Wires & Springs

"D-Tech super elastic nickel titanium archwire is made of the best quality, nickel titanium, so it retains its shape & memory longer, reducing chair time and patient wire changes."

Ni Ti Archwires

Ni Ti SE Archwires

Pre-Stoppered Wire

Dimpled Wire

Reverse Curve Wire

Regular with toe-in

Straight Leg

Pre Torqued

Heat Activated

Ni Ti Twist Wire

Ni Ti Lingual Archwire

Ni Ti Stepped Force

Ni Ti Springs

Open Spring

Close Spring

Distalising Spring

Ti - Mol Alloy

Stainless Steel Wire

Aesthetic Wire

Sliver Rhodium Wire

Teflon Coated Wire

Orthodontic Wire

Nickel Titanium Spool

Ni Ti Archwires

Super Elastic Bright

Features

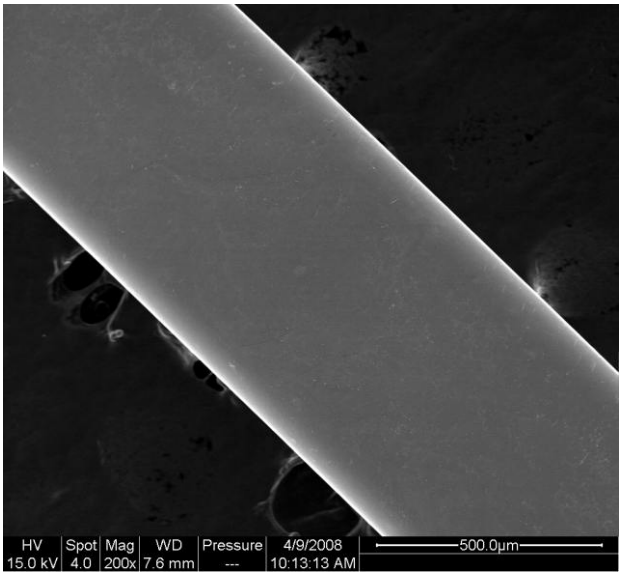
- Bright finished... Low friction.
- Permanent midline marking.
- Strength and ductility combination.
- High resistance to twist and fatigue.
- Smooth surface.
- Remarkable effect and patient comfort.
- It has a smooth bright finish, which allows brackets to slide freely along the wire, thus lowering bracket friction and accelerating tooth movement.

"D-Tech super elastic nickel titanium archwire is made of the best quality, nickel titanium, so it retains its shape memory longer, reducing chair time and patient wire changes."

Super elastic nickel titanium preform arch wire for easy engagement and delivery of constant but gentle force that effectively moves teeth with a minimum of patient discomfort

Ideal for alignment and leveling in early to mid-stages of treatment. All NiTi wires exhibit a unique "Superelastic" behavior

SEM photograph Magnification 200



Special surface polishing treatment ensures the best surface condition of wires.

10 per pack

Size Guide	
☐	0.016 X 0.016 U/L
☐	0.016 X 0.022 U/L
☐	0.017 X 0.022 U/L
☐	0.017 X 0.025 U/L
☐	0.018 X 0.022 U/L
☐	0.018 X 0.025 U/L
☐	0.019 X 0.025 U/L
☐	0.021 X 0.025 U/L

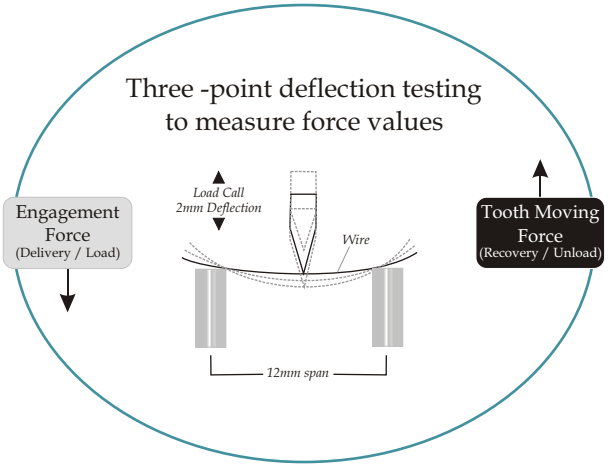
10 per pack

Size Guide	
○	0.012 U/L
○	0.014 U/L
○	0.016 U/L
○	0.018 U/L
○	0.020 U/L

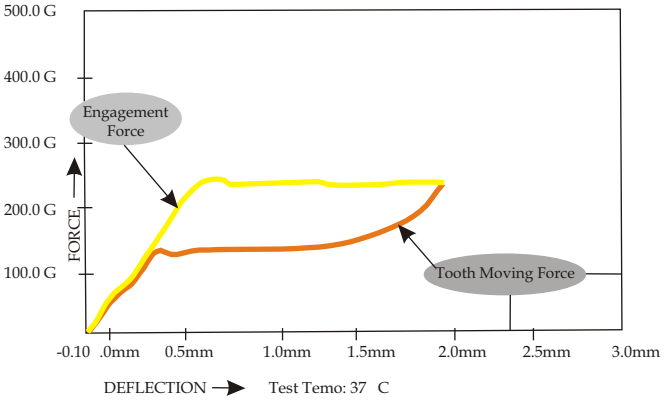
Ni Ti SE Archwires

Three-point deflection testing to measure force values

State- of - the - art ,Bose ELF 3200 mechanical test system was used for 3 point bending testing of orthodontic wires. Samples were immeresed into the water chamber which was controlled at 36°Celcius.



Hysteresis Graph



NiTi wires need to demonstrates *extreme elasticity*, *consistent force*, and *shape memory*, over a limited range of deflection.

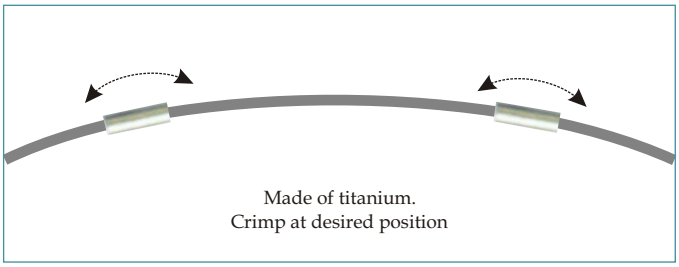
Flat curve of tooth moving force evidences "Constant Force".

Extreme elasticity shape memory is shown by near complete rebound

Wire are tested on Bose ELF 3200 machine for every production batch.

Bose ELF 3200

Pre - Stoppered Wire



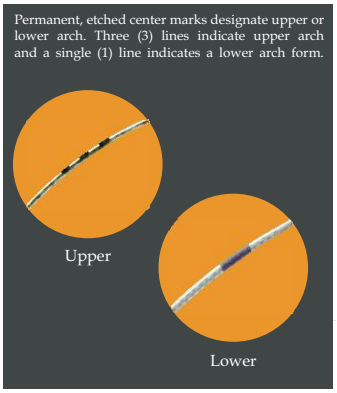
The possibility of nickel titanium archwires slipping through brackets and migrating around the arch has long been recognized. Dimple offsets at the midline have been the conventional solution to the problem.

D- Tech now offers another alternative. Our new "Pre-Stopped NiTi Archwires" come pre-loaded with crimpable stops. The stops are friction fit on the wire so they slide to position and stay there. A final crimp is then applied to permanently set the stops in place. The stops are soft and crimp easily using a plier or cutter.

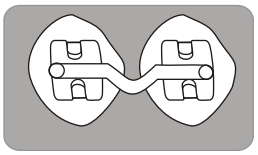
Pre-Stopped wires are effective with any bracket system and are especially popular for use with self-ligating brackets.We have stoppers in 3 different sizes:

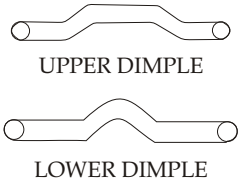
A 012,014,016,018,020
B 16x16,16x22,17x22,18x22
C 16x22,17x25,18x2,19x25,21x25

Round / Rectangular



Dimpled Wire





Our upper NiTi dimpled archwire is widened to minimise the potential for wire migration

Dimpled "Notch" reduces archwire drift and "Slide-Out"

Reverse Curve

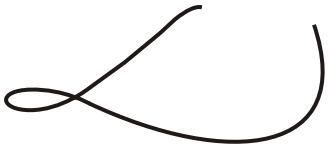
(Regular with toe - in)

Unique design counters the extrusive component of space closing force while continuing to open the bite. Curved in ends prevent mesio-lingual rotation of molars. Avoids extraction space tipping.

Reverse curve wires can be used for bite correction or, with springs and elastomerics, for retraction.

10 per pack

Size Guide			
○	0.014 U/L	☐	0.016 X 0.016 U/L
○	0.016 U/L	☐	0.016 X 0.022 U/L
○	0.018 U/L	☐	0.017 X 0.025 U/L
		☐	0.019 X 0.025 U/L



Reverse curve wire with toe - in

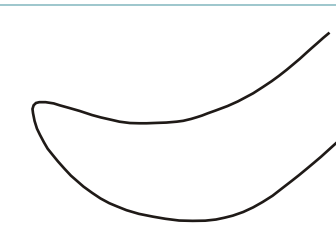
Reverse Curve

(Straight Leg)

A low-force, reverse curve of spee wire designed to open bites, prevent molar rotations & maintain anterior torque without crown tipping.

Available in all other sizes on request *10 per pack*

Size Guide			
○	0.014 U/L	☐	0.016 X 0.016 U/L
○	0.016 U/L	☐	0.016 X 0.022 U/L
○	0.018 U/L	☐	0.017 X 0.025 U/L
		☐	0.019 X 0.025 U/L



Reverse curve wire with straight leg

Pre- torqued R.C

D - Tech ,pre- torqued R.C wires are shape-memory, heat-activated wires which are soft at room temperature for easy ligation and become fully active in the mouth. The gentle forces remain consistent throughout placement and are noticeably more comfortable for the patient. The superb flexibility reduces the chance of debonding brackets.

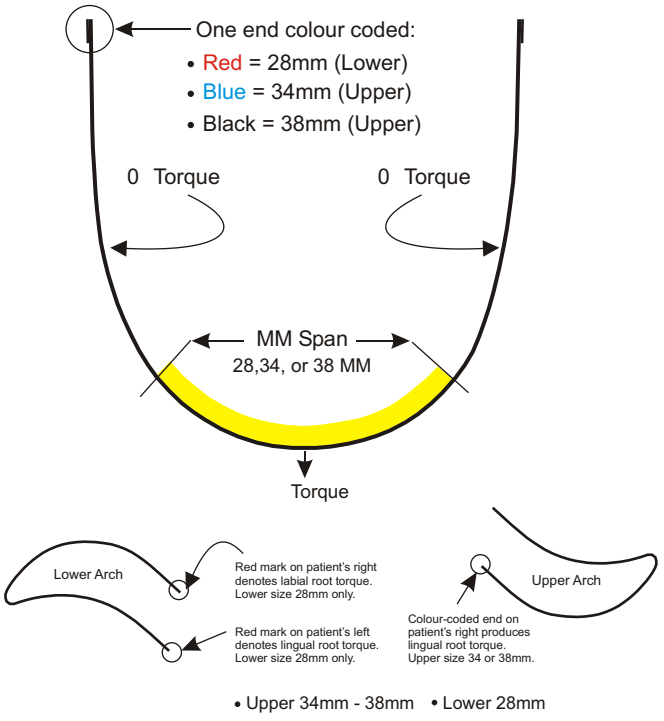
- Bite opening or closing.
- Initial leveling and aligning.
- Arch consolidation and expansion.
- Deep and open bite correction.
- Retraction of flared, protruding incisors

Our **new** reverse curve wires with "Built in Torque."
Write to us for details at **office@dtechasia.com**

Pre-Torqued Reverse Curve Ni Ti *4 per pack*

	Size Guide	
☐	0.017 X 0.025	Lower 28mm w/Labial root torque
☐	0.017 X 0.025	Lower 28mm w/Lingual root torque
☐	0.017 X 0.025	Upper 34mm w/Lingual root torque
☐	0.017 X 0.025	Upper 38mm w/Lingual root torque
☐	0.019 X 0.025	Lower 28mm w/Labial root torque
☐	0.019 X 0.025	Lower 28mm w/Lingual root torque
☐	0.019 X 0.025	Upper 34mm w/Lingual root torque
☐	0.019 X 0.025	Upper 38mm w/Lingual root torque

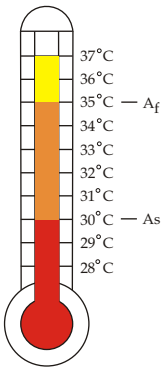
Reverse Curve NiTi wires with 20° pre-torqued anterior segments increase torque control during intrusion. Lingual root torque is applied in upper archwires. Lower wires offer the choice of lingual or labial root torque.

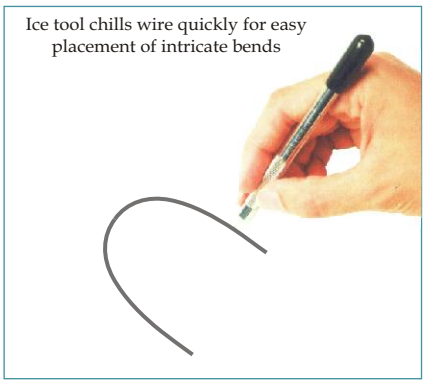


Heat Activated

NEW

The new Heat Activated Ni Ti wire is partly martensitic at room temperature. The martensitic characteristics that we refer to is the "soft"state of the Ni Ti material. The material gives you the "best of both worlds" offering you a soft easy to manipulate wire at room temperature and fully resilient wire after insertion in to the mouth. Our new wire is martensitic below 30°C. So its soft at room temperature. Its fully austenitic at 35°C, so it is super elastic in the mouth.





Austenitic Start As = 30°C
Austenitic Finish Af = 35°C

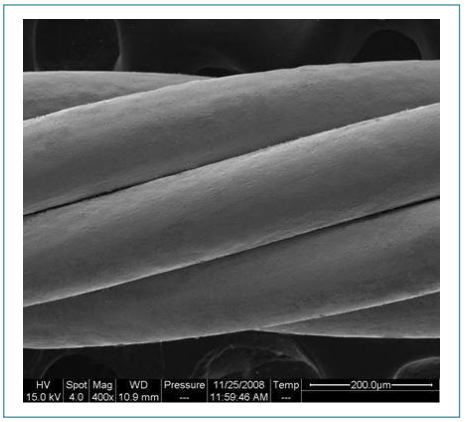
Our new heat activated wire is soft, even at room temperature but fully austenitic at 35°C in the mouth.

HEAT ACTIVATED *10 per pack*

Size Guide			
○	0.014 U/L	□	0.016 X 0.022 U/L
○	0.016 U/L	□	0.017 X 0.025 U/L
○	0.018 U/L	□	0.019 X 0.025 U/L

NEW

Ni ti Twist Wire



Seven Strand

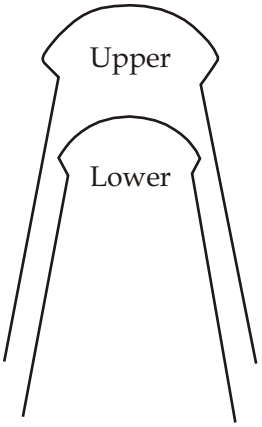
Features

- Ni Ti twist wire is an amazingly flexible initial wire
- Available in 0.018"
- Provides true gentle "constant force".

Lingual Ni Ti Archwire

For lingual orthodontics.

D- Tech introduces a line of **Lingual Archwires** . Archforms are designed and adapted precisely to lingual anatomy.



*Available in 3 sizes

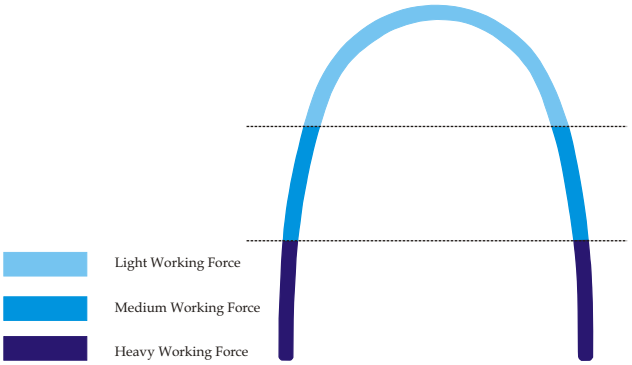
- Small
- Medium
- Large

NEW

Stepped force Ni Ti wire

These archwires offer 3 different forces through the three regions of the arch:

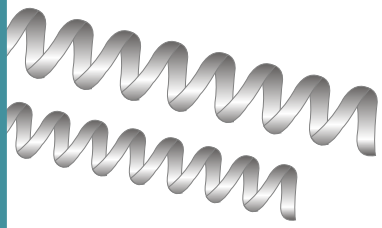
The anterior region consists of a light super-elastic force; the bicuspid_region is engineered to produce a increasing amount of super-elastic force, the posterior region exhibits the highest force.



Ni Ti Springs

Coil springs can be generally categorized into three types: Compression, Extension, and Distalizing.

Compression, or Open Coil, springs are used to create spaces between teeth or, more simply, to move points away from one another. The coils are compressed when loaded and provide forces outward to create and maintain needed space.



Extension, or Closed Coil, springs are used to close spaces between teeth or, more simply, to move points closer to one another. The coils are extended when loaded and provide retraction forces to close spaces.

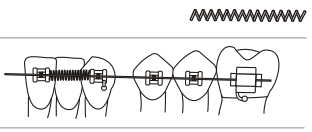
Distalizing, or Open-Closed Coil, springs are specialized springs used to distalize molars. The springs are compressed when loaded and exert forces against the molars to tip or move them in the proper direction.

Ni Ti Open Coil Springs

Ni Ti super elastic open coil spring comes in standard lengths of 7 inches and can be deflected to twice their original length without causing any permanent deformation. They provide Constant force for maximum efficiency in opening spaces when placed on wire compressed between two brackets.
Packaging - 1 pc(7 inch length)/pack.

OPEN COIL SPRING — 1 per pack

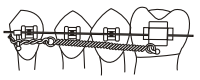
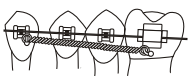
Force	Length
Light (010)	7″ length
Medium (012)	7″ length



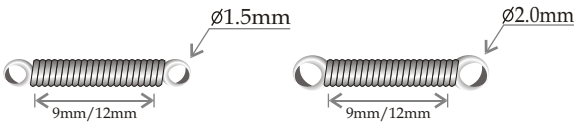
Ni Ti Close Coil Springs

Ni Ti close springs with loop ends are designed to close spaces with consistent and predictable results. They provide excellent results in closing spaces and anterior retraction. They can be easily engaged to bracket hook or buccal tube hook. In case the distance between two hooks exceeds expansion limits of this coil spring, use ligature with the close spring to engage hooks.
Packaging - 10 pcs/pack

CLOSE COIL SPRING — 10 per pack

Length	Eyelet	
L 9mm L 12mm	E 1.5 E 1.5	
L 9mm L 12mm	E 2.0 E 2.0	

Eyelets are integral and made of NiTi.



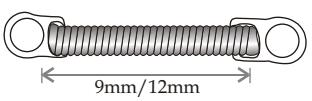
Distalising Springs

Helps in distalising molars easily with optimum patient comfort – no headgear or lip bumpers! Nickel Titanium **Distalizing Springs** are a great alternative for non-compliant patients! The gentle, constant force moves molars with ease.

- Delivers 100 gms of force
- Achieve 1mm to 1.5mm distalization per month
- Fits over any size wire

NEW

Also available with big eyelet for implants.



Ti-Mol™ Alloy

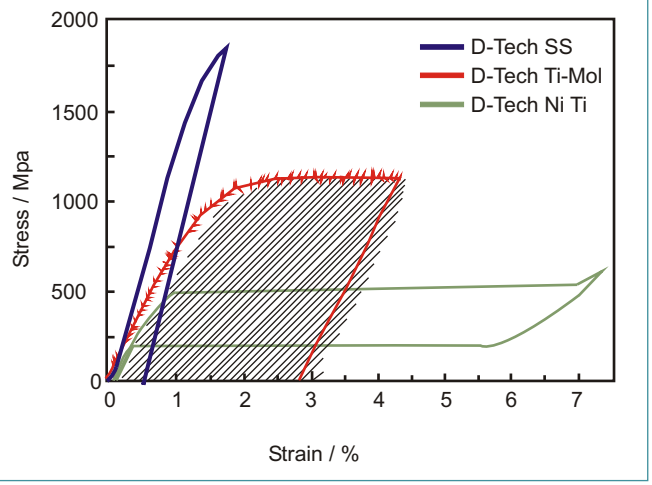
Features

- Ideal combination of flexibility & force
- Midline marking
- Nickel free , so no nickel allergy
- Tremendous time efficiency and therapeutic effect.
- Provides stronger force than Ni Ti wire but more elastic than SS wire
- Can be shaped by orthodontists to meet their various requirements.

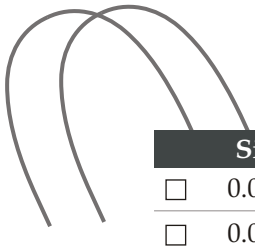
Nickel free !! Great formability!!

Orthodontists using TMA* will appreciate D-Tech's Equivalent– Ti-Mol.™ It provides the adaptability and handling characteristics of stainless steel with improved memory and gentler force levels compared to S.S. Ti-Mol™ is a nickel free alloy to help reduce patient Sensitivity. Due to its unique bendability, Ti-Mol™ can eliminate the need for bracket repositioning caused by misplacement or irregular morphology ensuring exact finishing capabilities.

**TMA is a registered trademark of ORMCO, Inc.*



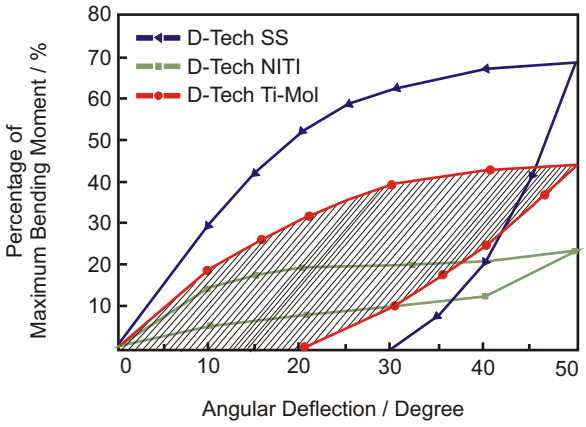
Stress-Strain curve of D-tech Ni Ti alloy.
D-tech Ti - Mol™ and Stainless Steel orthodontic wires



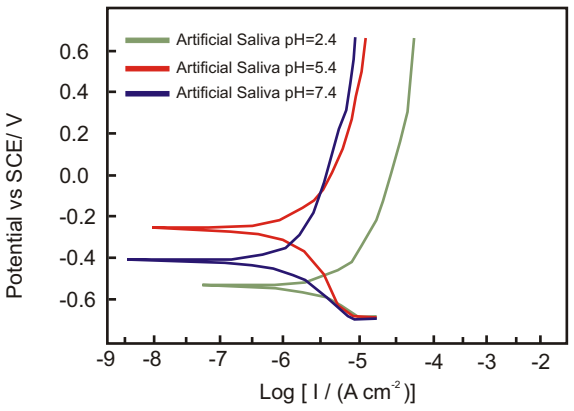
10 per pack

Size Guide
☐ 0.016 X 0.022 U/L
☐ 0.017 X 0.025 U/L
☐ 0.019 X 0.025 U/L

Available in all other sizes on request



Bending moment-deflection curve of D-tech Ni Ti alloy
D-tech Ti-Mol™ and Stainless Steel orthodontic wires.

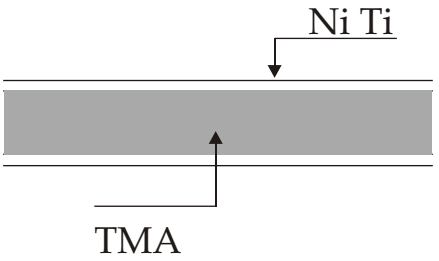


Anodic curves of D-Tech Ti-™ Mol in artificial saliva

NEW

Multi Wire

Multi wire - Ti Mol is now available in a multi - version. It's a TMA wire embedded in a Ni Ti Tube. Drastically reduces friction & gives a bright finish.



Stainless Steel Wire

Preformed S.S. Archwire

Features

- Superior smooth, bright finish.
- Precise shape and flatness of arches is ensured through tight production control.
- Best suited as finishing wire, as forces drop quickly as teeth move.
- Easy bend placement.
- Good corrosion resistance.

STAINLESS STEEL WIRE — *10 per pack*

Size Guide	
○	0.012 U/L
○	0.014 U/L
○	0.016 U/L

Size Guide	
○	0.018 U/L
○	0.020 U/L

STAINLESS STEEL WIRE — *10 per pack*

Size Guide	
☐	0.016 X 0.016 U/L
☐	0.016 X 0.022 U/L
☐	0.017 X 0.025 U/L

☐	0.018 X 0.025 U/L
☐	0.019 X 0.025 U/L
☐	0.021 X 0.025 U/L

Stainless Steel single strand archwires for treatments requiring complex bends and loops, with the force and stability that is needed for final treatment phases. S.S wire is available in round and rectangular sizes. The archwire has superior strength with excellent ductility to accept intricate bends. Super-bright finish for reduced friction.

"D -Tech's preformed Stainless Steel archwires are made of high quality medical grade Type 304VSS material with highly polished surfaces to provide reduced friction between bracket and arch."

S.S Heat Treated Archwire

- We also offer heat treated S.S wire.
- The process gives the wire a golden color / appearance & raises tensile straight.
- The wire becomes more firm.

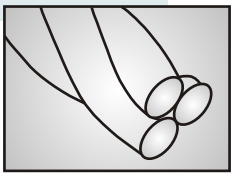
S.S Straight Length

Diamond drawn to exact tolerances for optimal resilience for every orthodontic application. Wire has excellent working characteristics, accepts severe bends with minimal fracturing and is easily soldered.

- Available in 14" straight Lengths round and rectangular. (20 pcs /pack).

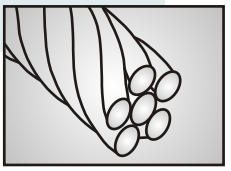
Three Strand Wire

- Will not unravel when cut.
- Moderate force , but drops quickly as teeth moves.
- Excellent for gentle - constant force for alignment.



Six strand Coaxial wire/Seven strand

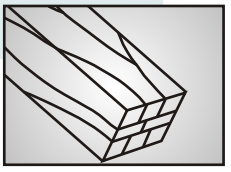
- Coaxial six stand wire is a super resilient wire that can be bent to a greater degree than ordinary twist wire without taking a set.
- Coaxial Wire is an excellent initial archwire.
- Gentle force



Also available in 7 strand variant

Eight Strand Braided wire

- Wire will not fray when cut.
- Rectangular shape completely fills bracket slot to archive torque control and leveling with one archwire .
- Flexible enough to engage every bracket, yet rigid enough for settling and finishing.



Aesthetic Wire

Silver Rhodium coated wire

This wire is long lasting.....
Lasts as much as 6 weeks
in the mouth and therefore helps to
increase time gap between
patient recall”

Features

- Preformed Coated Orthodontic Wire
- Silver-Rhodium coating give the longest life and best performance in orthodontics.
- Ideal choice in combination with top quality aesthetic ceramic brackets.
- Long life: This coating has a much longer life of 6 weeks.
- This coating also has less thickness as compared to teflon coated wire and has reduced friction.
- This coating is also more aesthetic .

Teflon Coated aesthetic wire

Features

- Ultra aesthetic . Teflon coating usually lasts 2 weeks in the mouth.
- Inked midline marking
  Upper ■ Lower ■
- It makes the wire very smooth and reduces friction of wire as well.
- Available in both round and rectangular.

Teflon coated, friction reducing, tooth-colored coatings blend with natural dentition as well as ceramic, brackets. Stain and crack resistant, the arch maintains its original color and will not crack when deflected or bent.

These wires blend in with tooth anatomy and esthetic brackets to further enhance the visual appeal of esthetic bracket systems.

Available in two colours • WHITE • IVORY

Orthodontic wire

Features

- Extremely resilient wires.
- Comparable with best international brands.
- Increased tensile strength.
- Available in 25 ft spools and straight lengths.

Sizes	Special	Special+
.012	✓	✓
.014	✓	✓
.016	✓	✓
.018	✓	✓
.020	✓	✓

Sizes	Premium	Premium+
.010	×	✓
.011	×	✓
.012	✓	✓
.014	✓	✓
.016	✓	✓

D-tech spooled wire grades

Special, special plus and premium wires are ideal for bite opening and where high resilience is required.

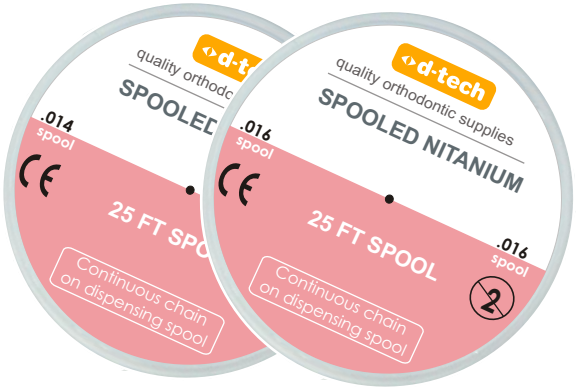
High resilience	
Special Grade	Special Plus Grade
Higher force with minimal breakage.	Requires caution when bending to avoid fracture.

Higher resilience	
Premium Grade	Premium Plus Grade
More difficult to bend occasional breakage to be expected.	Extremely resilient, not suitable for sharp bends.

Nickel Titanium Spool

Nickle titanium spooled wire gives continuous gentle force. These spools are convenient, save you time... every time you level, unravel, measure and cut.

- Packing: 25ft. EA/ Spool
- Available in round sizes only



Nickle Titanium Spool	25ft spool
Size	Pack
0.012	25FT
0.014	25FT
0.016	25FT
0.018	25FT
0.020	25FT