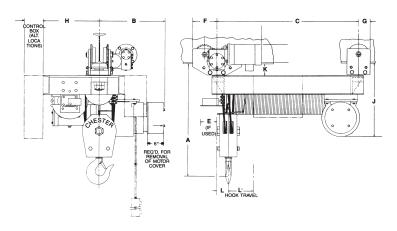




SPECIFICATIONS & CLEARANCE DIMENSIONS



FOR CHESTER

WORM DRIVE HOIST

ТҮРЕ	CAPACITY LBS.	SPEED (fpm)	MOTOR (hp)	LIFT (ft)	MODEL Number	A	В	С	E	F	G	н	J	K	L	Ľ	WGT.	REEVING
				24	WDMT-127	22	201/2	211/2	51/2	73/8	31/2	16	203/4	4	4	41/4	640	
				45	WDMT-128			28								71/2	690	
		20	2 @ 1200	66	WDMT-129			341/2								11	740	
				98	WDMT-129B			441/2								16	820	
				24	WDMT-120			211/2								41/4	640	
				45	WDMT-121			28								71/2	690	2PS-1/4
	2,000	30	3 @ 1800	66	WDMT-122			341/2								11	740	
				98	WDMT-122B			441/2								16	820	
				24	WDMT-123			21 ¹ / ₂								41/4	640	
		40	4 @ 1800	45	WDMT-124			28								71/2	690	
				68	WDMT-125			341/2								11	740	
				98	WDMT-125B	22		441/2								16	820	
				18	WDMT-130	251/2		211/2								41/4	640	
		20	3 @ 1200	35	WDMT-131			28								71/2	690	
				52	WDMT-132			341/2								11	740	
	3,000	30		18	WDMT-133			211/2								41/4	640	2PS-5/16
			5 @ 1800	35	WDMT-134			28								71/2	690	
				52	WDMT-135		201/2	341/2								11	740	
				18	WDMT-136		231/2	211/2				16	203/4			41/4	665	
		40	6 @ 1800	35	WDMT-137			28								71/2	715	
				52	WDMT-138	251/2	231/2	341/2				16	203/4			11	765	
R				12	WDMT-146	28	201/2	211/2				161/4	223/4			21/4	760	4PS-1/4
				22	WDMT-147			28								33/4	810	
		15		32	WDMT-148			341/2								53/8	860	
			3 @ 1800	49	WDMT-148A			441/2								8	960	
				72	WDMT-148B			58 ¹ / ₂								111/2	1060	
				93	WDMT-148C			711/2								15	1160	1
				115	WDMT-148D			851/2								181/2	1260	
				12	WDMT-140			211/2								21/4	760	
	4,000	20		22	WDMT-141			28								33/4	810	
				32	WDMT-142			341/2								53/8	860	
			4 @ 1800	49	WDMT-142A			441/2								8	910	1
				72	WDMT-142B			58 ¹ / ₂								111/2	1010	1
				93	WDMT-142C			711/2								15	1110	1
				115	WDMT-142D	28	201/2	85 ¹ / ₂	5 ¹ / ₂			16 ¹ / ₄	223/4			18 ¹ / ₂	1210	1
				20	WDMT-143	32	22	26 ¹ / ₈	5 ¹ / ₄			173/4	233/8	4	4	53/4	890	
				40	WDMT-144			347/8								10 ¹ /8	940	1
S		30	6 @ 1800	60	WDMT-145			435/8								141/2	990	2PS- ³ /8
				75	WDMT-145A			435/8								141/2	1010	1
				90	WDMT-145B			435/8								14 ¹ / ₂	1015	
				120	WDMT-145C	32	22	53 ⁵ /8	5 ¹ / ₄			173/4	233/8			19 ¹ / ₂	1050	2PS-5/16E
				9	WDMT-160	28	201/2	211/2	51/2			16 ¹ / ₄	223/4			21/4	760	
				17	WDMT-161			28								33/4	810	1
R	6,000	15	5 @ 1800	26	WDMT-162			341/2								53/8	860	4PS-5/16
	•			39	WDMT-162A			441/2								8	850	1
				57	WDMT-162B			581/2								111/2	950	1
				74	WDMT-162C	28	201/2	711/2	51/2	73/8	31/2	16 ¹ / ₄	223/4	4	4	15	1050	1

NOTE: When adding a geared limit switch — add 1" to head room "A" dimension.

NOTE: All Hoists with a lift exceeding 60' include a geared limit switch.

NOTE: TVL - (True Vertical Lift).

MOTORIZED TROLLEY SUSPENSION



The Chester side-drive motorized trolley increases speed and efficiency of load handling. Worm gearing in all sizes of motorized trolleys assists in smooth acceleration and deceleration.

With a motorized trolley suspension, a Chester Worm Drive Hoist can lift and transport loads to 15 tons with push button ease.

Multiple motorized trolleys are normally used for larger hoists (consult factory).

Trolleys can be supplied for I-beam, wide-flange or patented track systems. Specify flange width — from 3¹/₄" to 8". Trolleys for wider flanges are available at extra cost. Each trolley is made for the specified beam or track, and is not adjustable to other sizes.

Standard trolley speeds available: 15, 20, 35, 50, 75, 100, 150 fpm.

CAPACITY TONS	SIZE	CLEARANCE	MIN. CURVE RADIUS
1 - 5	7 - 24	7/16	6 ft.
6 - 7 ¹ / ₂ (4PS) Reeving	8 - 24	5/8	6 ft.
7 ¹ / ₂ (2PD) Reeving	7 - 24	7/16	6 ft.
10 - 15	8 - 24	5/8	7 ft.

TYPE	CAPACITY LBS.	SPEED (fpm)	MOTOR (hp)	LIFT (ft)	MODEL NUMBER	Α	В	С	Е	F	G	н	J	К	L	Ľ	WGT	REEVING
11112	LDG.	(ipiii)	(114)	9	WDMT-163	28	231/2	211/2	5 ¹ / ₂	73/8	31/2	16 ¹ / ₄	223/4	4	4	21/4	800	HELVING
				17	WDMT-163	20	2372	28	372	7-78	3.72	10.74	22-14	4	4	33/4	850	
			6 @ 1800	26	WDMT-165			341/4								53/8		4PS-5/16
R			0 0 .000	39	WDMT-165A			441/2								8	1035	
		20		57	WDMT-165B			58 ¹ / ₂								11 ¹ / ₂	1135	1
				74	WDMT-165C	28	231/2	711/2	51/2			16 ¹ / ₄	223/4			15	1235	1
	6,000			20	WDMT-166	32	22	26 ¹ / ₈	5 ¹ / ₄			173/4	233/8			53/4	890	
			6 @ 1200	40	WDMT-167			347/8								101/8	940	
				60	WDMT-168			43 ⁵ / ₈								14 ¹ / ₂	990	2PS- ⁷ /16
				80	WDMT-168A	32		53 ⁵ /8				17 ³ / ₄				19 ¹ / ₂	1050	
				10	WDMT-180	36		26 ¹ /8				18 ¹ / ₄				3	1150	
				20	WDMT-181			347/8								51/4	1200	
				30	WDMT-182			435/8								71/4	1250	
		15	6 @ 1800	38	WDMT-182A			435/8								71/4	1250	
				50	WDMT-182B			535/8								91/2	1300	
				75	WDMT-182C			705/8								151/2	1400	
	8,000			100	WDMT-182D			891/8								181/2		4PS- ³ /8
				10	WDMT-183			261/8								3	1150	
				20	WDMT-184			347/8								51/4	1200	4PS- ⁷ /16
			71/ 64000	30	WDMT-185			435/8								71/4	1250	
0		20	71/2 @1800		WDMT-185A			435/8								71/4	1250	
S				50	WDMT-185B			53 ⁵ / ₈								91/2	1300	
				75	WDMT-185C			705/8								151/2	1400	
				100	WDMT-185D WDMT-1100			89 ¹ / ₈ 26 ¹ / ₈								18 ¹ / ₂	1550 1150	
				20	WDMT-1100			34 ⁷ / ₈								5 ¹ / ₄		
		10	5 @ 1200	30	WDMT-1101			435/8								71/4	1250	
				38	WDMT-1102A			435/8								71/4	1250	
				50	WDMT-1102R			535/8								91/2		
				75	WDMT-1102C			701/8								15 ¹ / ₂	1400	
			71/2 @1800	10	WDMT-1103			26 ¹ / ₈								3	1150	4PS-7/16
				20	WDMT-1104			347/8								51/4		
		15		30	WDMT-1105			435/8								71/4	1250	
	10,000			38	WDMT-1105A			435/8								71/4	1250	
	· ·			50	WDMT-1105B			53 ⁵ /8								91/2	1300	
				75	WDMT-1105C	36	22	701/8				18 ¹ / ₄	233/8		4	15 ¹ / ₂	1400	4PS- ³ /8E
				23	WDMT-1104W	28	223/4	347/8				17 ⁵ /8	223/8		83/4	5	1200	
			10 @ 1800	35	WDMT-1105W			435/8								7	1300	
				45	WDMT-1105WA	28	22 ³ / ₄	53 ⁵ /8				17 ⁵ /8	223/8		83/4	10	1400	
]			15	WDMT-1106	34	31	421/2				221/4	281/2		17 ¹ / ₂	TVL	2200	
		20		25	WDMT-1107			51 ¹ / ₂							22		2300	
			10 @ 1200	35	WDMT-1108			571/2							25		2400	2PD-7/16
Т				55	WDMT-1108A			721/2							321/2		2600	2PD-3/8E
				65	WDMT-1108B			721/2							321/2		2600	
		<u> </u>		95	WDMT-1108C	34	31	931/2	51/4	73/8	31/2	221/4	281/2	4	421/2	TVL	2850	<u></u>

HOW TO ORDER A CHESTER WORM DRIVE HOIST

When specifying a Chester Worm Drive Hoist, the following parameters should be considered. Determine the values required, and clearly state them when ordering. The following checklist will be of help:

- 1. Load weight to be lifted
- 2. Lift or reach required
- 3. Lifting speed or speeds
- 4. Power supply available
- How often load must be lifted (specify number of starts per cycle, number of cycles per hour, on-time per hour).
- 6. Operating environment (moisture, corrosive fumes, explosive vapors, temperature, etc.).
- 7. Beam sizes and weight (to determine trolley wheel specifications).
- 8. Trolley type (plain, hand-geared, or motorized) and trolley speed.
- Controls (may be expressed as functions, such as Hoist Up-Down, Trolley Forward-Reverse, etc.).
- Headroom requirements (Standard or Low, to accommodate specified lift).

LETTERS USED IN MODEL DESIGNATIONS:

WD-Lug-Mounted Worm Drive Hoist

WDT - Worm Drive Hoist with Plain Trolley

WDGT – Worm Drive Hoist with Hand-Geared Trolley

WDMT – Worm Drive Hoist with Motorized Trolley

ТҮРЕ	CAPACITY LBS.	SPEED (fpm)	MOTOR (hp)	LIFT (ft)	MODEL Number	А	В	С	Е	F	G	н	J	к	L	Ľ	WGT.	REEVING
				15	WDMT-1109	34	31	421/2	5 ¹ / ₄	73/8	31/2	221/4	281/2	4	171/2	TVL	2200	
				25	WDMT-1110			51 ¹ / ₂							22		2300	2PD- ⁷ / ₁₆
		30	15 @ 1800	35	WDMT-1111			57 ¹ / ₂							25		2400	
				55	WDMT-1111A			721/2							321/2		2600	
				65	WDMT-1111B			721/2							321/2		2600	
Т	10,000			95	WDMT-1111C	34	31	931/2				221/4	281/2		421/2	TVL	2850	
				50	WDMT-1001	37	32	441/2				21 ¹ / ₂	27		4	13	2300	
				75	WDMT-1002			571/2								19 ¹ / ₂	2450	1
		33	15 @ 1800	100	WDMT-1003			691/2								251/2	2625	2PS-1/2E
				125	WDMT-1004			811/2								311/2	2800	
				150	WDMT-1005	37	32	931/2		73/8	31/2	21 ¹ / ₂	27	4		371/2	3000	1
				10	WDMT-1120	38 ¹ / ₂	22	26 ¹ /8		81/8	4	18 ¹ / ₄	25 ⁷ /8	6 ¹ / ₂		3	1150	4PS-7/16
	12,000			20	WDMT-1121			347/8								51/4	1200	
S		10	6 @ 1200	30	WDMT-1122			435/8								71/4	1250	
				40	WDMT-1122A			535/8								91/2	1250	
				60	WDMT-1122B	381/2	22	701/8		81/8	4	18 ¹ / ₄	25 ⁷ /8	61/2	4	15 ¹ / ₂	1300	
				15	WDMT-1150	34	33	421/2		73/8	7 ³ /8	221/4	281/2	4	17 ¹ / ₂	TVL	2200	2PD-7/16E
			15 @1200	25	WDMT-1151			51 ¹ / ₂							22		2300	
Т		20		35	WDMT-1152			57 ¹ / ₂							25		2400	
	15,000			55	WDMT-1152A	34	33	721/2		73/8	73/8	221/4	281/2	4	321/2	TVL	2600	
S			71/2 @1200	20	WDMT-1153	38 ¹ / ₂	22	347/8	5 ¹ / ₄	81/8	4	18 ¹ / ₄	25 ⁷ /8	6 ¹ / ₂	4	5 ¹ / ₄	1200	4PS-7/16E
		10	10 @ 1200	15	WDMT-1200	371/2	31	59	41/2		81/8	221/4	301/2	61/2	253/4	TVL	2900	
				25	WDMT-1201			74							331/4		3100	
				35	WDMT-1202			90							41 ¹ / ₄		3300	
				50	WDMT-1202A			105							483/4		3500	4PD- ⁷ /16
		15		15	WDMT-1203			59							253/4		2900	
				25	WDMT-1204			74							331/4		3100	
Т	20,000			35	WDMT-1205			90							411/4		3300	
			15 @ 1800	50	WDMT-1205A	371/2	31	105			81/8	221/4	301/2	61/2	483/8	TVL	3500	
				25	WDMT-1206	441/2	32	46			4	21 ¹ / ₂	291/2	61/2	43/4	63/4	2500	
				37	WDMT-1207			59								10	2650	
		16		50	WDMT-1208			71								13	2825	4PS-1/2E
				62	WDMT-1209			83								16	3000	1
				75	WDMT-1210	441/2	32	95			4	211/2	291/2	61/2		19	3200	1
				15	WDMT-1300	38 ¹ / ₂	33	59			8 ¹ / ₈	221/4	30 ¹ / ₂	6 ¹ / ₂	253/4	TVL	2900	
	30,000	10	15 @ 1200	25	WDMT-1301			74							331/4		3100	4PD-7/16E
				35	WDMT-1302	381/2	33	90	41/2	81/8	81/8	221/4	301/2	61/2	41 ¹ / ₄	TVL	3300	

WARNING

The hoisting equipment shown in this bulletin is intended for industrial use only and should not be used to lift, support or otherwise transport human cargo or molten metal.

FOR IMMEDIATE SERVICE — CALL CHESTER!

Standard Worm Drive Monorail Hoists with motorized trolleys are furnished with 115 VAC pendent-type four button weather-resistant control station with push button drop four feet less than lift. Standard control includes reversing contactors for hoist and trolley, control transformer (115 VAC) and terminal block in a NEMA-12 cabinet, supply voltage 230/460 VAC, 3-phase, 60 Hz and a paddle type limit switch which stops the hook in its upper position.

Standard paint is an air-dried enamel. Standard worm drive hoists are built and tested in accordance with the nationally recognized Safety Standard for overhead hoists ANSI B30.16.

Mounting arrangements available are: Lug, plain trolley, hand geared trolley and motorized trolley. Clearance dimensions shown here for single hook monorail hoist with motorized trolleys are the same for plain and hand geared trolley arrangements. For Lug suspension models subtract (K) dimensions from (A) and (J). All others are the same. If space is critical, ask your Chester Hoist representative or consult factory.

— HOIST MOUNTINGS —



LUG MOUNT SUSPENSION

Basic Chester Worm Drive Hoist mounting lets you select the right suspension for your job. Permits use of alternate suspensions with minimum installation problems.



PLAIN TROLLEY SUSPENSION

For mounting on I-beam to permit horizontal travel. Useful where loads are not exceedingly heavy for manual movement or where travel speed is not important. Heat-treated ductile iron wheels are mounted on ball bearings for easy movement and long life.



HAND GEARED TROLLEY SUSPENSION

Features a closed hand wheel for additional chain guidance and reliable operation. This arrangement is recommended for loads of 3 tons or more — and where accurate spotting is required. Heat-treated ductile iron wheels and ball bearings deliver smooth rolling action.



MOTORIZED TROLLEY SUSPENSION

This trolley increases speeds and efficiency of load handling. Worm gearing in all sizes of motorized trolleys assists in smooth acceleration and deceleration. With a motorized trolley suspension, a Chester Worm Drive Hoist can lift and transport loads to 15 tons with push button ease.

— OPTIONS —

VERSATII ITY

The Chester Worm Drive Hoist design permits adaptation to a wide variety of applications. Variations are available to accommodate special mountings, long lifts, special trolleys, controls, etc. Multiple speeds are available for both hoist and trolley.

SPECIAL PAINT

The hoist can be provided with any color finish to meet customer requirements. Machine enamel is standard. Epoxy coating is available at extra cost.

SPECIAL CONTROL ENCLOSURES

Unless otherwise specified, NEMA-12 (Industrial, dust-tight and drip-tight) enclosures will be supplied.

Optional enclosures are available for various non-hazardous locations, as well as certain hazardous locations.

EXPLOSION-PROOF UNITS

Units area available to meet customer specifications for equipment meeting Class I, Group D or Class II, Groups E, F or G criteria. Spark-resistant features are available when specified (optional, extra cost).

All units are designed in accordance with Chester Hoist's interpretation of the N.E.C. Explosion-proof components such as motor, control enclosure, limit switch, etc, carry the UL Label.

TWIN HOOK SPACING

Spacing of hooks on Twin Hook models can be provided as required by the application. Suspended units (trolley mounted, monorail) may be specified with hook spacing as great as 15 feet.

CIRCUITS and CONTROL

All Chester Worm Drive Hoists and motorized trolleys are designed for use on 230/460 volts AC, 3 phase, 60 Hz. Units for operation on 200 VAC, 575 VAC or 50 Hz systems are also available.

IEC contactors are standard. NEMA-rated contactors are available at extra cost.

ALL TYPES OF LIMIT SWITCHES

Chester Worm Drive Monorail Hoists are furnished with a paddle type upper limit switch. Additional paddle switches, or multi-element geared upper and lower limit switches are also available at extra cost. A geared limit switch is standard on each floor or ceiling mounted unit.

LOAD-LIMITING SWITCH

A mechanical, positive-acting or an electrical (current-limiting) load limiter is available on Chester Worm Drive Hoist models.

TROLLEY SPEEDS and BRAKE

Motorized trolleys are available in six different speeds. A trolley motor brake can be supplied at extra cost.

PUSH BUTTON STATIONS

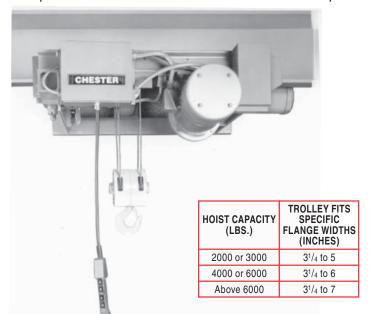
Some available options include extra push buttons to provide such functions as trolley and crane motion, start-stop control, tandem hoist control and multiple stations.

INCHING CIRCUIT

An inching circuit allows precise load handling down to a fraction of an inch each time the push button is pressed. This control is often used for accurate spotting of loads (option, extra cost).

LOW HEADROOM HOISTS 1 to 71/2 TONS

Complete with Push Button Transformer Control for operation on 230/460 VAC, 3 phase, 60 Hz



Chester Low Headroom Worm Drive Hoists are specifically designed for applications requiring minimal hook clearance.

Models are available with lug mount suspension, plain trolley or motorized trolley for efficient lifting and transporting of loads up to $7^{1/2}$ tons.

Because of minimal clearances, Low Headroom Worm Drive Hoists can be operated on straight track only.

Trolleys can be supplied for I-beam, wideflange or patented track systems. Each trolley is made for a specific beam or track flange width, and is not adjustable to other sizes. Limiting dimensions are shown in the box at left.

TWIN HOOK MODELS

Twin hook hoists are ideal for moving long, unwieldy loads. Specify desired hook spacing (up to 15 feet on suspended units).



FLOOR MOUNTED & CEILING MOUNTED WORM DRIVE HOISTS

1/2 to 71/2 TONS



For stable lifting of loads from a stationary position such as over a hatchway, loading dock or in an auditorium. Hook spacing available as desired. Spacing up to 40 feet is common.