



The Strongest Piles in the World

PRODUCT CATALOG
IMPERIAL VERSION

With over 30 years of experience in the soil stabilization and foundation industry, we are bringing new solutions that apply state of the art technology and expertise to change the way foundation piles and anchors are installed.

Helical Anchors Product Catalog



ESR-3982



ISO 9001:2008 Certified
Quality Management System

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Product Overview

Component Properties	Specification
Outer Diameter*	2 3/8", 2 7/8", 3 1/2", 4 1/2", 5", 5 1/2", 6 5/8", 7", 8 5/8", 10 3/4", 12 3/4"
Capacity	50,000 lbs to 800,000 lbs
Length	5', 7', 10'
Helix Plate Diameter	8", 10", 12", 14", 16"
Helix Plate Thickness**	3/8", 1/2"
Bracket Types	Standard, Light, and Heavy Duty
New Construction Caps	Custom designed
Push Piers	Custom designed
Corrosion Protection	Hot Dip Galvanized

* Custom designed diameter and wall thickness is available based on request. Inertia welding is done for shafts up to 7 5/8" diameter.

** Different cutting flight profiles for easier installation are available based on request.

Table A: Structural Capacity Table (SCT)

Helical Anchors Products	Shaft Size (in)	Wall Thickness (in)	Ultimate Tension Strength (lbs)	Compression Load Limit (lbs)	Ultimate Torsional Strength (ft-lb)	Installation Torque Factor K (ft ⁻¹)	Capacity Based on Torsional Strength (lbs)
TS238190	2.375 OD	0.190	125,000	100,000	6,500	9 - 10	65,000
TS238254	2.375 OD	0.254	125,000	135,000	9,000	9 - 10	90,000
TS278217	2.875 OD	0.217	180,000	140,000	13,000	8 - 9	117,000
TS278276	2.875 OD	0.276	180,000	180,000	16,000	8 - 9	144,000
TS312254	3.50 OD	0.254	250,000	210,000	18,000	6.5-8	144,000
TS312368	3.50 OD	0.368	250,000	290,000	27,000	6.5-8	216,000
TS412250	4.50 OD	0.250	275,000	260,000	30,000	5-6.5	195,000
TS412337	4.50 OD	0.337	360,000	350,000	48,000	5-6.5	312,000
TS500362	5.00 OD	0.362	413,000	413,000	74000*	4.5-6	413,000
TS512361	5.50 OD	0.361	510,000	466,000	90700*	4-5.5	466,000
TS700498	7.00 OD	0.498	999,000	814,000	180000*	3-4.5	810,000

Important Notes:

- The Structural Capacity Table (SCT) recommends only using 85% of the Ultimate Torsional Strength shown above in table A for 2-3/8 to 3-1/2 helical piles. All other diameter helical piles are recommended to be use to 95% of their Ultimate Torsional Strength.
- When using helical piles for tieback or any battered application with more than 10 degrees from vertical, HAI recommends only using 80% of the Ultimate Torsional Strength which will only apply to 2-3/8 and 2-7/8 diameter helical piles.
- The ultimate torsional strength values shown above were determined by statistical analysis of laboratory testing results except for values with an asterisk next to them. Values with an asterisk next to them are calculated ratings.
- The capacities shown above in table A for ultimate tension strength and compression load limit are calculated ratings not determined by field tests.

SCT Round Shaft Leads and Extensions 2-3/8" OD (0.190" Wall Thickness)

Product Specification	
Shaft OD	2.375"
Wall Thickness	0.190"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	125 Kips
Compression Load Limit*	100 Kips
Ultimate Torsional Strength	6,500 ft-lbs
Uplift/Compression Capacity**	65 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 10 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	0.318
10	0.515
12	0.755
14	1.038
16	1.365

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 2-3/8" OD (0.190 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
2 3/8" X 5' (3/8" X 10")	---	10	---	5'	32	TL238190603810
2 3/8" X 5' (3/8" X 8" & 10")	8	10	---		36	TL2381906038810
2 3/8" X 5' (3/8" X 10" & 12")	10	12	---		43	TL23819060381012
2 3/8" x 7' (3/8" X 10")	10	---	---	7'	40	TL238190843810
2 3/8" x 7' (3/8" X 10" & 12")	10	12	---		52	TL23819084381012
2 3/8" x 7' (3/8" X 8" & 10" & 12")	8	10	12		57	TL238190843881012
2 3/8" x 7' (3/8" X 10" & 12" & 14")	10	12	14		68	TL2381908438101214
2 3/8" x 10' (3/8" X 10")	10	---	---	10'	54	TL2381901203810
2 3/8" x 10' (3/8" X 10" & 12")	10	12	---		66	TL238190120381012
2 3/8" x 10' (3/8" X 8" & 10" & 12")	8	10	12		70	TL2381901203881012
2 3/8" x 10' (3/8" X 10" & 12" & 14")	10	12	14		81	TL23819012038101214

Notes:

Special orders are available, allow extra time for processing All products are available with 1/2" thick helix plate

SCT Round Shaft Leads and Extensions 2-3/8" OD (0.254" Wall Thickness)

Product Specification	
Shaft OD	2.375"
Wall Thickness	0.254"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	125 Kips
Compression Load Limit*	135 Kips
Ultimate Torsional Strength	9,000 ft-lbs
Uplift/Compression Capacity**	90 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 10 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	0.318
10	0.515
12	0.755
14	1.038
16	1.365

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 2-3/8" OD (0.254 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
2 3/8" X 5' (3/8" X 8")	8	---	---	5'	35	TL23825460388
2 3/8" X 5' (3/8" X 10")	10	---	---		38	TL238254603810
2 3/8" X 5' (3/8" X 12")	12	---	---		42	TL238254603812
2 3/8" X 5' (3/8" X 14")	14	---	---		46	TL238254603814
2 3/8" X 5' (3/8" X 8" & 10")	8	10	---		43	TL2382546038810
2 3/8" X 5' (3/8" X 10" & 12")	10	12	---		50	TL23825460381012
2 3/8" X 5' (3/8" X 12" & 14")	12	14	---		58	TL23825460381214
2 3/8" x 7' (3/8" X 8")	8	---	---	7'	47	TL23825484388
2 3/8" x 7' (3/8" X 10")	10	---	---		50	TL238254843810
2 3/8" x 7' (3/8" X 12")	12	---	---		53	TL238254843812
2 3/8" x 7' (3/8" X 14")	14	---	---		58	TL238254843814
2 3/8" x 7' (3/8" X 8" & 10")	8	10	---		55	TL2382548438810
2 3/8" x 7' (3/8" X 10" & 12")	10	12	---		61	TL23825484381012
2 3/8" x 7' (3/8" X 12" & 14")	12	14	---		69	TL23825484381214
2 3/8" x 7' (3/8" X 8", 10" & 12")	8	10	12	66	TL238254843881012	
2 3/8" x 7' (3/8" X 10", 12" & 14")	10	12	14	77	TL2382548438101214	
2 3/8" x 10' (3/8" X 8")	8	---	---	10'	64	TL238254120388
2 3/8" x 10' (3/8" X 10")	10	---	---		67	TL2382541203810
2 3/8" x 10' (3/8" X 12")	12	---	---		71	TL2382541203812
2 3/8" x 10' (3/8" X 14")	14	---	---		75	TL2382541203814
2 3/8" x 10' (3/8" X 8" & 10")	8	10	---		72	TL23825412038810
2 3/8" x 10' (3/8" X 10" & 12")	10	12	---		79	TL238254120381012
2 3/8" x 10' (3/8" X 12" & 14")	12	14	---		87	TL238254120381214
2 3/8" x 10' (3/8" X 8", 10" & 12")	8	10	12	83	TL2382541203881012	
2 3/8" x 10' (3/8" X 10", 12" & 14")	10	12	14	94	TL23825412038101214	

Notes:

Special orders are available, allow extra time for processing All products are available with 1/2" thick helix plate.

SCT Round Shaft Leads and Extensions 2-7/8" OD (0.217" Wall Thickness)

Product Specification	
Shaft OD	2.875"
Wall Thickness	0.217"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	180 Kips
Compression Load Limit*	140 Kips
Ultimate Torsional Strength	13,000 ft-lbs
Uplift/Compression Capacity**	117 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 9 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	0.304
10	0.500
12	0.740
14	1.024
16	1.351

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 2-7/8" OD (0.217 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
2 7/8" X 5' (3/8" X 8")	10	---	---	5'	40	TL278276603810
2 7/8" X 5' (3/8" X 10")	8	10	---		45	TL2782766038810
2 7/8" X 5' (3/8" X 12")	10	12	---		51	TL27827660381012
2 7/8" x 7' (3/8" X 8")	10	---	---	7'	52	TL278276843810
2 7/8" x 7' (3/8" X 10")	10	12	---		64	TL27827684381012
2 7/8" x 7' (3/8" X 12")	8	10	12		68	TL278276843881012
2 7/8" x 7' (3/8" X 14")	10	12	14		79	TL2782768438101214
2 7/8" x 10' (3/8" X 8")	10	---	---	10'	71	TL2782761203810
2 7/8" x 10' (3/8" X 10")	8	10	---		75	TL27827612038810
2 7/8" x 10' (3/8" X 12")	10	12	---		82	TL278276120381012
2 7/8" x 10' (3/8" X 14")	8	10	12		84	TL2782761203881012
2 7/8" x 10' (3/8" X 8" & 10")	10	12	14		98	TL27827612038101214

Notes:

Special orders are available, allow extra time for processing All products are available with 1/2" thick helix plate

SCT Round Shaft Leads and Extensions 2-7/8" OD (0.276" Wall Thickness)

Product Specification	
Shaft OD	2.875"
Wall Thickness	0.276"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	180 Kips
Compression Load Limit*	180 Kips
Ultimate Torsional Strength	16,000 ft-lbs
Uplift/Compression Capacity**	144 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 9 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	0.304
10	0.500
12	0.740
14	1.024
16	1.351

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 2-7/8" OD (0.276 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
2 7/8" X 5' (3/8" X 8")	8	---	---	5'	45	TL27827660388
2 7/8" X 5' (3/8" X 10")	10	---	---		48	TL278276603810
2 7/8" X 5' (3/8" X 12")	12	---	---		51	TL278276603812
2 7/8" X 5' (3/8" X 14")	14	---	---		56	TL278276603814
2 7/8" X 5' (3/8" X 8" & 10")	8	10	---		52	TL2782766038810
2 7/8" X 5' (3/8" X 10" & 12")	10	12	---		59	TL27827660381012
2 7/8" X 5' (3/8" X 12" & 14")	12	14	---		67	TL27827660381214
2 7/8" X 7' (3/8" X 8")	8	---	---		7'	60
2 7/8" X 7' (3/8" X 10")	10	---	---	63		TL278276843810
2 7/8" X 7' (3/8" X 12")	12	---	---	67		TL278276843812
2 7/8" X 7' (3/8" X 14")	14	---	---	71		TL278276843814
2 7/8" X 7' (3/8" X 8" & 10")	8	10	---	67		TL2782768438810
2 7/8" X 7' (3/8" X 10" & 12")	10	12	---	74		TL27827684381012
2 7/8" X 7' (3/8" X 12" & 14")	12	14	---	82		TL27827684381214
2 7/8" X 7' (3/8" X 8", 10" & 12")	8	10	12	79		TL278276843881012
2 7/8" X 7' (3/8" X 10", 12" & 14")	10	12	14	90	TL2782768438101214	
2 7/8" X 10' (3/8" X 8")	8	---	---	10'	83	TL278276120388
2 7/8" X 10' (3/8" X 10")	10	---	---		86	TL2782761203810
2 7/8" X 10' (3/8" X 12")	12	---	---		90	TL2782761203812
2 7/8" X 10' (3/8" X 14")	14	---	---		94	TL2782761203814
2 7/8" X 10' (3/8" X 8" & 10")	8	10	---		90	TL27827612038810
2 7/8" X 10' (3/8" X 10" & 12")	10	12	---		97	TL278276120381012
2 7/8" X 10' (3/8" X 12" & 14")	12	14	---		105	TL278276120381214
2 7/8" X 10' (3/8" X 8", 10" & 12")	8	10	12		102	TL2782761203881012
2 7/8" X 10' (3/8" X 10", 12" & 14")	10	12	14	113	TL27827612038101214	

Notes:

Special orders are available, allow extra time for processing All products are available with 1/2" thick helix plate

SCT Round Shaft Leads and Extensions 3-1/2" OD (0.254" Wall Thickness)

Product Specification	
Shaft OD	3.500"
Wall Thickness	0.254"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	250 Kips
Compression Load Limit*	210 Kips
Ultimate Torsional Strength	18,000 ft-lbs
Uplift/Compression Capacity**	144 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 8 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	0.282
10	0.479
12	0.719
14	1.002
16	1.329

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 3-1/2" OD (0.254 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
3 1/2" X 5' (3/8" X 10")	10	---	---	5'	50	TL312254603810
3 1/2" X 5' (3/8" X 12")	12	---	---		57	TL312254603812
3 1/2" X 5' (3/8" X 14")	14	---	---		61	TL312254603814
3 1/2" X 5' (3/8" X 10" & 12")	10	12	---		64	TL31225460381012
3 1/2" X 5' (3/8" X 12" & 14")	12	14	---		72	TL31225460381214
3 1/2" x 7' (3/8" X 10")	10	---	---		7'	71
3 1/2" x 7' (3/8" X 12")	12	---	---	74		TL312254843812
3 1/2" x 7' (3/8" X 14")	14	---	---	79		TL312254843814
3 1/2" x 7' (3/8" X 10" & 12")	10	12	---	81		TL31225484381012
3 1/2" x 7' (3/8" X 12" & 14")	12	14	---	90		TL31225484381214
3 1/2" x 7' (3/8" X 10", 12" & 14")	10	12	14	97		TL3122548438101214
3 1/2" x 10' (3/8" X 10")	10	---	---	10'	97	TL3122541203810
3 1/2" x 10' (3/8" X 12")	12	---	---		101	TL3122541203812
3 1/2" x 10' (3/8" X 14")	14	---	---		105	TL3122541203814
3 1/2" x 10' (3/8" X 10" & 12")	10	12	---		108	TL312254120381012
3 1/2" x 10' (3/8" X 12" & 14")	12	14	---		116	TL312254120381214
3 1/2" x 10' (3/8" X 10", 12" & 14")	10	12	14		123	TL31225412038101214

Notes:

Special orders are available, allow extra time for processing All products are available with 1/2" thick helix plate

SCT Round Shaft Leads and Extensions 3-1/2" OD (0.368" Wall Thickness)

Product Specification	
Shaft OD	3.500"
Wall Thickness	0.368"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	250 Kips
Compression Load Limit*	290 Kips
Ultimate Torsional Strength	27,000 ft-lbs
Uplift/Compression Capacity**	216 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 8 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	0.282
10	0.479
12	0.719
14	1.002
16	1.329

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 3-1/2" OD (0.368 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
3 1/2" X 5' (3/8" X 10")	10	---	---	5'	70	TL312368603810
3 1/2" X 5' (3/8" X 12")	12	---	---		74	TL312368603812
3 1/2" X 5' (3/8" X 14")	14	---	---		79	TL312368603814
3 1/2" X 5' (3/8" X 10" & 12")	10	12	---		81	TL31236860381012
3 1/2" X 5' (3/8" X 12" & 14")	12	14	---		89	TL31236860381214
3 1/2" x 7' (3/8" X 10")	10	---	---	7'	95	TL312368843810
3 1/2" x 7' (3/8" X 12")	12	---	---		99	TL312368843812
3 1/2" x 7' (3/8" X 14")	14	---	---		103	TL312368843814
3 1/2" x 7' (3/8" X 10" & 12")	10	12	---		106	TL31236884381012
3 1/2" x 7' (3/8" X 12" & 14")	12	14	---		114	TL31236884381214
3 1/2" x 7' (3/8" X 10", 12" & 14")	10	12	14		121	TL3123688438101214
3 1/2" x 10' (3/8" X 10")	10	---	---	10'	132	TL3123681203810
3 1/2" x 10' (3/8" X 12")	12	---	---		136	TL3123681203812
3 1/2" x 10' (3/8" X 14")	14	---	---		140	TL3123681203814
3 1/2" x 10' (3/8" X 10" & 12")	10	12	---		143	TL312368120381012
3 1/2" x 10' (3/8" X 12" & 14")	12	14	---		151	TL312368120381214
3 1/2" x 10' (3/8" X 10", 12" & 14")	10	12	14		158	TL31236812038101214

Notes:

Special orders are available, allow extra time for processing All products are available with 1/2" thick helix plate

SCT Round Shaft Leads and Extensions 4-1/2" OD (0.250" Wall Thickness)

Product Specification	
Shaft OD	4.500"
Wall Thickness	0.250"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	275 Kips
Compression Load Limit*	260 Kips
Ultimate Torsional Strength	30,000 ft-lbs
Uplift/Compression Capacity**	195 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 6.5 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	0.239
10	0.435
12	0.675
14	0.959
16	1.286

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 4-1/2" OD (0.250 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
4 1/2" X 5' (3/8" X 10")	10	---	---	5'	83	TL412250603810
4 1/2" X 5' (3/8" X 12")	12	---	---		87	TL412250603812
4 1/2" X 5' (3/8" X 14")	14	---	---		91	TL412250603814
4 1/2" X 5' (3/8" X 10" & 12")	10	12	---		93	TL41225060381012
4 1/2" X 5' (3/8" X 12" & 14")	12	14	---		101	TL41225060381214
4 1/2" x 7' (3/8" X 10")	10	---	---	7'	113	TL412250843810
4 1/2" x 7' (3/8" X 12")	12	---	---		117	TL412250843812
4 1/2" x 7' (3/8" X 14")	14	---	---		121	TL412250843814
4 1/2" x 7' (3/8" X 10" & 12")	10	12	---		123	TL41225084381012
4 1/2" x 7' (3/8" X 12" & 14")	12	14	---		131	TL41225084381214
4 1/2" x 7' (3/8" X 10", 12" & 14")	10	12	14	138	TL4122508438101214	
4 1/2" x 10' (3/8" X 10")	10	---	---	10'	158	TL4122501203810
4 1/2" x 10' (3/8" X 12")	12	---	---		162	TL4122501203812
4 1/2" x 10' (3/8" X 14")	14	---	---		166	TL4122501203814
4 1/2" x 10' (3/8" X 10" & 12")	10	12	---		168	TL412250120381012
4 1/2" x 10' (3/8" X 12" & 14")	12	14	---		177	TL412250120381214
4 1/2" x 10' (3/8" X 10", 12" & 14")	10	12	14		183	TL41225012038101214

Notes:

Special orders are available, allow extra time for processing All products are available with 1/2" thick helix plate

SCT Round Shaft Leads and Extensions 4-1/2" OD (0.337" Wall Thickness)

Product Specification	
Shaft OD	4.500"
Wall Thickness	0.337"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	360 Kips
Compression Load Limit*	350 Kips
Ultimate Torsional Strength	48,000 ft-lbs
Uplift/Compression Capacity**	312 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 6.5 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	0.239
10	0.435
12	0.675
14	0.959
16	1.286

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 4-1/2" OD (0.337 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
4 1/2" X 5' (3/8" X 10")	10	---	---	5'	65	TL412337603810
4 1/2" X 5' (3/8" X 12")	12	---	---		69	TL412337603812
4 1/2" X 5' (3/8" X 14")	14	---	---		73	TL412337603814
4 1/2" X 5' (3/8" X 10" & 12")	10	12	---		75	TL41233760381012
4 1/2" X 5' (3/8" X 12" & 14")	12	14	---		83	TL41233760381214
4 1/2" x 7' (3/8" X 10")	10	---	---	7'	88	TL412337843810
4 1/2" x 7' (3/8" X 12")	12	---	---		91	TL412337843812
4 1/2" x 7' (3/8" X 14")	14	---	---		96	TL412337843814
4 1/2" x 7' (3/8" X 10" & 12")	10	12	---		98	TL41233784381012
4 1/2" x 7' (3/8" X 12" & 14")	12	14	---		106	TL41233784381214
4 1/2" x 7' (3/8" X 10", 12" & 14")	10	12	14	112	TL4123378438101214	
4 1/2" x 10' (3/8" X 10")	10	---	---	10'	122	TL4123371203810
4 1/2" x 10' (3/8" X 12")	12	---	---		126	TL4123371203812
4 1/2" x 10' (3/8" X 14")	14	---	---		130	TL4123371203814
4 1/2" x 10' (3/8" X 10" & 12")	10	12	---		132	TL412337120381012
4 1/2" x 10' (3/8" X 12" & 14")	12	14	---		140	TL412337120381214
4 1/2" x 10' (3/8" X 10", 12" & 14")	10	12	14		147	TL41233712038101214

Notes:

Special orders are available, allow extra time for processing All products are available with 1/2" thick helix plate

SCT Round Shaft Leads and Extensions 5" OD (0.362" Wall Thickness)

Product Specification	
Shaft OD	5.000"
Wall Thickness	0.362"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	413 Kips
Compression Load Limit*	413 Kips
Ultimate Torsional Strength	74,000 ft-lbs
Uplift/Compression Capacity**	413 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 6 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	0.213
10	0.409
12	0.649
14	0.933
16	1.260

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 5" OD (0.362 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
5" X 5' (1/2" X 10")	10	---	---	5'	100	TL500362601210
5" X 5' (1/2" X 12")	12	---	---		104	TL500362601212
5" X 5' (1/2" X 14")	14	---	---		110	TL500362601214
5" X 5' (1/2" X 16")	16	---	---		117	TL500362601216
5" X 5' (1/2" X 10" & 12")	10	12	---		113	TL50036260121012
5" X 5' (1/2" X 12" & 14")	12	14	---		123	TL50036260121214
5" X 5' (1/2" X 14" & 16")	14	16	---		136	TL50036260121416
5" x 7' (1/2" X 10")	10	---	---	7'	136	TL500362841210
5" x 7' (1/2" X 12")	12	---	---		140	TL500362841212
5" x 7' (1/2" X 14")	14	---	---		146	TL500362841214
5" x 7' (1/2" X 16")	16	---	---		153	TL500362841216
5" x 7' (1/2" X 10" & 12")	10	12	---		149	TL50036284121012
5" x 7' (1/2" X 12" & 14")	12	14	---		159	TL50036284121214
5" x 7' (1/2" X 14" & 16")	14	16	---		172	TL50036284121416
5" x 7' (1/2" X 10", 12" & 14")	10	12	14		167	TL5003628412101214
5" x 7' (1/2" X 12", 14" & 16")	12	14	16	199	TL5003628412121416	
5" x 10' (1/2" X 10")	10	---	---	10'	189	TL5003621201210
5" x 10' (1/2" X 12")	12	---	---		194	TL5003621201212
5" x 10' (1/2" X 14")	14	---	---		200	TL5003621201214
5" x 10' (1/2" X 16")	16	---	---		207	TL5003621201216
5" x 10' (1/2" X 10" & 12")	10	12	---		203	TL500362120121012
5" x 10' (1/2" X 12" & 14")	12	14	---		213	TL500362120121214
5" x 10' (1/2" X 14" & 16")	14	16	---		226	TL500362120121416
5" x 10' (1/2" X 10", 12" & 14")	10	12	14		221	TL50036212012101214
5" x 10' (1/2" X 12", 14" & 16")	12	14	16		239	TL50036212012121416

Notes:

Special orders are available, allow extra time for processing All products are available with 5/8" thick helix plate

SCT Round Shaft Leads and Extensions 5-1/2" OD (0.361" Wall Thickness)

Product Specification	
Shaft OD	5.500"
Wall Thickness	0.361"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	510 Kips
Compression Load Limit*	466 Kips
Ultimate Torsional Strength	90,700 ft-lbs
Uplift/Compression Capacity**	466 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 5.5 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	N/A
10	0.380
12	0.620
14	0.904
16	1.231

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 5-1/2" OD (0.361 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
5-1/2" X 5' (1/2" X 10")	10	---	---	5'	108	TL512361601210
5-1/2" X 5' (1/2" X 12")	12	---	---		113	TL512361601212
5-1/2" X 5' (1/2" X 14")	14	---	---		119	TL512361601214
5-1/2" X 5' (1/2" X 16")	16	---	---		126	TL512361601216
5-1/2" X 5' (1/2" X 10" & 12")	10	12	---		121	TL51236160121012
5-1/2" X 5' (1/2" X 12" & 14")	12	14	---		132	TL51236160121214
5-1/2" X 5' (1/2" X 14" & 16")	14	16	---		144	TL51236160121416
5-1/2" x 7' (1/2" X 10")	10	---	---	7'	148	TL512361841210
5-1/2" x 7' (1/2" X 12")	12	---	---		153	TL512361841212
5-1/2" x 7' (1/2" X 14")	14	---	---		159	TL512361841214
5-1/2" x 7' (1/2" X 16")	16	---	---		166	TL512361841216
5-1/2" x 7' (1/2" X 10" & 12")	10	12	---		161	TL51236184121012
5-1/2" x 7' (1/2" X 12" & 14")	12	14	---		171	TL51236184121214
5-1/2" x 7' (1/2" X 14" & 16")	14	16	---		184	TL51236184121416
5-1/2" x 7' (1/2" X 10", 12" & 14")	10	12	14	179	TL5123618412101214	
5-1/2" x 7' (1/2" X 12", 14" & 16")	12	14	16	196	TL5123618412121416	
5-1/2" x 10' (1/2" X 10")	10	---	---	10'	208	TL5123611201210
5-1/2" x 10' (1/2" X 12")	12	---	---		213	TL5123611201212
5-1/2" x 10' (1/2" X 14")	14	---	---		218	TL5123611201214
5-1/2" x 10' (1/2" X 16")	16	---	---		225	TL5123611201216
5-1/2" x 10' (1/2" X 10" & 12")	10	12	---		220	TL512361120121012
5-1/2" x 10' (1/2" X 12" & 14")	12	14	---		231	TL512361120121214
5-1/2" x 10' (1/2" X 14" & 16")	14	16	---		243	TL512361120121416
5-1/2" x 10' (1/2" X 10", 12" & 14")	10	12	14	238	TL51236112012101214	
5-1/2" x 10' (1/2" X 12", 14" & 16")	12	14	16	256	TL51236112012121416	

Notes:

Special orders are available, allow extra time for processing All products are available with 5/8" thick helix plate

SCT Round Shaft Leads and Extensions 7" OD (0.498" Wall Thickness)

Product Specification	
Shaft OD	7"
Wall Thickness	0.498"
Shaft Material	API 5CT N80
Shaft Coupling	Inertia Welded ¹
Coupling Materials (Pin/Box)	AISI 4140/4125
Helix Material	ASTM A572
Corrosion Protection	Hot Dip Galvanized ²

¹:Per AWS C6.2

²:Per ASTM A123

Capacity	
Ultimate Tension Strength*	999 Kips
Compression Load Limit*	814 Kips
Ultimate Torsional Strength	180,000 ft-lbs
Uplift/Compression Capacity**	810 Kips

* : Based on Mechanical Strength of Steel Material

** : Based on Ultimate Torsion, $K_t = 4.5 \text{ ft}^{-1}$

Helix Diameter (in)	Helix Area (ft ²)
8	N/A
10	N/A
12	0.518
14	0.802
16	1.129

Note:

Helix shape and thickness are custom designed.



Helical Anchor, 7" OD (0.498 wall) Tubular Leads

*Refer to Table A: Structural Capacity Table (SCT)



Product Description	Plate Diameter			Length	Weight	Part Number
	A	B	C			
7" x 5' (1/2" x 12")	12	---	---	5'	185	TL700498601212
7" x 5' (1/2" x 14")	14	---	---		191	TL700498601214
7" x 5' (1/2" x 16")	16	---	---		198	TL700498601216
7" x 5' (1/2" x 12" & 14")	12	14	---		201	TL70049860121214
7" x 5' (1/2" x 14" & 16")	14	16	---		214	TL70049860121416
7" x 7' (1/2" x 12")	12	---	---	7'	255	TL700498841212
7" x 7' (1/2" x 14")	14	---	---		260	TL700498841214
7" x 7' (1/2" x 16")	16	---	---		267	TL700498841216
7" x 7' (1/2" x 12" & 14")	12	14	---		271	TL70049884121214
7" x 7' (1/2" x 14" & 16")	14	16	---		283	TL70049884121416
7" x 7' (1/2" x 12", 14" & 16")	12	14	16	293	TL7004988412121416	
7" x 10' (1/2" x 12")	12	---	---	10'	359	TL7004981201212
7" x 10' (1/2" x 14")	14	---	---		364	TL7004981201214
7" x 10' (1/2" x 16")	16	---	---		371	TL7004981201216
7" x 10' (1/2" x 12" & 14")	12	14	---		375	TL700498120121214
7" x 10' (1/2" x 14" & 16")	14	16	---		387	TL700498120121416
7" x 10' (1/2" x 12", 14" & 16")	12	14	16		397	TL70049812012121416

Notes:

Special orders are available, allow extra time for processing All products are available with 5/8" thick helix plate

Helical Anchors Tubular Extensions



Product Description	Wall Size	Length	Weight	Part Number
2 3/8" X 5'	0.190	5'	27	TE23819060
2 3/8" X 7'		7'	36	TE23819084
2 3/8" X 10'		10'	50	TE238190120
2 3/8" X 5'	0.254	5'	33	TE23825460
2 3/8" X 7'		7'	45	TE23825484
2 3/8" X 10'		10'	62	TE238254120
2 7/8" X 5'	0.217	5'	40	TE27821760
2 7/8" X 7'		7'	53	TE27821784
2 7/8" X 10'		10'	71	TE278217120
2 7/8" X 5'	0.276	5'	47	TE27827660
2 7/8" X 7'		7'	62	TE27827684
2 7/8" X 10'		10'	85	TE278276120
3 1/2" X 5'	0.254	5'	61	TE31225460
3 1/2" X 7'		7'	79	TE31225484
3 1/2" X 10'		10'	105	TE312254120
3 1/2" X 5'	0.368	5'	76	TE31236860
3 1/2" X 7'		7'	101	TE31236884
3 1/2" X 10'		10'	138	TE312368120
4 1/2" X 5'	0.250	5'	79	TE41225060
4 1/2" X 7'		7'	101	TE41225084
4 1/2" X 10'		10'	135	TE412250120
4 1/2" X 5'	0.337	5'	111	TE41233760
4 1/2" X 7'		7'	141	TE41233784
4 1/2" X 10'		10'	186	TE412337120

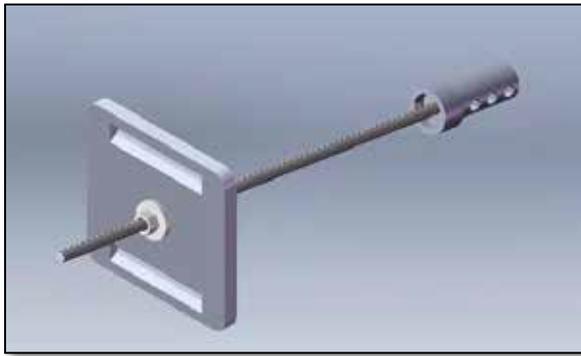
Helical Anchors Tubular Extensions



Product Description	Wall Size	Length	Weight	Part Number
5" X 5'	0.362	5'	112	TE50036260
5" X 7'		7'	148	TE50036284
5" X 10'		10'	202	TE500362120
5 1/2" X 5'	0.361	5'	127	TE51236160
5 1/2" X 7'		7'	167	TE51236184
5 1/2" X 10'		10'	226	TE512361120
7" X 5'	0.498	5'	236	TE70049860
7" X 7'		7'	305	TE70049884
7" X 10'		10'	409	TE700498120

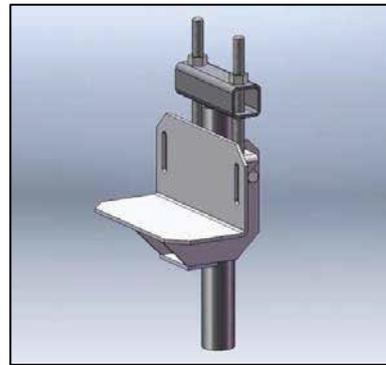
Helical Anchors Accessories*

*: Custom Designed Accessories are available based on request.



TIE BACK PACKAGE

Used for temporary wall or permanent.
Includes coupler, washers, adapter, threaded rod, and wall plate.

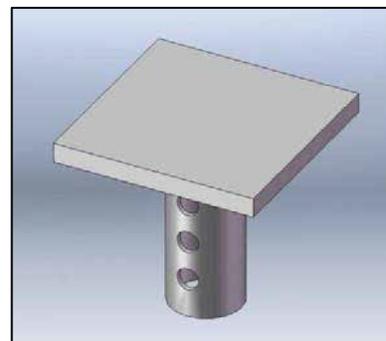


STANDARD BRACKET

with T-pipe
(40 kips, 80 kips Capacity) For stabilizing/lifting repairs of existing foundations.

NEW CONSTRUCTION CAP

Placed on foundation anchors for support of new structures. Tied to reinforcement prior to concrete being poured. Available in 6", 8", 10" and 12" square.



	OD (in)	8x8x3/4	8x8x1	10x10x3/4	10x10x1	12x12x3/4	12x12x1
Cap Capacity (Kips)	2 3/8	39	42	34	45	31	40
	2 7/8	47	51	38	55	34	50
	3 1/2	59	66	45	66	39	65
	4 1/2	65	70	50	69	42	68



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