**Swage Fittings****Spelter Fittings****Standard and Custom Cable Fittings**

TriPyramid provides cable assemblies of all description, ranging from small diameter stainless steel to large galvanized cables. In some cases a job may require just standard end-fittings such as turnbuckles, eyes, or jaws. But in many cases a total solution calls for specially designed hardware in addition to the cables with standard end fittings.

TriPyramid has designed and produced many custom cable fittings such as strut-end clamp assemblies, stainless steel glass holding fittings for cable net walls, and end fittings for special conditions. The design group works with architects and engineers to develop hardware that celebrates the structure and is at the same time cost effective and structurally sound.

Termination Methods

There are a variety of ways to affix fittings to the various forms of cable. For structural applications the termination should be stronger than the cable it is attached to and it should retain the cable until the cable breaks.

Swage fittings have a hollow shank that is about 12 cable diameters in length. The cable is inserted into the hollow shank, and then the shank is cold-formed (swaged) around and into the cable, resulting in a mechanical connection that is as strong as the cable itself. Swage fittings can be used for both wire rope and structural strand, either stainless steel or galvanized. They cannot be used for full-locked cables.

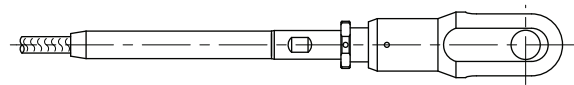
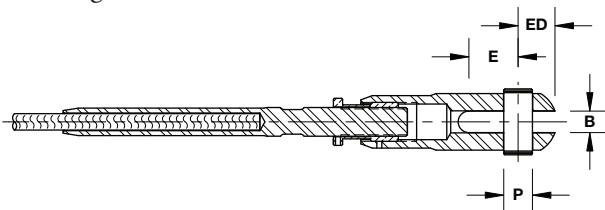
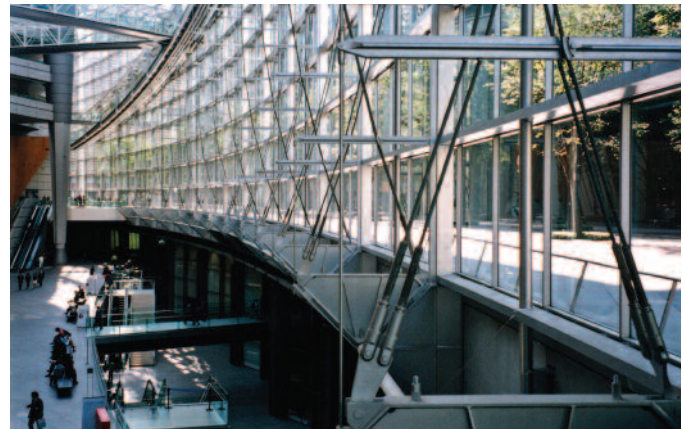
Larger galvanized cables (and all full-locked cables) are typically terminated with poured, sometimes called spelter, sockets. In this case the fitting is slid onto the cable, the cable end is splayed out and molten zinc is then poured into the socket, around the splayed out cable strands. Once the zinc solidifies the termination is strong enough to break the cable without slipping.

For architectural applications, cables with diameters less than about 1.25" (32 mm) are most often terminated with swage type fittings.

Swage Turnbuckles

TriPyramid has two standard stainless steel turnbuckle ranges for architectural applications. The turnbuckles are compact and have thread-free appearance. Adjustment is provided by rotating the adjusting sleeve, which telescopes with the swage stud into the machined jaw.

The B310 range is designed for standard type 316 stainless steel structural strand, and galvanized or stainless steel wire rope. The B315 range is stronger for a given cable size, designed for high strength stainless structural strand and for galvanized structural strand.



Turnbuckles: Standard Stainless Structural Strand, Galvanized Wire Rope, Stainless Steel Wire Rope														
Turnbuckle Part Number	Cable Diameter		Cable Breaking Strength Limit		Pin Diameter (P)		Jaw Gap (B)		Throat Depth (E)		Edge Distance (ED)		Take Up	
	inch	(mm)	kips	(kN)	inch	(mm)	inch	(mm)	inch	(mm)	inch	(mm)	inch	(mm)
B310-0375	0.375	(9.5)	15	(67)	0.63	(15.9)	0.53	(13.5)	1.20	(30.5)	0.90	(22.9)	1.50	(38.1)
B310-0500	0.500	(12.7)	26	(116)	0.88	(22.2)	0.66	(16.6)	1.50	(38.1)	1.13	(28.6)	1.50	(38.1)
B310-0625	0.625	(15.9)	41	(182)	1.13	(28.6)	0.91	(23.1)	1.85	(47.0)	1.50	(38.1)	3.00	(76.2)
B310-0750	0.750	(19.1)	52	(231)	1.25	(31.8)	1.06	(27.0)	2.03	(51.4)	1.69	(42.9)	3.00	(76.2)
B310-0875	0.875	(22.2)	70	(311)	1.38	(34.9)	1.06	(27.0)	2.44	(62.0)	1.86	(47.2)	3.00	(76.2)
B310-1000	1.000	(25.4)	91	(405)	1.50	(38.1)	1.31	(33.3)	2.63	(66.7)	2.00	(50.8)	3.50	(88.9)
B310-1125	1.125	(28.6)	116	(516)	1.50	(38.1)	1.31	(33.3)	3.00	(76.2)	2.10	(53.3)	3.50	(88.9)
B310-1250	1.250	(31.8)	144	(641)	1.75	(44.5)	1.56	(39.7)	3.13	(79.4)	2.40	(61.0)	3.50	(88.9)
B310-1375	1.375	(34.9)	176	(783)	1.88	(47.6)	1.81	(46.0)	3.30	(83.8)	2.70	(68.6)	3.50	(88.9)
B310-1500	1.500	(38.1)	208	(925)	2.00	(50.8)	1.81	(46.0)	3.80	(96.5)	2.75	(69.9)	4.00	(101.6)

Notes: B310 turnbuckles can be used for stainless steel strand, such as standard type 316 1x19 cable, as long as the cable strength is not greater than that shown in the table above. Fittings are for length adjustment, not for pretensioning to more than 2000 pounds.

Turnbuckles: High Strength Stainless Steel Structural Strand, Galvanized Structural Strand														
Turnbuckle Part Number	Cable Diameter		Cable Breaking Strength Limit		Pin Diameter (P)		Jaw Gap (B)		Throat Depth (E)		Edge Distance (ED)		Take Up	
	inch	(mm)	kips	(kN)	inch	(mm)	inch	(mm)	inch	(mm)	inch	(mm)	inch	(mm)
B315-0500	0.500	(12.7)	30	(133)	1.00	(25.4)	0.66	(16.6)	1.78	(45.1)	1.25	(31.8)	1.50	(38.1)
B315-0625	0.625	(15.9)	48	(214)	1.25	(31.8)	0.91	(23.0)	2.10	(53.3)	1.60	(40.6)	2.00	(50.8)
B315-0750	0.750	(19.1)	68	(302)	1.50	(38.1)	1.06	(27.0)	2.50	(63.5)	1.88	(47.6)	2.50	(63.5)
B315-0787	0.787	(20.0)	67	(298)	1.50	(38.1)	1.06	(27.0)	2.50	(63.5)	1.88	(47.6)	2.50	(63.5)
B315-0875	0.875	(22.2)	92	(409)	1.50	(38.1)	1.19	(30.2)	2.75	(69.9)	2.10	(53.3)	2.50	(63.5)
B315-1000	1.000	(25.4)	122	(543)	1.50	(38.1)	1.31	(33.3)	3.10	(78.7)	2.13	(54.1)	3.00	(76.2)
B315-1024	1.024	(26.0)	112	(498)	1.50	(38.1)	1.31	(33.3)	3.10	(78.7)	2.13	(54.1)	3.00	(76.2)
B315-1125	1.125	(28.6)	156	(694)	1.75	(44.5)	1.56	(39.7)	3.40	(86.4)	2.50	(63.5)	3.00	(76.2)
B315-1181	1.181	(30.0)	149	(663)	1.75	(44.5)	1.56	(39.7)	3.40	(86.4)	2.50	(63.5)	3.00	(76.2)
B315-1250	1.250	(31.8)	192	(854)	2.00	(50.8)	1.81	(46.0)	3.80	(96.5)	2.75	(69.9)	3.00	(76.2)
B315-1375	1.375	(34.9)	232	(1032)	2.25	(57.1)	1.81	(46)	4.25	(108.0)	2.87	(72.9)	4.00	(101.6)
B315-1417	1.417	(36.0)	214	(952)	2.25	(57.1)	1.81	(46)	4.25	(108.0)	2.87	(72.9)	4.00	(101.6)
B315-1500	1.500	(38.1)	276	(1228)	2.50	(63.5)	2.06	(52.4)	4.60	(116.8)	3.25	(82.55)	4.00	(101.6)

Note: Fittings are for length adjustment, not for pretensioning to more than 2000 pounds.