0.014"	28	781-028	0.020"	28
781-430	0.014"	30	781-030	0.020"	30
781-432	0.014"	32	781-032	0.020"	32
781-434	0.014"	34	781-034	0.020"	34
781-436	0.014"	36	781-036	0.020"	36
781-438	0.014"	38	781-038	0.020"	38
781-440	0.014"	40	781-040	0.020"	40
781-442	0.014"	42	781-042	0.020"	42
781-444	0.014"	44	781-044	0.020"	44
781-446	0.014"	46	781-046	0.020"	46
781-448	0.014"	48	781-048	0.020"	48
781-450	0.014"	50	781-050	0.020"	50
781-628	0.016"	28	781-228	0.022"	28
781-630	0.016"	30	781-230	0.022"	30
781-632	0.016"	32	781-232	0.022"	32
781-634	0.016"	34	781-234	0.022"	34
781-636	0.016"	36	781-236	0.022"	36
781-638	0.016"	38	781-238	0.022"	38
781-640	0.016"	40	781-240	0.022"	40
781-642	0.016"	42	781-242	0.022"	42
781-644	0.016"	44	781-244	0.022"	44
781-646	0.016"	46	781-246	0.022"	46
781-648	0.016"	48	781-248	0.022"	48
781-650	0.016"	50	781-250	0.022"	50
781-828	0.018"	28			
781-830	0.018"	30			
781-832	0.018"	32			
781-834	0.018"	34			
781-836	0.018"	36			
781-838	0.018"	38			
781-840	0.018"	40			
781-842	0.018"	42			
781-844	0.018"	44			
781-846	0.018"	46			
781-848	0.018"	48			
781-850	0.018"	50			

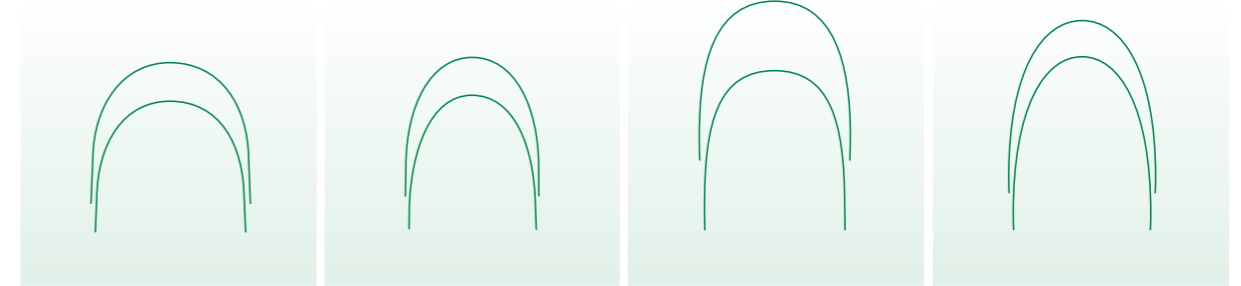
A J Wilcock Australian Wire Arches



These stainless steel archwires are manufactured by A.J. Wilcock to fine tolerances and have consistently square, accurately-made edges for precise torque control. Arches have mid-line markings to identify upper and lower arches.



A J Wilcock Special Plus Pre-formed Arches

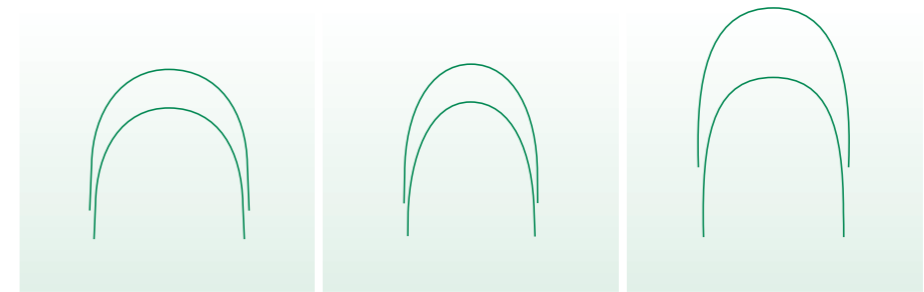


Square

Ovoid

Nature

Tapered



Lingual

Roth

ZZ

All made from 0.016 Australian Wire.

Please enquire for other sizes.

NiTi Thermal Active Archwires

AJW thermal active NiTi is dead soft when chilled below 50C and the thermal properties achieve optimum activation at 320C. This unique characteristic allows for simplified bracket engagement in any malocclusion and potential use of large cross-sectional wires from initiation of treatment to achieve initial levelling and alignment rapidly and without trauma.

Many orthodontists induce this martensitic phase by chilling the wire below its transition temperature prior to replacement to simplify engagement, particularly in moderate to severe malocclusion scenarios. Following engagement, as the thermal wire elevates in temperature within the oral cavity, the transition from martensitic to austenitic phases causes the force level to increase and the shape memory phenomenon to occur. Due to the extreme pliability and reduced force characteristics of the Thermal NiTi, it is possible to engage wires of larger diameter than would otherwise be practical, thereby necessitating fewer wire changes and earlier translation of bracket prescription information.



Square

Ovoid

Nature

Tapered

Wire Size	Upper	Lower	Upper	Lower	Upper	Lower
0.012"	AJW011201	AJW011202	AJW021201	AJW021202	AJW031201	AJW031202
0.014"	AJW011401	AJW011402	AJW021401	AJW021402	AJW031401	AJW031402
0.016"	AJW011601	AJW011602	AJW021601	AJW021602	AJW031601	AJW031602
0.018"	AJW011801	AJW011802	AJW021801	AJW021802	AJW031801	AJW031802
0.020"	AJW012001	AJW012002	AJW022001	AJW022002	AJW032001	AJW032002
0.016"*0.016"	AJW01161601	AJW01161602	AJW02161601	AJW02161602	AJW03161601	AJW03161602
0.016"*0.022"	AJW01162201	AJW01162202	AJW02162201	AJW02162202	AJW03162201	AJW03162202
0.017"*0.022"	AJW01172201	AJW01172202	AJW02172201	AJW02172202	AJW03172201	AJW03172202
0.017"*0.025"	AJW01172501	AJW01172502	AJW02172501	AJW02172502	AJW03172501	AJW03172502
0.018"*0.022"	AJW01182201	AJW01182202	AJW02182201	AJW02182202	AJW03182201	AJW03182202
0.018"*0.025"	AJW01182501	AJW01182502	AJW02182501	AJW02182502	AJW03182501	AJW03182502
0.019"*0.025"	AJW01192501	AJW01192502	AJW02192501	AJW02192502	AJW03192501	AJW03192502
0.021"*0.025"	AJW01212501	AJW01212502	AJW02212501	AJW02212502	AJW03212501	AJW03212502

10 per pack

Wire Size	Upper	Lower
0.012"	AJW081201	AJW081202
0.014"	AJW081401	AJW081402
0.016"	AJW081601	AJW081602
0.018"	AJW081801	AJW081802
0.020"	AJW082001	AJW082002
0.016"*0.016"	AJW08161601	AJW08161602
0.016"*0.022"	AJW08162201	AJW08162202
0.017"*0.022"	AJW08172201	AJW08172202
0.017"*0.025"	AJW08172501	AJW08172502
0.018"*0.022"	AJW08182201	AJW08182202
0.018"*0.025"	AJW08182501	AJW08182502
0.019"*0.025"	AJW08192501	AJW08192502
0.021"*0.025"	AJW08212501	AJW08212502

10 per pack

NiTi Super Elastic Archwires

The formulation of Nickel Titanium alloys and their subsequent programming allows for various beneficial properties to be engineered into the final product. By fine-tuning the molecular balance of ingredients and the time/temperature processing of the alloys, specific characteristics are realized. AJW Superelastic NiTi is formulated to provide consistent, predictable forces during treatment.

AJW Superelastic NiTi is provided in its austenitic, or activated, phase at all times.

The superb rebound and memory characteristics ensure desired results without the need for adjustment or modification. Superelastic NiTi allows for a high degree of deflection without causing deformation of the original arch from characteristics. Efficiency or performance ensures achievement of objectives without need for multiple staging of archwires as with stainless steel alternatives.



Square

Ovoid

Nature

Wire Size	Upper	Lower	Upper	Lower	Upper	Lower
0.012"	AJW011201	AJW011202	AJW021201	AJW021202	AJW031201	AJW031202
0.014"	AJW011401	AJW011402	AJW021401	AJW021402	AJW031401	AJW031402
0.016"	AJW011601	AJW011602	AJW021601	AJW021602	AJW031601	AJW031602
0.018"	AJW011801	AJW011802	AJW021801	AJW021802	AJW031801	AJW031802
0.020"	AJW012001	AJW012002	AJW022001	AJW022002	AJW032001	AJW032002
0.016"*0.016"	AJW01161601	AJW01161602	AJW02161601	AJW02161602	AJW03161601	AJW03161602
0.016"*0.022"	AJW01162201	AJW01162202	AJW02162201	AJW02162202	AJW03162201	AJW03162202
0.017"*0.022"	AJW01172201	AJW01172202	AJW02172201	AJW02172202	AJW03172201	AJW03172202
0.017"*0.025"	AJW01172501	AJW01172502	AJW02172501	AJW02172502	AJW03172501	AJW03172502
0.018"*0.022"	AJW01182201	AJW01182202	AJW02182201	AJW02182202	AJW03182201	AJW03182202
0.018"*0.025"	AJW01182501	AJW01182502	AJW02182501	AJW02182502	AJW03182501	AJW03182502
0.019"*0.025"	AJW01192501	AJW01192502	AJW02192501	AJW02192502	AJW03192501	AJW03192502
0.021"*0.025"	AJW01212501	AJW01212502	AJW02212501	AJW02212502	AJW03212501	AJW03212502

10 per pack

NiTi Super Elastic Archwires



Tapered

Wire Size	Upper	Lower
0.012"	AJW081201	AJW081202
0.014"	AJW081401	AJW081402
0.016"	AJW081601	AJW081602
0.018"	AJW081801	AJW081802
0.020"	AJW082001	AJW082002
0.016"*0.016"	AJW08161601	AJW08161602
0.016"*0.022"	AJW08162201	AJW08162202
0.017"*0.022"	AJW08172201	AJW08172202
0.017"*0.025"	AJW08172501	AJW08172502
0.018"*0.022"	AJW08182201	AJW08182202
0.018"*0.025"	AJW08182501	AJW08182502
0.019"*0.025"	AJW08192501	AJW08192502
0.021"*0.025"	AJW08212501	AJW08212502

10 per pack



RSC

Wire Size	Upper	Lower
0.012"	AJW041201	AJW041202
0.014"	AJW041401	AJW041402
0.016"	AJW041601	AJW041602
0.018"	AJW041801	AJW041802
0.020"	AJW042001	AJW042002
0.016"*0.016"	AJW04161601	AJW04161602
0.016"*0.022"	AJW04162201	AJW04162202
0.017"*0.022"	AJW04172201	AJW04172202
0.017"*0.025"	AJW04172501	AJW04172502
0.018"*0.022"	AJW04182201	AJW04182202
0.018"*0.025"	AJW04182501	AJW04182502
0.019"*0.025"	AJW04192501	AJW04192502
0.021"*0.025"	AJW04212501	AJW04212502

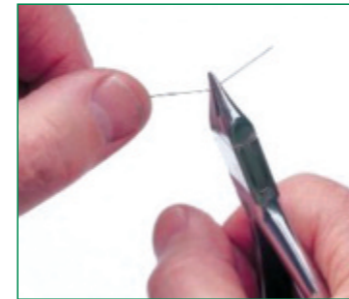
2 per pack

Wire Bending High Tensile Pliers



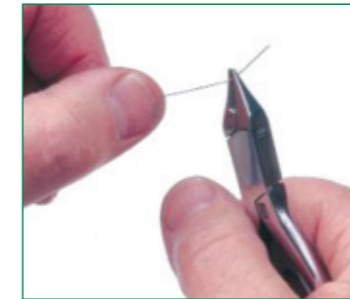
Polished Wire Bending Plier - Mollenhauer

Product No.	Product Name
100-240	Mollenhauer High Tensile Wire Bending Plier



Step 1

Bend wire around polished Flat Beak of plier with minimal gripping pressure on wire for approximately 80 degrees.



Step 2

Interchange beak and continue to bend around the Round Beak to continue loop. This permits firmer grip of wire for ease of wire bending.



Step 3

Complete loop around Beak



Step 4

Finished loop

The Mollenhauer bending plier is strongly recommended for bending Wilcock wire as it helps to minimise breakages. The tips are tungsten carbide inserted for durability, with rounded and highly polished edges.

Note: Thumb is approximately 12mm from wire beaks to minimise stressing of the wire at the plier tips.



specialist wire manufacturer



manufacturer and stockist of steel wire rope



Australian orthodontic appliances

Hay Mills, Birmingham B25 8DW England

T: 0121 772 9794 F: 0121 766 5816

E: enquiries@ajwilcock.com www.ajwilcock.com