

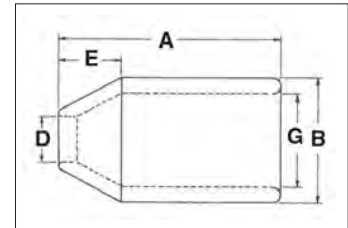


S-505 Swaging Sleeve



Cross Section of Swaged Sleeve

- For flemish eye wire rope splicing.
- Designed for low temperature toughness.
- Resists cracking when swaged (equals or exceeds stainless steel sleeves).
- Special processed low carbon steel.
- COLD TUFF® for better swageability.
- Can be stamped for identification after swaging without concern for fractures when following these directions:
 - Use round corner stamps to a maximum depth of 1.38mm.
 - The area for stamping should be on the side of the sleeve in the plane of the sling eye, and no less than 7mm from either end of the sleeve.
- Standard steel sleeve terminations have efficiency ratings as follows based on the catalog strength of wire rope.
- Do not use on wire rope size other than size shown.



S-505 Termination Efficiency		
Size (mm)	Type of Wire Rope *	
	IWRC	FC
6 - 26	96%	93%
28 - 52	92%	89%
56 and Larger	90%	87%

Intermediate Metric Die Chart

Sleeve and Swaging Die Requirements for Intermediate Sizes of Metric Wire Rope							
S-505 Stock No.	S-505 Sleeve Size	Metric Wire Rope Size (mm)	Standard Round Dies				Maximum After Swage Dimension (mm)
			1st Stage Die		2nd Stage Die		
			Die No.	Die Size	Die No.	Die Size	
1041143	1/2	12	1190881	5 x 7 Double Cavity	—	—	25.1
1041223	7/8	20	1190901	5 x 7 Double Cavity	—	—	41.1
1041241	1	24	1190921	5 x 7 Double Cavity	—	—	47.8
1041321	1-1/2	36	1192649	5 x 7	1190941	5 x 7	66.8
1041349	1-3/4	40	1192685	5 x 7	1190961	5 x 7	74.9
1041367	2	48	1192729	5 x 7	1190971	5 x 7	87.9
1041401	2-1/2	60	1192809	5 x 7	1190981	5 x 7	111
1041401	2-1/2	60	1191061	6 x 12	1190991	6 x 12	111
1041447	3	72	1193201	6 x 12	1191001	6 x 12	122
1041483	3-1/2	80	1193247	6 x 12	1191101	6 x 12	138
1041483	3-1/2	84	1193247	6 x 12	1191121	6 x 12	141

QUIC-PASS® system not available for these metric rope sizes. Note: Fittings designed only to be used on exact sizes listed.

** NOTE: S-505 Standard Sleeves are recommended for use with 6 x 19 or 6 x 37, IPS or XIP (EIP), XXIP (EEIP), RRL, FC or IWRC wire rope.

Before using any National Swage fitting with any other type lay, construction or grade of wire rope, it is recommended that the termination be destructive and documented to prove the adequacy of the assembly to be manufactured.



WIRE ROPE END FITTINGS

S-505 COLD TUFF® Standard Steel Sleeves

S-505 Standard Steel Sleeve Specifications												Swager / Die Data		
S-505 Stock No.	Rope Size		Weight Per 100 (kg)	Pkg. Qty.	Before Swage Dimensions (mm)					Maximum After Swage Dimensions (mm)		Standard Round Dies		QUIC-PASS Dies
	(in)	(mm)			A	B	D	E	G	Standard Die	QUIC-PASS Die	Die Description	Standard Die Stock No.	QUIC-PASS Die Stock No.
1041063	1/4	6-7	3.60	250	25.4	16.8	7.88	7.12	11.9	14.5	14.4	1/4 Taper	1197528	1923530
1041090	5/16	8	4.08	200	38.1	23.1	11.2	11.2	15.8	19.1	19.5	3/8 Taper	1192364	1923551
1041107	3/8	9-10	5.44	100	38.1	23.1	11.9	9.91	16.8	19.1	19.5	3/8 Taper	1192364	1923551
1041125	7/16	11	13.6	50	51.0	31.0	14.0	16.5	21.6	25.7	25.8	1/2 Taper	1192408	1923572
1041143	1/2	13	13.2	50	51.0	31.0	16.0	14.2	23.1	25.7	25.8	1/2 Taper	1192408	1923572
1041161	9/16	14	30.8	25	70.0	37.3	17.5	16.0	26.2	31.5	31.7	5/8 Taper	1192444	1923593
1041189	5/8	16	25.9	25	70.0	37.3	19.1	16.0	27.7	31.5	31.7	5/8 Taper	1192444	1923593
1041205	3/4	18-19	40.0	20	81.0	43.7	23.1	21.3	32.5	37.1	37.5	3/4 Taper	1192462	1923614
1041223	7/8	22	62	10	90.5	51.5	26.2	25.4	38.9	42.7	44.1	7/8 Taper	1192480	1923635
1041241	1	25-26	89	10	102	58.0	29.5	28.6	43.7	49.0	49.7	1 Taper	1192505	1923656
1041269	1-1/8	28-29	118	Bulk	122	63.5	32.5	31.8	49.3	54.1	55.1	1-1/8 Open 1st Stage 2nd Stage	1192523 1192541	1923677
1041287	1-1/4	31-32	154	Bulk	132	70.5	36.5	35.8	55.0	58.9	61.1	1-1/4 Open 1st Stage 2nd Stage	1192621 1192587	1923698
1041303	1-3/8	34-35	195	Bulk	148	76.0	39.7	39.7	60.5	64.0	66.3	1-3/8 Open 1st Stage 2nd Stage	1192667 1192621	1923717
1041321	1-1/2	37-38	226	Bulk	159	82.5	42.9	42.9	67.0	69.0	72.0	1-1/2 Open 1st Stage 2nd Stage	1192649 1192667	1923736

Note: Fittings designed only to be used on exact sizes listed.

S-505 COLD TUFF® Standard Steel Sleeves

S-505 Standard Steel Sleeve Specifications											Swager / Die Data					
S-505 Stock No.	Rope Size		Weight Per 100 (kg)	Pkg. Qty.	Before Swage Dimensions (mm)					Maximum After Swage Dimensions (mm)	Die Description	Stock No.				
	(in)	(mm)			A	B	D	E	G			500 Tons 1000 Tons 1500 Tons 5x7	Front Load		Side Load	
											1500 Ton 6x12	3000 Ton 6x12	1500 Ton 6x12	3000 Ton 6x12		
1041349	1-3/4	44-45	367	Bulk	184	97.5	49.2	50.0	79.5	78.7	1-3/4 Open 1st Stage 2nd Stage	1192685 1192701	—	—	—	—
1041367	2	50-52	510	Bulk	216	111	57.0	57.0	92.0	90.4	2 Open 1st Stage 2nd Stage	1192729 1192747	—	—	—	—
1041385	2-1/4	56-57	862	Bulk	243	128	63.5	64.5	102	105	2-1/4 Open 1st Stage 2nd Stage	1192765 1192783	1191089 1191043	1191089 1191043	—	1195085 1195067
1041401	2-1/2	62-64	1043	Bulk	267	140	70.0	71.5	114	114	2-1/2 Open 1st Stage 2nd Stage	—	1191061 1191089	1191061 1191089	1195370 1195469	1195076 1195085
1041429	2-3/4	68-70	1270	Bulk	292	146	76.0	78.5	121	119	2-3/4 Open 1st Stage 2nd Stage	—	1191034 1191052	1191034 1191052	1195389 1195478	1195094 1195101
1041447	3	75-76	1334	Bulk	305	152	82.5	86.0	127	126	3 Open 1st Stage 2nd Stage	—	1193201 1193229	1193201 1193229	1195398 1195487	1195110 1195129
1041483	3-1/2	87-89	2105	Bulk	356	178	98.5	100	148	147	3-1/2 Open 1st Stage 2nd Stage	—	1193247 1193265	1193247 1193265	—	1195138 1195147
1041492	3-3/4	93-95	2495	Bulk	381	191	103	108	160	158	3-3/4 Open 1st Stage 2nd Stage	—	—	1191114 1191132	—	1195263 1195272
1041508	4	100-105	3130	Bulk	406	206	111	114	173	170	4 Open 1st Stage 2nd Stage	—	—	1191150 1191178	—	1195156 1195165
1041526	4-1/2	112-114	4536	Bulk	457	232	124	129	195	189	4-1/2 Open 1st Stage 2nd Stage	—	—	1191187 1191203	—	1195174 1195183

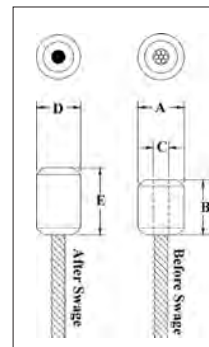
Note: Fittings designed only to be used on exact sizes listed.



S-409



- Swage button terminations have an efficiency rating of 98% based on the catalog strength of wire rope.
- Special processed, low carbon steel.
- COLD TUFF® for better swageability.
- Stamp for identification after swaging without concern for fractures (as per directions in the Wire Rope End Terminations User's Manual).
- S-409 Buttons are recommended for use with 6 x 19 or 6 x 37, IPS or XIP (EIP), RRL, FC or IWRC wire rope. Before using any National Swage fitting with any other type lay, construction or grade of wire rope, it is recommended that the termination be destructive tested and documented to prove the adequacy of the assembly to be manufactured.



S-409 COLD TUFF® Buttons

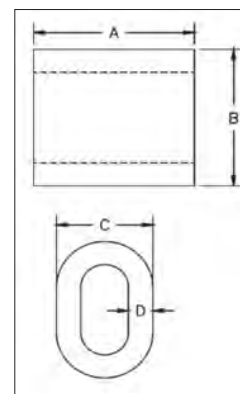
S-409 Steel Swage Button Specifications										Swager / Die Data	
S-409 Stock No.	Size No.	Rope Size		Weight Per 100 (kg)	Before Swage Dimensions (mm)			After Swage Dimensions (mm)		Die Description	Stock No. 500 Tons 1000 Tons 1500 Tons 5 x 7
		(in)	(mm)		A	B	C	D Maximum After Swage Dimensions	E Length*		
1040171	1 SB	1/8	3	.91	10.7	12.7	3.56	10.2	15.5	1/8 - 1/4 Button	1191621
1040215	3 SB	3/16	5	1.81	14.2	17.8	5.08	13.2	21.3	1/4 1st Stage	1197528
1040251	5 SB	1/4	6-7	3.63	17.3	26.9	7.87	14.7	33.5	1/8 - 1/4 Button	1191621
1040297	7 SB	5/16	8	7.26	22.4	28.7	9.14	19.6	33.8	3/8 1st Stage	1192364
1040313	8 SB	3/8	9-10	6.80	22.4	37.6	10.7	19.6	42.9	3/8 1st stage	1192364
1040331	9 SB	7/16	11	13.6	28.7	41.4	12.2	26.2	49.3	1/2 1st Stage	1192408
1040359	10 SB	1/2	13	22.7	33.3	48.0	14.0	29.5	55.1	5/8 Socket	1192907
1040377	11 SB	9/16	14	31.8	36.6	51.3	15.5	32.8	61.2	9/16 -5/8 Button	1191665
1040395	12 SB	5/8	16	45.4	39.6	61.5	17.0	36.1	73.4	3/4 Socket	1192925
1040411	13 SB	3/4	18-20	59	42.7	69.6	20.3	39.6	82.6	3/4 1st Stage	1192462
1040439	14 SB	7/8	22	100	50.8	83.1	23.9	45.7	98.0	7/8 1st Stage	1192480
1040457	15 SB	1	25-26	141	57.2	93.2	26.9	52.1	111	1 1st Stage	1192505
1040475	16 SB	1-1/8	28-29	204	65.0	103	30.2	58.4	122	1-1/8 1st Stage	1192523
1040493	17 SB	1-1/4	31-32	295	71.4	116	33.8	65.0	138	1-3/8 Socket	1193023

* NOTE: Length is measured from outside end of termination. Fittings designed only to be used on exact sizes listed.

S-506



- For turnback wire rope splicing.
- Special processed low carbon steel.
- Turnback terminations have efficiency ratings of 94% based on the catalog strength of wire rope.
- COLD TUFF® for better swageability and low temperature toughness.
- S-506 Sleeves are recommended for use with 6 x 19 or 6 x 37, IPS or XIP (EIP), RRL, FC or IWRC wire rope. Before using any National Swage fitting with any other type lay, construction or grade of wire rope, it is recommended that the termination be destructive tested and documented to prove the adequacy of the assembly to be manufactured.
- Resists cracking when swaged (equals or exceeds stainless steel sleeves).
- Stamp for identification after swaging without concern for fractures (as per directions in the Wire Rope End Termination User's Manual).



S-506 COLD TUFF® Duplex Non-Tapered Sleeves

S-506 Steel Duplex Non-Tapered Sleeve Specifications										Swager / Die Data	
S-506 Stock No.	Rope Size		Weight Per 100 (kg)	Pkg. Qty.	Before Swage Dimensions (mm)				Max. After Swage Dimensions (mm)	Die Description	Stock No. 500 Tons 1000 Tons 1500 Tons 5 x 7
	(in)	(mm)			A	B	C	D			
1039334	5/16	8	7.7	200	31.8	26.9	20.6	4.85	19.6	3/8 1st Stage	1192364
1039352	3/8	9-10	5.9	100	31.8	28.4	20.6	3.55	19.6	3/8 1st Stage	1192364
1039370	7/16	11	14.1	50	41.4	35.8	25.9	4.85	26.2	1/2 1st Stage	1192408
1039398	1/2	13	12.2	50	41.4	36.6	25.9	4.05	26.2	1/2 1st Stage	1192408
1039414	9/16	14	28.6	25	57.0	43.7	31.2	5.85	32.8	5/8 1st Stage	1192444
1039432	5/8	16	24.5	25	57.0	46.7	32.5	5.10	32.8	5/8 1st Stage	1192444
1039450	3/4	18-20	41.3	10	67.0	55.0	38.6	5.85	39.4	3/4 1st Stage	1192462
1039478	7/8	22	57	10	73.0	63.5	44.5	6.85	45.7	7/8 1st Stage	1192480
1039496	1	25-26	85	10	77.5	72.0	51.0	8.40	52.0	1 1st Stage	1192505
1039539	1-1/4	30-32	174	Bulk	103	89.0	63.5	9.65	65.0	1-3/8 Socket	1193023

Note: Fittings designed only to be used on exact sizes listed.

WIRE ROPE END FITTINGS