ESCO Critical Lift Permit

Use this permit if <u>any</u> of the following exist: 1. Lift is 75% of Crane Capacity. 2. Two cranes required for lift. 3. Within 10ft of power lines exceeding 50KVW. 4. Crane operator determines this is a critical lift.

Job Site: _____ Date of Lift: _____

Item to be lifted: _____

Source of Weight & Size - How do we know? (Nameplate, Drawings, Calculated, etc): _____

A) Erection Crane
1. Type of Crane _____
2. Rated Capacity _____ Tons
3. Last Documented Inspection Date: _____
4. Lifting Arrangement
   a. Max. distance, Center of Load to center pin of crane _____ ft.
   b. Length of Boom _____ ft.
   c. Angle of Boom at pick-up _____ degrees
   d. Angle of Boom at set _____ degrees
   e. Rated capacity of crane under severest lifting conditions
      1. Over Rear _____ lbs
      2. Over Front _____ lbs
      3. Over Side _____ lbs
5. Max. Load on Erection Crane _____ lbs

B) Weight
1. Equipment Condition New ( ) Used ( )
2. Weight Empty _____ lbs
3. Weight of Headache Ball _____ lbs
4. Weight of Block _____ lbs
5. Weight of Lifting Bar _____ lbs
6. Weight of Slings & Shackles _____ lbs
7. Allowance for Unaccounted Material in Equipment _____ lbs
8. Other _____ lbs

Total Weight _____ lbs

C) Sizing of Slings
1. Sling Selection
   a. Circle Type of Arrangement (on page 2)
   b. Number of Slings in Hook-up. _____
   c. Circle sling load under appropriate column
   d. Circle sling size
   e. Sling Length _____
2. Shackle Selection
   a. Circle appropriate Shackle

Pin Diam. (IN)				1/2	5/8	3/4	7/8	1
Capacity (TONS)				1-1/2	2	3-1/4	4-3/4	6-1/2
1-1/8	1-1/4	1-3/8	1-1/2	1-5/8	2	2-1/4	2-3/4	3-1/4
8-1/2	9-1/2	12	13-1/2	17	25	35	50	75

A-1) Tailing Crane
1. Type of Crane _____
2. Rated Capacity _____ Tons
3. Last Documented Inspection Date: _____
4. Lifting Arrangement
   a. Max. distance, Center of Load to center pin of crane _____ ft.
   b. Length of Boom _____ ft.
   c. Angle of Boom at pick-up _____ degrees
   d. Angle of Boom at set _____ degrees
   e. Rated capacity of crane under severest lifting conditions
      1. Over Rear _____ lbs
      2. Over Front _____ lbs
      3. Over Side _____ lbs
5. Max. Load on Erection Crane _____ lbs

B-1) Weight
1. Equipment Condition New ( ) Used ( )
2. Weight Empty _____ lbs
3. Weight of Headache Ball _____ lbs
4. Weight of Block _____ lbs
5. Weight of Lifting Bar _____ lbs
6. Weight of Slings & Shackles _____ lbs
7. Allowance for Unaccounted Material in Equipment _____ lbs
8. Other _____ lbs

Total Weight _____ lbs

C-1) Sizing of Slings
1. Sling Selection
   a. Circle Type of Arrangement (on page 2)
   b. Number of Slings in Hook-up. _____
   c. Circle sling load under appropriate column
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8-1/2	9-1/2	12	13-1/2	17	25	35	50	75

COMPLETE PAGE 2

Standard Sling and Shackle Capacity Charts

Size (Inches)	Fiber core	Rated Capacity - Pounds					
		Vertical	Choker Hitch	Basket Hitch (Two Legs)			
				Vertical	15°	30°	45°
1/4	6 X 19	1020	760	2000	1960	1760	1440
5/16	6 X 19	1580	1180	3200	3000	2800	2200
3/8	6 X 19	2200	1700	4400	4400	3800	3200
1/2	6 X 19	4000	3000	7800	7600	6800	5600
9/16	6 X 19	5000	3800	10000	9600	8600	7000
5/8	6 X 19	6200	4600	12400	12000	10600	8800
3/4	6 X 19	8800	6600	17600	17000	15200	12400
7/8	6 X 19	11800	9000	24000	22000	20000	16800
1	6 X 19	15400	11600	30000	29000	26000	22000
1-1/8	6 X 19	19000	14200	38000	36000	32000	26000
1-1/4	6 X 37	24000	17400	46000	44000	40000	32000
1-1/2	6 X 37	32000	24000	66000	64000	58000	46000
1-5/8	6 X 37	38000	28000	76000	74000	66000	54000
1-3/4	6 X 37	44000	34000	90000	86000	78000	62000
2	6 X 37	58000	44000	116000	112000	100000	82000
2-1/4	6 X 37	72000	54000	144000	138000	124000	102000
2-1/2	6 X 37	88000	66000	176000	170000	152000	124000

Standard Sling and Shackle Capacity Charts

Size (Inches)	Fiber core	Rated Capacity - Pounds					
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				Vertical	15°	30°	45°
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3/4	6 X 19	8800	6600	17600	17000	15200	12400
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2-1/2	6 X 37	88000	66000	176000	170000	152000	124000

PRE-LIFT CHECK LIST

D)		Erection Crane		D-1) Trailing Crane	
		YES	NO	YES	NO
1.	Weather Suitable	( )	( )	( )	( )
2.	Matting Acceptable	( )	( )	( )	( )
3.	Outriggers fully extended	( )	( )	( )	( )
4.	Crane in good condition	( )	( )	( )	( )
5.	Swing Room	( )	( )	( )	( )
6.	Head Room Checked	( )	( )	( )	( )
7.	Max. Counterweight used	( )	( )	( )	( )
8.	Tag line used	( )	( )	( )	( )
9.	Experienced Operator	( )	( )	( )	( )
10.	Experienced Flagman	( )	( )	( )	( )
11.	Experienced Rigger	( )	( )	( )	( )
12.	Lifting Lugs Inspected	( )	( )	( )	( )
13.	Lifting Lugs Condition	( )	( )	( )	( )
14.	Lugs OK'd by N.D.T. Group	( )	( )	( )	( )
15.	Softeners Needed (Cutting Hazards to	( )	( )	( )	( )
16.	Center of Gravity Considered	( )	( )	( )	( )
17.	Chokers Properly Hitched				
	to Maintain Load Control	( )	( )	( )	( )
18.	Prelift Meeting Conducted	( )	( )	( )	( )
19.	Orientation Confirmed (of Lift)	( )	( )	( )	( )
20.	Lift Plan Considered	( )	( )	( )	( )
21.	Inspect				
	a. Lifting Bar	( )	( )	( )	( )
	b. Lifting Bar OK'd by N.D.T. Group	( )	( )	( )	( )
	c. Slings	( )	( )	( )	( )
	d. Shackles	( )	( )	( )	( )
22.	Disconnecting Rigging Planned	( )	( )	( )	( )

SIMPLIFIED SKETCH OF HOOKUP NEXT PAGE