**The Answer** for engineered solutions in heavy lifting & crane recovery applications



ENGINEERED DERRICH SOLUTIONS



## DERRICHS & HOISTS FOR HEAVY CONSTRUTION PROJECTS

Building on over 70 years of heavy lifting and tensioning experience, Timberland Equipment has emerged as a leading force in the design and delivery of engineered hoists, winching and derrick systems for construction and mining projects worldwide.



### **Engineering and Design**

Timberland designs and builds a broad product range of derricks including modular portable derricks which can be transported up and down high rise buildings via elevator to high capacity derricks installed on large civil and mining construction sites. From 1 to 500 ton derricks, standard derricks and heavy lift hoisting packages.



### **Adjustability and Configurations**

All of our standard stiffleg (fixed and adjustable) derricks can be configured into a Guyline, Column and Chicago Boom configuration.

Consult Timberland's expert team for load capacity charts and any additional features required for your specific configuration and requirements.



### **Modular Construction & Standardization**

Timberland's standard modular design allows for interchangeability between boom and mast sections as well as between leg and sill sections.

Our modular component design provides balance between practical set-up of the machine and ease of handling and transport.

### **Customization**

Timberland thrives when custom applications are required. Consult our team of highly qualified engineers and senior sales consultants for custom derrick and hoist applications.



### **Continued Support**

Our team works hand in hand with customers and local regulatory authorities to ensure seamless project implementation.

Timberland supplies with each Adjustable Stiffleg Derrick, a computer program to show the derrick capacity and reactions for any configuration within the adjustability range. This program is also available on our website.

### 35 TON ADJUSTABLE STIFFLEG DERRICH (ASD35-120)



**Managing Risk** 

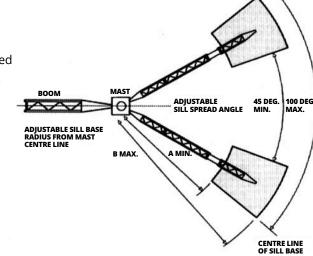
Timberland Equipment is a global leader in the integrated design, manufacture and support of engineered winches, hoists, sheaves derricks and tensioning equipment. Our renewed customer-first focus and field experience bring us a unique understanding of the many dimensions of "risk" that our customers face.

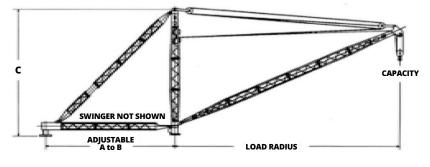
### STANDARD FEATURES AND BENEFITS

- Adjustable sill and leg lengths
- Adjustable sill spread angle from 45° to 100°
- Standard maximum boom length of 123'-4"
- Boom, mast, sill and leg sections 8'-4"
- Lattice construction
- Sheaves have machined rope grooves and sealed anti-friction bearings
- · Mechanical boom angle indicator
- Electro-hydraulic swinger drive
- Swing limit switches
- Load & boom blocks
- Multi position mast base design
- Standard hoist package allows for max lift height of 850' fully reeved
- 8 Part line for the load line
- 10 Part line for the boom line
- Rated minimum operating temperature -20°C (-4°F)

### OPTIONS

- · Bolt on rigging package
- Erection Gin Pole or Crane
- Load Moment Indicator (LMI) package including:
- Anti 2-Block
- Anemometer
- Load Sensing
- Digital display of boom and swing angles
- Beacon on top of mast
- Swinger remote control (25 ft. pendant)
- Additional 25 ft. remote extensions upon request
- Cold temperature package to allow for operation down to -40°C (-40°F)
- 1800' 35 Ton Extended Lift Height Derrick option





Model	Boom		LOAD RADIUS (FT.)						A	В	С					
Wodel	Length	15	20	30	40	50	60	70	80	90	100	110	120	A	В	
ASD35-65	65'-0"	35.0	35.0	35.0	35.0	31.2	25.3									
ASD35-75	73'-4"		34.4	34.4	34.4	31.2	25.4	21.2								
ASD35-80	81'-8"		29.7	29.0	28.4	27.8	25.4	21.2	18.1							
ASD35-90	90'-0"		24.3	23.7	23.0	22.4	21.8	21.2	18.1	15.6				25'-7"	34'-8"	35'-1"
ASD35-100	98'-4"			19.2	18.5	17.9	17.3	16.7	16.2	15.6				25 -7	34-0	33-1
ASD35-110	106'-8"			15.4	14.8	14.2	13.6	13.0	12.4	11.9	11.4					
ASD35-115	115'-0"			12.2	11.6	11.0	10.4	9.8	9.3	8.7	8.2	7.8				
ASD35-120	123'-4"			9.5	8.9	8.3	7.7	7.2	6.6	6.1	5.6	5.1	4.7			

35 Ton derrick ratings above are in short tons (2,000 lbs) and based on a 90 degree sill spread angle and sill length of 34'-8". These charts are for reference only. Please consult Timberland or refer to Timberland's online calculator for specific load cases.

### 17 TON ADJUSTABLE STIFFLEG DERRICH (ASD17-110)



### **Seamless Delivery**

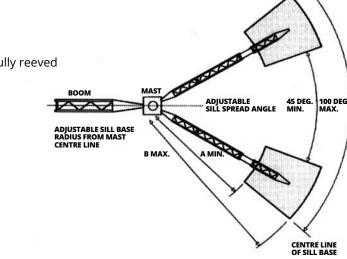
Timberland engineering and manufacturing bring together all the expertise you need working together under one roof to develop, deliver and support your engineered solutions. Our end-to-end view of customer projects, from design concept to lifelong support, allows direct accountability and clear communications to ensure the success of your project.

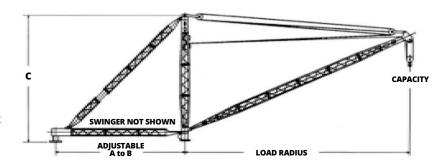
### STANDARD FEATURES AND BENEFITS

- Adjustable sill and leg lengths
- Adjustable sill spread angle from 45° to 100°
- Standard maximum boom length of 106'-8"
- Boom, mast, sill and leg sections 8'-4"
- Lattice construction
- Sheaves have machined rope grooves and sealed anti-friction bearings
- Mechanical boom angle indicator
- Electro-hydraulic swinger drive
- Swing limit switches
- Load & boom blocks
- · Multi position mast base design
- Standard hoist package allows for max lift height of 1700' fully reeved
- 4 Part line for the load line
- 7 Part line for the boom line
- · Rated minimum operating
- Temperature -20°C (-4°F)

### OPTIONS

- Bolt on rigging package
- Erection Gin Pole or Crane
- Load Moment Indicator (LMI) package including:
- Anti 2-Block
- Anemometer
- Load Sensing
- Digital display of boom and swing angles
- · Beacon on top of mast
- Swinger remote control (25 ft. pendant)
- Additional 25 ft. remote extensions upon request
- Cold temperature package to allow for operation down to -40°C (-40°F)





Model	Boom		LOAD RADIUS (FT.)							В				
Model	Length	15	20	30	40	50	60	70	80	90	100	A	В	С
ASD17-65	65'-0"	17.0	17.0	17.0	17.0	17.0	13.5							
ASD17-75	73'-4"	16.0	16.0	15.5	15.5	14.5	14.0	11.5						
ASD17-80	81'-8"	12.5	12.5	12.0	11.5	11.0	11.0	10.5	9.5			17'-5"	34'-6"	35'-6"
ASD17-90	90'-0"	10.0	9.5	9.0	9.0	8.5	8.0	7.5	7.5	7.0		17-5	34-6	35-0
ASD17-100	98'-4"		7.5	7.0	6.5	6.0	5.5	5.5	5.0	4.5				
ASD17-110	106'-8"		5.5	5.0	4.5	4.0	4.0	3.5	3.0	3.0	2.5			

17 Ton derrick ratings above are in short tons (2,000 lbs) and based on a 90 degree sill spread angle and sill length of 34'-6". These charts are for reference only. Please consult Timberland or refer to Timberland's online calculator for specific load cases.

## 10 TON STIFFLEG DERRICH (SD10-81)

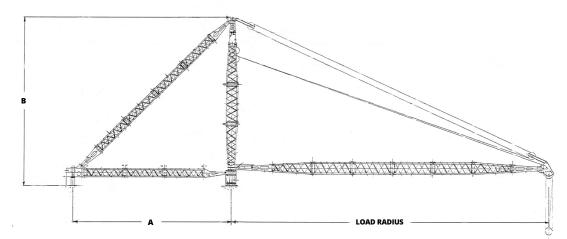
#### STANDARD FEATURES AND BENEFITS

- · Fixed sill and leg length
- Fixed sill spread angle at 90°
- Standard maximum boom length of 87'-0"
- Boom, mast, sill and leg sections 6'-0"
- Lattice construction
- Sheaves have machined rope grooves and sealed anti-friction bearings
- Mechanical boom angle indicator

- Electro-hydraulic swinger drive
- Swing limit switches
- Load & boom blocks
- · Multi position mast base design
- Standard hoist package allows for max lift height of 850' fully reeved
- 4 Part line for the load line
- 6 Part line for the boom line
- Rated minimum operating temperature -20°C (-4°F)

#### OPTIONS

- Load Moment Indicator (LMI) package including:
- Anti 2-Block
- Anemometer
- Load Sensing
- Digital display of boom and swing angles
- Beacon on top of mast
- Swinger remote control (25 ft. pendant)
- Additional 25 ft. remote extensions upon request
- Cold temperature package to allow for operation down to -40°C (-40°F)



Model	Boom		LOAD RADIUS (FT.)												
Model	Length	10	15	20	30	40	50	60	65	70	75	80	85	A	В
SD10-45	45'-0"	10.0	10.0	10.0	10.0	10.0									
SD10-51	51'-0"	10.0	10.0	10.0	10.0	10.0	10.0								
SD10-57	57'-0"	10.0	10.0	10.0	10.0	10.0	10.0								
SD10-63	63'-0"		10.0	10.0	10.0	9.6	9.2	9.2						201.011	201.401
SD10-69	69'-0"		9.4	9.4	9.4	9.2	8.8	8.8	8.8					30'-0"	30'-10"
SD10-75	75'-0"		8.5	8.5	8.5	8.5	8.5	8.2	8.2	8.2	7.1				
SD10-81	81'-0"			7.7	7.7	7.5	7.3	7.1	7.0	6.8	6.7	6.7			
SD10-87	87'-0"			6.7	6.5	6.3	6.1	5.8	5.7	5.7	5.6	5.5	5.3		

10 Ton derrick ratings above are in short tons (2,000 lbs) and based on a 90 degree sill spread angle and sill length of 30'-0". These charts are for reference only. Please consult Timberland for specific load cases.

### 6 TON STIFFLEG DERRICH (SD6-66)

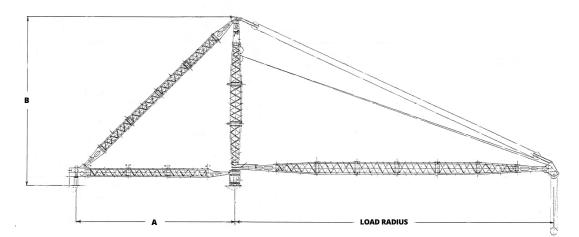
#### STANDARD FEATURES AND BENEFITS

- · Fixed sill and leg length
- Fixed sill spread angle at 90°
- Standard maximum boom length of 66'-0"
- Boom, mast, sill and leg sections 6'-0"
- Lattice construction
- Sheaves have machined rope grooves and sealed anti-friction bearings
- Mechanical boom angle indicator

- · Electro-hydraulic swinger drive
- Swing limit switches
- Load & boom blocks
- · Multi position mast base design
- Standard hoist package allows for max lift height of 850' fully reeved
- 2 Part line for the load line
- 5 Part line for the boom line
- Rated minimum operating temperature -20°C (-4°F)

### OPTIONS

- Load Moment Indicator (LMI) package including:
- Anti 2-Block
- Anemometer
- Load Sensing
- Digital display of boom and swing angles
- · Beacon on top of mast
- Swinger remote control (25 ft. pendant)
- Additional 25 ft. remote extensions upon request
- Cold temperature package to allow for operation down to -40°C (-40°F)



Model	Boom		LOAD RADIUS (FT.)												
Model	Length	10	15	20	25	30	35	40	45	50	55	60	65	A	В
SD6-36	36'-0"	6.0	6.0	6.0	5.8	5.7	5.7								
SD6-42	42'-0"	6.0	6.0	6.0	5.7	5.5	5.3	5.3							
SD6-48	48'-0"	6.0	6.0	6.0	5.6	5.3	5.2	5.1	5.1					241.01	201.011
SD6-54	54'-0"		6.0	5.8	5.3	5.1	5.0	4.7	4.6	4.6				24'-0"	28'-0"
SD6-60	60'-0"		5.6	5.5	5.1	4.8	4.7	4.6	4.5	4.5	4.2	3.5			
SD6-66	66 <sup>-0</sup> "		5.0	5.0	5.0	4.7	4.5	4.3	4.2	4.2	4.0	3.7	3.2		

6 Ton derrick ratings above are in short tons (2,000 lbs) and based on a 90 degree sill spread angle and sill length of 24'-0". These charts are for reference only. Please consult Timberland for specific load cases.

### 35 & 17 TON DERRICH HOISTS

### STANDARD FEATURES AND BENEFITS

- Cascading double drum design
- Splits into 4 modules
- Load Drum, Boom Drum, Engine, Reservoir/Cooler/Fuel Tank
- Modules can be bolted together, or positioned separately
- 850' lift height (35 ton) with 8-part line
- 1700' lift height (17 ton) with 4-part line
- 130 HP Diesel/Hydraulic powered with controlled lowering circuit
- 150% of SWL spring applied, hydraulic release driveline brake
- Manually actuated locking dogs
- Return to center joystick

### OPTIONS

- 100 HP Electro-hydraulic powered
- Retarder circuit available when run electric motor is run from Generator
- Quick disconnect hydraulic hoses & electric plugs
- Remote operator station, with hydraulically actuated locking dogs
- Operator Cab
- Wireless Remote Pendant
- Cold temperature package
- LMI Package with derrick
- Lebus Shell for Load Line Drum
- Other power units available upon request & location requirements





#### **35 Ton Derrick Hoist Load Charts**

	Load Line (Rear Drum) - GP100-1-180-1-160DH						
Bono Lavor	Low Spe	ed Mode	High Speed Mode				
Rope Layer	Linepull (lbs)	Linespeed (fpm)	Linepull (lbs)	Linespeed (fpm)			
1st Layer	10,000	93	9,700	200			
Mid Drum	10,000	140	6,600	297			
Full Drum	10,000	194	4,650	418			

	Boom Line (Front Drum) - GP100-1-180-1-160DH						
Bono Lavor	Low Spe	ed Mode	High Speed Mode				
Rope Layer	Linepull (lbs)	Linespeed (fpm)	Linepull (lbs)	Linespeed (fpm)			
1st Layer	18,000	106	9,125	213			
Mid Drum	18,000	122	9,125	244			
Full Drum	18,000	130	9,125	260			

#### **17 Ton Derrick Hoist Load Charts**

Load Line (Rear Drum) - GP100-1-120-1-160DH							
Dana Lavor	Low Spe	ed Mode	High Speed Mode				
Rope Layer	Linepull (lbs)	Linespeed (fpm)	Linepull (lbs)	Linespeed (fpm)			
1st Layer	10,000	93	9,700	200			
Mid Drum	10,000	140	6,600	297			
Full Drum	10,000	194	4,650	418			

	Boom Line (Front Drum) - GP100-1-120-1-160DH						
Pono Lavor	Low Spe	ed Mode	High Speed Mode				
Rope Layer	Linepull (lbs)	Linespeed (fpm)	Linepull (lbs)	Linespeed (fpm)			
1st Layer	12,000	144	4,350	398			
Mid Drum	12,000	161	4,350	446			
Full Drum	12,000	170	4,350	470			

### 35 TON EXTENDED LIFT HEIGHT HOISTS OPTION



### STANDARD FEATURES AND BENEFITS

- Designed to work with the optional 35 ton extended lift height Derrick
- 260 HP Diesel/Hydraulic powered with controlled lowering circuit
- 1800' lift height on a single part line
- Two independent automatic braking systems
- Driveline and band brake on load drum only
- Return to center joystick
- Quick disconnect hydraulic hoses & electric plugs
- Remote operator station, hyd actuated locking dogs

### OPTIONS

- Lebus Shell
- Operator cab
- Other power units available upon request
- Wireless Remote
   Pendant

### **35 Ton Extended Lift Height Hoist Load Charts**

Load Line - GP500-1-260DH							
Dana Lavor	Low Spe	ed Mode	High Spe	ed Mode			
Rope Layer	Linepull (lbs)	Linespeed (fpm)	Linepull (lbs)	Linespeed (fpm)			
1st Layer	50,000	35.7	14,000	50.0			
Mid Drum	50,000	41.4	12,070	58.0			
Full Drum	50,000	50.0	10,000	70.0			

### 6 & 10 TON DERRICH HOIST



### STANDARD FEATURES AND BENEFITS

- Cascading double drum design
- Breaks up into 2 modules
- 850' lift height (10 ton) with 4-part line
- 850' lift height (6 ton) with 2-part line
- Each module is driven by a separate electric motor (comes with starter)
- Manually actuated locking dogs

#### **6 Ton Derrick Hoist Load Charts**

Load	Load Line (Front Drum) - GP65-1-20E						
Rope Layer	Linepull (lbs)	Linespeed (fpm)					
1st Layer	6,500	41					
Mid Drum	6,500	63					
Full Drum	6,500	90					

Boom	Boom Line (Rear Drum) - GP62-1-7.5E							
Rope Layer	Linepull (lbs)	Linespeed (fpm)						
1st Layer	6,200	33						
Mid Drum	6,200	37						
Full Drum	6,200	40						

#### **10 Ton Derrick Hoist Load Charts**

Load Line (Front Drum) - GP56-1-30E							
Rope Layer	Linepull (lbs)	Linespeed (fpm)					
1st Layer	5,600	49					
Mid Drum	5,600	98					
Full Drum	5,600	159					

Boom Line (Rear Drum) - GP99-1-10E		
Rope Layer	Linepull (lbs)	Linespeed (fpm)
1st Layer	9,900	106
Mid Drum	9,900	122
Full Drum	9,900	130

## RIGGING EQUIPMENT FOR CONSTRUCTION PROJECTS

### **T50/42BW Bullwheel Tensioner**

Max continuous tension: 5000 lbs Linespeed: 0 - 4 mph Bullwheel diameter: 42" Max rope diameter: 1.4"





### **T50H/52 DD Bullwheel Tensioner/Reel Carrier**

Max continuous tension: 5000 lbs @ 4 mph
Max reel dimensions: 96" dia, 54" wide
Max reel weight: 12,500 lbs
Bullwheel diameter: 52"
Max rope diameter: 1.5



Max linepull / tension: 8992 lbs
Max linespeed: 3.1 mph
Physical Weight: 4,750 lbs
Bullwheel diameter: 48"
Max rope diameter: 1.7"





### **DPT-40B Puller-Tensioner**

Continuous torque rating: Intermittent torque rating: Continuous linepull rating:

Max reel dimensions: Max reel weight: 70,000 in.lbs 80,000 in.lbs 4,350 lbs with 6,000 ft. of 5/8" rope on drum 72" dia, 56" wide 6,000 lbs.

### **Power Reel Stands**

Max reel dimensions: Max reel weight: Physical dimensions (LxWxH): Drive torque & speed rating: 72" dia, 44" wide 8,000 lbs 66" x 80" x 55" 20,000 in.lbs & 34 RPM



### PROJECT PORTFOLIO

Customers around the world trust Timberland for our expertise in lifting, whether it's on the tallest building or requires the largest capacity.



### **432 Park Avenue Condominium Tower**

An award winning application of Timberland's 35 ton derrick, where our system was used to dismantle the tower crane on the tallest residential building in the Western hemisphere.



### **One World Trade Center**

Timberland supplied a 35 ton derrick and hoist to perform the required pick and lowering of the tower crane used throughout the construction of the tallest building in the Western hemisphere.



### **Kiewit Offshore Heavy Lift Device**

Timberland supplied a system of boom line hoists, load line hoists and reel winders, along with the HPU's and controls to operate all four heavy lift units in synchronized lifts up to 12,500 tons.



### **Bigge AFRD**

The 6800 ton Super Derrick was built using Timberland 75 ton traction winches, reel winders and four 950 HP hydraulic power units with synchronized control system. The AFRD is the world's largest capacity, land-based, rotating crane and the only machine capable of making every super lift on a twin-unit nuclear power plant site from a single location.

# THE ANSWER IS TIMBERLAND

Timberland Equipment has been designing and manufacturing specialized material handling equipment for the construction, resource and energy sectors since 1947.

Since our earliest days, Timberland built its success on equipment that customers can rely on to perform every day in the most critical applications and in the most remote regions.

#### ENGINEERING CONFIDENCE WORLDWIDE

Timberland Equipment is a member of the Timberland Group, serving a worldwide base of customers with engineered solutions for many of today's most challenging projects in lifting, pulling, conveying and tensioning applications.

- Underground mining
- Heavy construction
- · Offshore oil & gas projects
- Electrical power transmission and distribution
- · Marine & fishing industries

With production and service facilities totaling over 180,000 sq. ft. on 55 acres, we employ more than 300 people internationally. Our "solutions" focus is reflected in the large number of professional engineers who take leadership roles in all our operations.



#### **Timberland Equipment Limited**

P.O. Box 490, 459 Industrial Avenue Woodstock, Ontario, Canada, N4S 7Z2 Phone: 519-537-6262 Fax: 519-539-5853

sales@tewinch.com service@tewinch.com parts@tewinch.com

www.timberlandequipment.com

