

Issued 9-7-01

604-1

LOUDEN®

MONORAIL AND CRANE SYSTEM TRACK

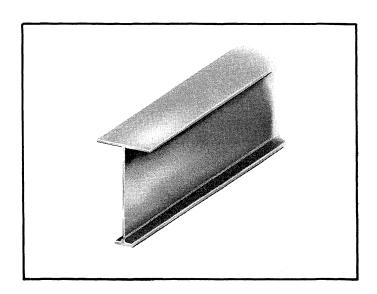
SUPERTRACK™ GIRDER WITH 3.33" OPERATING FLANGE

LOUDEN SUPERTRACK™ GIRDER

Louden 3.33" flange SuperTrack is designed to meet most requirements of heavy-duty service at moderate expense. SuperTrack Girder is constructed of an operating flange continuously welded to a supporting web and top flange. The operating flange is rolled from special analysis billets to exacting specifications and tolerances.

LOUDEN SuperTrack is used where loads and building bay spans are too great to use standard SuperTrack. SuperTrack Girder provides a beam of exceptional strength and maximum economy of weight. The beam strength reduces or eliminates the need for intermediate hangers.

Each piece of LOUDEN SuperTrack Girder is engineered expecially for your requirements, fabricated, and cut to exact length. All holes are in place, all curves are prepared to layout specifications, and all equipment is shipped from the factory ready for erection.



Trolleys for this track are illustrated in Catalog Section 403 and switches are illustrated in Catalog Section 703. A complete line of hangers and other fittings are shown in Catalog Section 607.

FEATURES

Uniform thickness of running tread with published dimensions.

Published chemical content and physical properties of running tread

Full 7/16" tread thickness.

Flat running tread.

Efficient girder design.

Web and top flange offset.

Fully manufactured at factory.

The LOUDEN® Trademark.

BENEFITS

Full metal thickness from fillet to edge of flange provides maximum load carrying capacity. Dimensions are known, with no reduction of metal from fillet to flange.

Assures that long wearing and peen-resistant metalurgy is used which meets or exceeds monorail manufacturer's specifications.

Able to withstand heavy wheel loads providing long wearing track for most crane or monorail systems, yet offering economy of price.

Allows the use of flat tread wheels on which the radius of the wheel is uniform across the width of the running surface or "Footprint". Prevents wheel tread slip, minimizing tread wear and peening.

Web and top flange are computer matched with the high carbon flange, for maximum load carrying capacity with minimum weight.

Allows easy alignment of the running flange of adjacent girders at splices. Provides extra clearance for ease of installation.

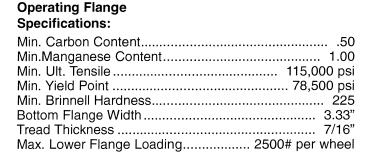
All girders are welded, straightened, and all splice holes, hanger holes, as well as electrification holes are in place before painting and shipment, for easier and faster installation.

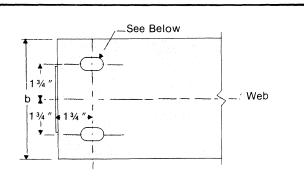
Being the originators of the underhung monorail and crane industry, the user is assured of the ultimate in design, manufacturing and application expertise when purchasing a system which will most completely satisfy his particular requirements.

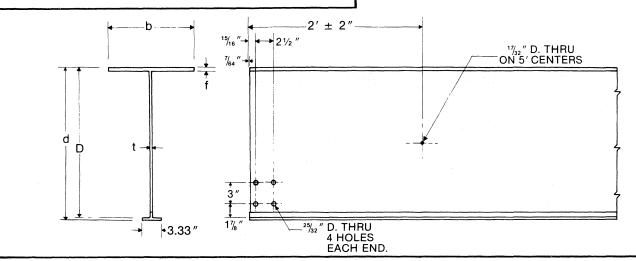
LOUDEN® MONORAIL AND CRANE SYSTEM TRACK SUPERTRACK™ GIRDER WITH 3.33" OPERATING FLANGE

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LOUDEN SUPERTRACK™ GIRDER







Cat. No	604.820	604.924	604.1231	604.1435	604.1538	604.1846	604.2153
Wt./Ft.	20	24	31	35	38	46	53
D	7 9/16	9	12	14	15	18	21
d	8	9 7/16	12 7/16	14 7/16	15 7/16	18 7/16	21 7/16
b	6	6	6	7	8	10	12
f	5/16	7/16	5/8	5/8	5/8	5/8	5/8
t	5/16	5/16	5/16	5/16	5/16	5/16	5/16

Each piece of girder track is furnished with standard splice punching at each end and two slotted holes at each end of the top flange as shown above. Nominal slot length is twice the hole size but does not exceed 2" Hole size must be specified as shown at right.

Maximum permissible Wheel Load on 604 Type SUPERTRACK Girder is 2,500 Lbs. (5,000 Lbs. per 2 Wheel Trolley).

N. A. - Not Available

Top Flange Hole Sizes						
Flange	Bolt Size					
Thickness	5/8	3/4	7/8			
5/16	11/16	N.A.	N.A.			
7/16	11/16	13/16	N.A.			
5/8	11/16	13/16	15/16			





LOUDEN® SUPERTRACK™ GIRDER TRACK EQUIVALENT CENTER LOADS SPAN/450 - DEFLECTION LIMITED TO 1.25"

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1 1 -								
SPAN 604	1.820	604.924	604.1231	604.1435	604.1538	604.1846	604.2153	SPAN
5 15	,663 s	18,424 s	23,992 s	27,721 s	29,544 s	34,968 s	36,118 s	5
6 15	,653 s	18,412 s	23,977 s	27,703 s	29,525 s	34,945 s	36,092 s	6
	,643 s	18,400 s	23,961 s	27,686 s	29,506 s	34,922 s	36,065 s	7
8 13	,888 t	17,924 t	23,946 s	27,669 s	29,487 s	34,899 s	36,039 s	8
9 12,	,326 t	15,910 t	24,039 t	27,651 s	29,468 s	34,877 s	36,012 s	9
	,075 t	14,296 t	21,606 t	27,197 t	29,449 s	34,854 s	35,986 s	10
	,049 t	12,974 t	19,613 t	24,692 t	27,612 t	34,831 s	35,959 s	11
	,538 с	11,870 t	17,949 t	22,601 t	25,274 t	33,623 t	35,933 s	12
	,247 c	10,934 t	16,539 t	20,829 t	23,294 t	30,993 t	35,907 s	13
	,221 c	10,130 t	15,328 t	19,307 t	21,593 t	28,736 t	35,880 s	14
	,391 c	9,356 d	14,277 t	17,986 t	20,117 t	26,776 t	34,258 t	15
	,711 c	8,181 d	13,355 t	16,829 t	18,823 t	25,058 t	32,066 t	16
	,145 с	7,205 d	12,539 t	15,805 t	17,679 t	23,540 t	30,128 t	17
18 3,	,669 с	6,385 d	11,813 t	14,893 t	16,659 t	22,188 t	28,403 t	18
19 3,	,265 с	5,688 d	11,161 t	14,075 t	15,746 t	20,976 t	26,857 t	19
20 2,	,918 c	5,091 d	10,624 c	13,337 t	14,921 t	19,883 t	25,462 t	20
21 2,	,618 c	4,575 d	9,593 c	12,668 t	14,174 t	18,892 t	24,198 t	21
22	1	4,126 d	8,697 c	11,891 c	13,492 t	17,989 t	23,047 t	22
23		3,732 d	7,913 c	10,829 c	12,868 t	17,162 t	21,993 t	23
24	l	3,385 d	7,223 c	9,895 c	12,295 t	16,403 t	21,025 t	24
25		3,077 d	6,613 c	9,069 c	11,739 c	15,702 t	20,132 t	25
26			6,070 c	8,335 c	10,798 c	15,054 t	19,306 t	26
27			5,585 c	7,679 c	9,958 c	14,452 t	18,539 t	27
28	ı		5,149 c	7,090 c	9,205 c	13,891 t	17,825 t	28
29			4,755 c	6,559 c	8,526 c	13,327 c	17,158 t	29
30	1		4,399 c	6,078 c	7,912 c	12,387 c	16,534 t	30
31	i			5,642 c	7,354 c	11,535 c	15,949 t	31
32				5,244 c	6,847 c	10,759 c	15,399 t	32
33	i			4,880 c	6,383 c	10,051 c	14,505 c	33
34				4,547 c	5,957 c	9,402 c	13,587 c	34
35				4,240 c	5,566 c	8,806 c	12,745 c	35
36	Ī				5,206 c	8,258 c	11,970 c	36
37					4,873 c	7,751 c	11,254 c	37
38					4,564 c	7,282 c	10,592 c	38
39					4,278 c	6,847 c	9,979 с	39
40					4,011 c	6,443 c	9,409 с	40
41						6,066 c	8,878 c	41
42						5,714 c	8,383 c	42
43	İ					5,384 c	7,920 c	43
44						5,076 c	7,487 c	44
45						4,786 c	7,080 c	45
46	ŀ			İ		4,514 c	6,698 c	46
47						4,257 c	6,339 c	47
48						4,015 c	6,000 c	48
49	1				,	3,786 c	5,679 c	49
50							5,377 c	50
51							5,090 c	51
52							4,819 c	52
53							4,561 c	53
54							4,316 c	54
55							4,082 c	55
56							3,812 d	56
57			1				3,486 d	57

NOTES:

- Figures shown are allowable Equivalent Center Loads (ECL's) at the span as if developed by a single two-wheel trolley. Refer to ECL calculations for loads on four, eight and 16 wheel units, in section 1100 (Engineering).
- The ECL's shown are limited by tension of the bottom flange, compression of the top flange, deflection of the beam and shear. These are indicated by the letters t, c, d & s, respectively, in accordance with ANSI MH 27.1 1981.
- 3. The weight of the girder has been considered and need not be deducted in load calculations.
- These figures are for crane runways and monorail track where deflection is limited to 1/450 of the span, with a maximum deflection of 1.25".
- The maximum ratio of span to depth of the girder has been limited to 32 to avoid a spring-like condition not desirable in most installations.
- 6. The maximum ratio of span to top flange width is limited to 60.
- Special girders may be constructed to meet load / depth / span conditions not shown here.
 Consult the factory for special girders.



LOUDEN® SUPERTRACK™ GIRDER TRACK EQUIVALENT CENTER LOADS SPAN/600 - DEFLECTION LIMITED TO 1.25"

604-4 Issued 9-7-01

SPAN	604.820	604.924	604.1231	604.1435	604.1538	604.1846	604.2153	SPAN
5	15,663 s	18,424 s	23,992 s	27,721 s	29,544 s	34,968 s	36,118 s	5
6	15,653 s	18,412 s	23,977 s	27,703 s	29,525 s	34,945 s	36,092 s	6
7	15,643 s	18,400 s	23,961 s	27,686 s	29,506 s	34,922 s	36,065 s	7
8	13,888 t	17,924 t	23,946 s	27,669 s	29,487 s	34,899 s	36,039 s	8
9	12,015 d	15,910 t	24,039 t	27,651 s	29,468 s	34,877 s	36,012 s	9
10	8,698 d	14,296 t	21,606 t	27,197 t	29,449 s	34,854 s	35,986 s	10
11	7,981 d	12,974 t	19,613 t	24,692 t	27,612 t	34,831 s	35,959 s	11
12	6,672 d	11,047 d	17,949 t	22,601 t	25,274 t	33,623 t	35,933 s	12
13	5,651 d	9,372 d	16,539 t	20,829 t	23,294 t	30,993 t	35,907 s	13
14	4,838 d	8,039 d	15,328 t	19,307 t	21,593 t	28,736 t	35,880 s	14
15	4,179 d	6,961 d	14,277 t	17,986 t	20,117 t	26,776 t	34,258 t	15
16	3,638 d	6,076 d	13,142 d	16,829 t	18,823 t	25,058 t	32,066 t	16
17	3,188 d	5,341 d	11,587 d	15,805 t	17,679 t	23,540 t	30,128 t	17
18	2,808 d	4,722 d	10,281 d	14,893 t	16,659 t	22,188 t	28,403 t	18
19	2,485 d	4,195 d	9,173 d	13,904 d	15,746 t	20,976 t	26,857 t	19
20	2,208 d	3,744 d	8,224 d	12,486 d	14,921 t	19,883 t	25,462 t	20
21	1,967 d	3,353 d	7,405 d	11,263 d	13,893 d	18,892 t	24,198 t	21
22		3,013 d	6,692 d	10,200 d	12,591 d	17,989 t	23,047 t	22
23		2,714 d	6,068 d	9,270 d	11,452 d 10,449 d	17,162 t	21,993 t	23
25		2,450 d	5,518 d 5,030 d	8,451 d 7,726 d	9,561 d	16,403 t 15,702 t	21,025 t	24 25
26		2,215 d	4,596 d	7,726 d 7,080 d	9,561 d 8,771 d	15,702 t 14,707 d	20,132 t	26
27			4,596 d 4,206 d	6,503 d	8,065 d	13,556 d	19,306 t 18,539 t	27
28			3,856 d	5,983 d	7,431 d	12,523 d	17,825 t	28
29			3,539 d	5,515 d	6.858 d	12,523 d 11,592 d	17,025 t	29
30			3,252 d	5,090 d	6,340 d	10,749 d	16,534 t	30
31			0,202 u	4,704 d	5,868 d	9,985 d	15,531 d	31
32				4,351 d	5,438 d	9,288 d	14,479 d	32
33				4,028 d	5,044 d	8,651 d	13,519 d	33
34				3,731 d	4,683 d	8,067 d	12,639 d	34
35				3,458 d	4,350 d	7,530 d	11,831 d	35
36				0,100	4,042 d	7,034 d	11,086 d	36
37					3,757 d	6,576 d	10,399 d	37
38					3,493 d	6,152 d	9,762 d	38
39					3,247 d	5,757 d	9,171 d	39
40					3,017 d	5,390 d	8,622 d	40
41						5,047 d	8,110 d	41
42				1		4,727 d	7,631 d	42
43				!		4,426 d	7,184 d	43
44						4,144 d	6,764 d	44
45						3,878 d	6,370 d	45
46						3,628 d	5,999 d	46
47						3,392 d	5,650 d	47
48						3,169 d	5,320 d	48
49						2,957 d	5,008 d	49
50							4,712 d	50
51							4,432 d	51
52							4,166 d	52
53			1				3,913 d	53
54		j		j			3,672 d	54
55							3,443 d	55
56			1				3,223 d	56
57		1	I	1			3,014 d	57

NOTES:

- Figures shown are allowable Equivalent Center Loads (ECL's) at the span as if developed by a single two-wheel trolley. Refer to ECL calculations for loads on four, eight and 16 wheel units, in section 1100 (Engineering).
- The ECL's shown are limited by tension of the bottom flange, compression of the top flange, deflection of the beam and shear. These are indicated by the letters t, c, d & s, respectively, in accordance with ANSI MH 27.1 1981.
- The weight of the girder has been considered and need not be deducted in load calculations
- These figures are for crane runways and monorail track where deflection is limited to 1/600 of the span, with a maximum deflection of 1.25".
- The maximum ratio of span to depth of the girder has been limited to 32 to avoid a spring-like condition not desirable in most installations.
- 6. The maximum ratio of span to top flange width is limited to 60.
- Special girders may be constructed to meet load/depth/span conditions not shown here.
 Consult the factory for special girders.



ACCO Material Handling Solutions

604-5 Issued 9-7-01

604.924, 604.1231, 604.14*, 604.15* SUPERTRACK GIRDER TRACK CURVES FOR USE WITH TROLLEYS WITH UP TO 2,500 LB. WHEEL LOAD.

SPECIAL CURVE INFORMATION

Standard tangent length for square cut end is 12". For tangent lengths shorter than 12" see Cutting Charge on price page. 5" minimum tangent length.

Minimum tangent length for an angle cut is 14".

Minimum center straight for "S" curve is 12".

Maximum overall length is 20'-0".

Minimum radius is 3'-0".

Hangers are required within 12" of the tangent points and at the center of the arc for up to 45 degrees and up to a maximum of 10' radius. Add hangers if 10' radius is exceeded. See Fig. 1.

Hangers are required within 12" of the tangent points and at the center of the arc for up to 90 degrees and up to a maximum of 6' radius. Add hangers if 6' radius is exceeded. See Fig. 2.

Hangers are required within 12" of the tangent points and at the 3rd points in the arc for up to 90 degrees and from 6' to 10' radius. Add hangers if 10' radius is exceeded. See Fig. 3.

*Note: 604 series Special Curves have a 6" top flange.

