

## TRU-CHROME® Development

Wire has been basic to orthodontics since its beginning. By serving as holding, anchoring and spring elements, the orthodontist is able to stimulate tooth movement predictably and precisely.

In developing specialty wires for modern orthodontics, several considerations are involved:

- Semantic problem of matching requirements and terminology of orthodontics with engineering terms and tests.
- Selecting the best alloys, tempers, sizes, etc.
- Engineering procedures and quality controls for accuracy and dependability.
- Refinement of time-saving instruments, equipment and handling techniques to assure best results.

In the selection here, you will find the most complete choice of controlled quality wire for all techniques.

The success of chrome alloy stainless steel in orthodontics lies in the keen combination of delicacy and strength. It possesses, to an unusual degree, those three requisites of an orthodontic metal—hardness, elastic limit and tensile strength.

## TRU-CHROME® Stainless Steel Wire

TRU-CHROME® stainless steel wire is a stable, consistent, predictable performance wire, offered in four tempers. Quality controls are the tightest of any stainless steel wire in the industry.

## Resilient Arch Wire Temper

Resilient arch wire temper is available in preformed arch blanks and is used in some special wire forms, depending on the suitability for the desired usage. Straight lengths are provided for those who prefer forming their own arch wires.

## Retainer Wire or No. 2 Temper

Retainer wire or No. 2 temper stainless steel wire has a softer temper than arch wire temper, which enables the operator to more easily form the wire into retainer appliances. Forming the wire work-hardens it and provides a working resiliency for retainer appliances.

## Clasp Wire Temper

Clasp wire is a stainless steel wire between the resilient arch wire temper and the retainer wire temper. It is soft enough to be instrument-formed to the clasp configuration and, in forming, gains sufficient hardening from pliering to have a satisfactory spring resiliency for clasps.

## Ligature Wire Temper

Ligature Wire is a stainless steel wire of “dead-soft” temper that allows ligating and tying to be done with minimal work-hardening of the wire.

## Stainless Steel Wire Properties

### Composition of TRU-CHROME®

	Type 302	Type 304
Carbon	0.08-0.20	0.08 max
Manganese	2.00 max	2.00 max
Silicon	1.00 max	1.00 max
Phosphorus	0.040 max	0.040 max
Sulphur	0.030 max	0.030 max
Chromium	17-19	18-30
Nickel	8-10	8-10
Iron	Balance	Balance

**TRU-CHROME® Stainless Steel Preformed Natural Arches**

- TRU-CHROME® preformed natural arches can be easily soldered, stress relieved, and spot welded
- Permanent midline etchmarks: three lines for a maxillary arch, one line for a mandibular arch

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary	Mandibular
Round	.014	(0.356)	100	A07201	A07221
	.016	(0.406)	100	A07202	A07222
	.018	(0.457)	100	A07203	A07223
Square	.016 x .016	(0.406 x 0.406)	10	A07205	A07225
	.018 x .018	(0.457 x 0.457)	10	A07206	A07226
	.019 x .019	(0.483 x 0.483)	10	A07212	A07232
	.020 x .020	(0.508 x 0.508)	10	A07213	A07233
Rectangular	.016 x .022	(0.406 x 0.559)	10	A07207	A07227
	.017 x .025	(0.432 x 0.635)	10	A07208	A07228
	.018 x .025	(0.457 x 0.635)	10	A07209	A07229
	.019 x .025	(0.483 x 0.635)	10	A07210	A07230
	.021 x .025	(0.533 x 0.635)	10	A07211	A07231

**TRU-CHROME® Stainless Steel Preformed Ideal Arches**

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary	Mandibular
Round	.014	(0.356)	100	A07251	A07271
	.016	(0.406)	100	A07252	A07272
	.018	(0.457)	100	A07253	A07273
Square	.016 x .016	(0.406 x 0.406)	10	A07255	A07275
	.018 x .018	(0.457 x 0.457)	10	A07256	A07276
	.019 x .019	(0.483 x 0.483)	10	A07262	
Rectangular	.016 x .022	(0.406 x 0.559)	10	A07257	A07277
	.017 x .025	(0.432 x 0.635)	10	A07258	A07278
	.018 x .025	(0.457 x 0.635)	10	A07259	A07279
	.019 x .025	(0.483 x 0.635)	10	A07260	A07280
	.021 x .025	(0.533 x 0.635)	10	A07261	A07281

**Penta-Morphic® Arches (Ricketts®) TRU-CHROME® Stainless Steel**

- 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
- Permanent midline etchmark on universal maxillary/mandibular

Shape	Size (inch)	Size (mm)	Package Contains	Normal	Tapered	Ovoid	Narrow Tapered	Narrow Ovoid
Round	.014	(0.356)	10	E01005	E01006	E01007	E01008	E01009
	.016	(0.406)	10	E01010	E01011	E01012	E01013	E01014
	.018	(0.457)	10	E01015	E01016	E01017	E01018	E01019
	.020	(0.508)	10	E01060	E01061	E01062	E01063	E01064
Square	.016 x .016	(0.406 x 0.406)	10	E01000	E01001	E01002	E01003	E01004
Rectangular	.016 x .022	(0.406 x 0.559)	10	E00651	E00652	E00653	E00654	E00655
	.017 x .025	(0.432 x 0.635)	10	E00661	E00662	E00663	E00664	E00665
	.018 x .025	(0.457 x 0.635)	10	E01035	E01036	E01037	E01038	E01039
	.019 x .025	(0.483 x 0.635)	10	E01045	E01046	E01047	E01048	E01049

### FLI® Wire TRU-CHROME® Stainless Steel Preformed Natural Aesthetic Coated Arch Wires

- Natural appearance that will last until your next wire change
- Maintains expected wire properties and performance characteristics of the wire
- Coating on labial surface only

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary	Mandibular
Round	0.014	(0.356)	10	A07201-A	A07221-A
	0.016	(0.406)	10	A07202-A	A07222-A
	0.018	(0.457)	10	A07203-A	A07223-A
Square	.016 x .016	(0.406 x 0.406)	10	A07205-A	A07225-A
	.020 x .020	(0.508 x 0.508)	10	A07213-A	A07233-A
Rectangular	.016 x .022	(0.406 x 0.559)	10	A07207-A	A07227-A
	.017 x .025	(0.432 x 0.635)	10	A07208-A	A07228-A
	.018 x .025	(0.457 x 0.635)	10	A07209-A	A07229-A
	.019 x .025	(0.483 x 0.635)	10	A07210-A	A07230-A

### TRU-CHROME® Stainless Steel Anterior Arch Blanks

- All arch blanks are anterior contour (3 x 3) with midline etchmarks: three lines for a maxillary arch, and one line for a mandibular arch
- TRU-CHROME® stainless steel arch blanks can be easily soldered, stress relieved and spot welded

Shape	Size (inch)	Size (mm)	Package Contains	Maxillary	Mandibular
Round	.016	(0.406)	100	A00781	A00786
	.018	(0.457)	100	A00782	A00787
	.020	(0.508)	100	A00783	A00788
Square	.016 x .016	(0.406 x 0.406)	10	A00819	A00824
Rectangular	.016 x .022	(0.406 x 0.559)	10	A00798	A00808
	.017 x .025	(0.432 x 0.635)	10	A00800	A00810
	.018 x .022	(0.457 x 0.559)	10	A00801	A00811
	.018 x .025	(0.457 x 0.635)	10	A00802	A00812
	.019 x .026	(0.483 x 0.660)	10	A00803	A00813

### Maxillary Anterior Torquing Arch (Debnam)

Shape	Size (inch)	Size (mm)	Package Contains	Order Number
Round	.018	(0.457)	5	E00610
	.020	(0.508)	5	E00611



## TRU-CHROME® Stainless Steel, 14" (35.56cm) Lengths

Shape	Size (inch)	Size (mm)	Package Contains	Order Number
Round	.012	(0.305)	30	E00005
	.014	(0.356)	30	E00007
	.016	(0.406)	30	E00009
	.018	(0.457)	20	E00010
	.020	(0.508)	20	E00011
	.022	(0.559)	20	E00013
	.024	(0.610)	20	E00014
	.025	(0.635)	10	E00015
	.028	(0.711)	10	E00016
	.030	(0.762)	10	E00017
	.032	(0.813)	10	E00018
	.036	(0.914)	10	E00019
	.040	(1.016)	6	E00020
	.045	(1.143)	6	E00021
	.050	(1.270)	5	E00022
	.060	(1.524)	5	E00024
Square	.016 x .016	(0.406 x 0.406)	10	E00313
	.017 x .017	(0.432 x 0.432)	10	E00314
	.019 x .019	(0.483 x 0.483)	10	E00092
Rectangular	.016 x .022	(0.406 x 0.559)	10	E00098
	.017 x .022	(0.432 x 0.559)	10	E00099
	.017 x .025	(0.432 x 0.635)	10	E00311
	.018 x .022	(0.457 x 0.559)	10	E00096
	.018 x .025	(0.457 x 0.635)	10	E00097
	.019 x .026	(0.483 x 0.660)	10	E00095
	.021 x .025	(0.533 x 0.635)	10	E00090
	.0215 x .028	(0.546 x 0.711)	10	E00091
Rectangular (Round cornered)	.018 x .025	(0.457 x 0.635)	10	E00103
	.019 x .026	(0.483 x 0.660)	10	E00107
	.021 x .025	(0.533 x 0.635)	10	E00105
	.0215 x .028	(0.546 x 0.711)	10	E00106
Flat Ribbon	.015 x .028	(0.381 x 0.711)	20	E00116
Arch	.015 x .036	(0.381 x 0.914)	20	E00117

**TRU-CHROME® Stainless Steel Retainer Wire, 14" (35.56cm) Lengths, No. 2 Temper**

- Retainer Wire, No. 2 Temper is softer than arch wire, which enables the operator to more easily form the wire into retainer appliances
- Forming of the wire work-hardens the wire and provides a working resiliency for those types of appliances

Shape	Size (inch)	Size (mm)	Package Contains	Order Number
Round	.028	(0.711)	10	E00080
	.030	(0.762)	10	E00081
	.032	(0.813)	10	E00082
	.036	(0.914)	10	E00083
	.040	(1.016)	6	E00084

**TRU-CHROME® Stainless Steel Retainer Clasp Wire, 12" Lengths, Clasp Wire Temper**

- Retainer Wire, No. 2 Temper is softer than arch wire, which enables the operator to more easily form the wire into retainer appliances
- Forming of the wire work-hardens the wire and provides a working resiliency for those types of appliances

Shape	Size (inch)	Size (mm)	Gauge	Package Contains	Order Number
Round	.028	(0.711)	21	5	E00065
	.032	(0.813)	20	5	E00064
	.036	(0.914)	19	5	E00063
	.040	(1.016)	18	5	E00062
Half Round	.057	(1.448)	15	5	E00071

**Ligature Wire, TRU-CHROME® Stainless Steel – Dead soft**

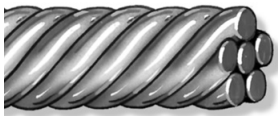
Shape	Size (inch)	Size (mm)	Package Contains	Order Number
Round (1 OZ. Spool)	.007	(0.178)	1	E00120
	.008	(0.203)	1	E00121
	.009	(0.229)	1	E00122
	.010	(0.254)	1	E00123
	.011	(0.279)	1	E00124
	.012	(0.305)	1	E00125
	.014	(0.356)	1	E00126
	.015	(0.381)	1	E00127
	.016	(0.406)	1	E00128
	.018	(0.457)	1	E00129
	.020	(0.508)	1	E00130
Round (1 LB. Spool)	.009	(0.229)	1	E00133
	.010	(0.254)	1	E00134
	.011	(0.279)	1	E00135
	.012	(0.305)	1	E00136



### TRI-FLEX Twisted Wire

Tri-Flex (3 strands) is spring-tempered, twisted leveling wire for early treatment stages. It bends readily and can accept great deflection before its limit is reached. It provides gentle force and will not unravel or fray when cut.

Shape	Size (inch)	Size (mm)	Package Contains	Order Number
Round Straight	.0155	(0.394)	10	<b>E00175</b>
Lengths (14")	.0175	(0.445)	10	<b>E00176</b>
	.0195	(0.495)	10	<b>E00177</b>
	.0215	(0.546)	10	<b>E00178</b>



### SUPRA-FLEX™ Twisted Wire

Supra-Flex™ (6 strands) is cable-designed, initial stage arch wire with five exterior wires helically wound around a core wire. It can be flexed to a great degree without taking a set. It delivers constant uniform light force over a long period of time and does not fray when cut.

Shape	Size (inch)	Size (mm)	Package Contains	Order Number
Round Straight	.0155	(0.394)	10	<b>E00179</b>
Lengths (14")	.0175	(0.445)	10	<b>E00180</b>
	.0195	(0.495)	10	<b>E00181</b>
	.0215	(0.546)	10	<b>E00182</b>
	Round Spools (30')	.0155	(0.394)	10
	.0175	(0.445)	10	<b>E00188</b>
	.0195	(0.495)	10	<b>E00189</b>
	.0215	(0.546)	10	<b>E00190</b>



### FLEX-VIII™ Braided Wire

- Flex-VIII™ (8 strands) is a braided wire for unscrambling and leveling
- Preformed arch

Shape	Size (inch)	Size (mm)	Package Contains	Order Number
Square	.016 x .016	(0.406 x 0.406)	10	<b>E01400</b>
Rectangular	.016 x .022	(0.406 x 0.559)	10	<b>E01401</b>
	.017 x .025	(0.432 x 0.635)	10	<b>E01403</b>
	.018 x .025	(0.457 x 0.635)	10	<b>E01404</b>
	.019 x .025	(0.483 x 0.635)	10	<b>E01405</b>