

## ZEPHYR

# HOOK-SUSPENDED HOISTS

### CAPACITIES

1/2 to 25 Tons

### LIFT

8 Feet Standard

### OPTIONS

Spark and Corrosion Resistance  
Clean Room

Chester Zephyr steel-framed, hook-suspended hoists are designed, built and tested to meet rigid quality and performance specifications that exceed industry standards. The Zephyr is a specially engineered hoist from every standpoint and is available in capacities ranging from ¼ to 25 tons. Versatile and easy to maintain, this hoist is durable and well suited to any lifting application.

### KEY FEATURES

#### MECHANICALLY-SEALED, GREASE-TIGHT ENCLOSURE

Heavy steel housings keep out most foreign material, protecting precision-machined working parts. Sealed enclosure keeps lubrication in, making the Chester Zephyr a lifetime-lubricated hoist under normal conditions. No protruding parts prevent snagging.

#### SHOCK RESISTANT

Stamped covers made of heavy-gauge steel, two rolled steel sections in the frame and strong alloy steel suspension provide durability and shock resistance.

#### EASY DISMANTLING

Using only a small wrench and screwdriver, operators can make periodic inspections or replace chains and parts with ease.

#### GEAR TRAIN

Center planetary system uses modified involute stub tooth form. Gear teeth are cut from solid alloy steel blanks and heat treated for added strength.

#### DURABLE INTERNAL GEARS, PINIONS & PINION SHAFTS

Internal gears and pinions are made of nickel-chrome-molybdenum alloy steel. Internal gear is heat treated for durability and strength. Machine-cut teeth are heat treated and mounted on heavy-duty roller bearings. Gear and pinion shafts are made of rigidly mounted alloy steel and are surface hardened and ground.

#### PINION CAGE

Spline fitted to the steel load wheel shaft.

#### DRIVING SPINDLE

Made of nickel-chrome-molybdenum alloy steel with machine-cut teeth. Operates on heavy-duty bearings.

#### LOAD WHEEL

Heat-treated cast steel with spline fit to load shaft. Chain pockets are accurately formed, and load wheel can be reversed when new chain is installed to effect double life.

#### CHAIN STRIPPER

Ductile Iron.

#### LOAD BRAKE

Positive-action, Weston-type load brake with uniform composition lining and quiet-action, forged-alloy dual pawls.

#### LOAD CHAIN GUIDE

Completely shrouds load sheave, guides chain into load wheel and efficiently shields these parts from entry of foreign objects.

#### LOAD CHAIN

Made of durable steel. Links are precision formed to fit pockets of load wheel. Heat treated for high tensile strength and hardness.

#### HAND CHAIN GUIDE

Designed to eliminate fouling and permit angular pull on the hand chain.

#### TOP HOOK ASSEMBLY

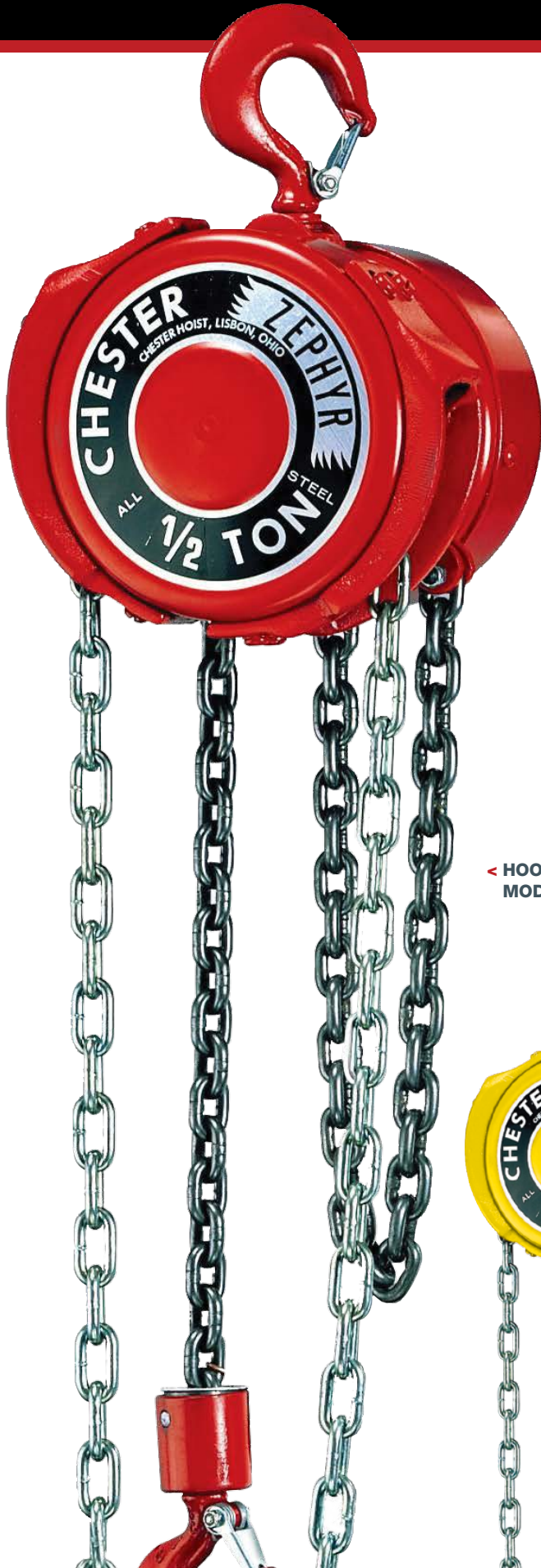
Permits hoist to rock and swivel under load. Alloy crosshead rocks in rolled steel straps welded to frame. Alloy hook is heat treated. Drop-forged alloy steel hook will open before fracturing.

#### BOTTOM HOOK ASSEMBLY

Consists of forged alloy steel hook operating on thrust bearing with full swiveling action.

For Chester trolley options, see pages 34 through 41.

**HOOK-SUSPENDED HOISTS**



**SPARK-RESISTANT OPTIONS**

SOLID BRONZE TOP AND BOTTOM HOOKS,  
BOTTOM BLOCK AND BRAKE RATCHET

STAINLESS STEEL LOAD CHAIN  
AND HOOK LATCHES

ALUMINUM, BRONZE OR  
STAINLESS STEEL HAND CHAIN

**CORROSION-RESISTANT OPTIONS**

SPECIAL CORROSION-RESISTANT FINISHES

Created specifically for operation in salt-laden  
or other corrosive environments.

**CLEAN ROOM OPTIONS**

STAINLESS STEEL LOAD CHAIN, HAND CHAIN,  
HAND CHAIN WHEEL, LIFT WHEEL, HOOKS,  
LATCHES, HOOK BLOCK  
AND HOUSINGS

GREASE-TIGHT ENCLOSURE  
WITH FOOD-GRADE LUBRICANT

Clean room environments exist in many industries,  
including food processing, pharmaceutical, electronics  
and others. Special material options available for the  
Zephyr hoist allow it to be specially built and used in a  
wide range of clean room applications.

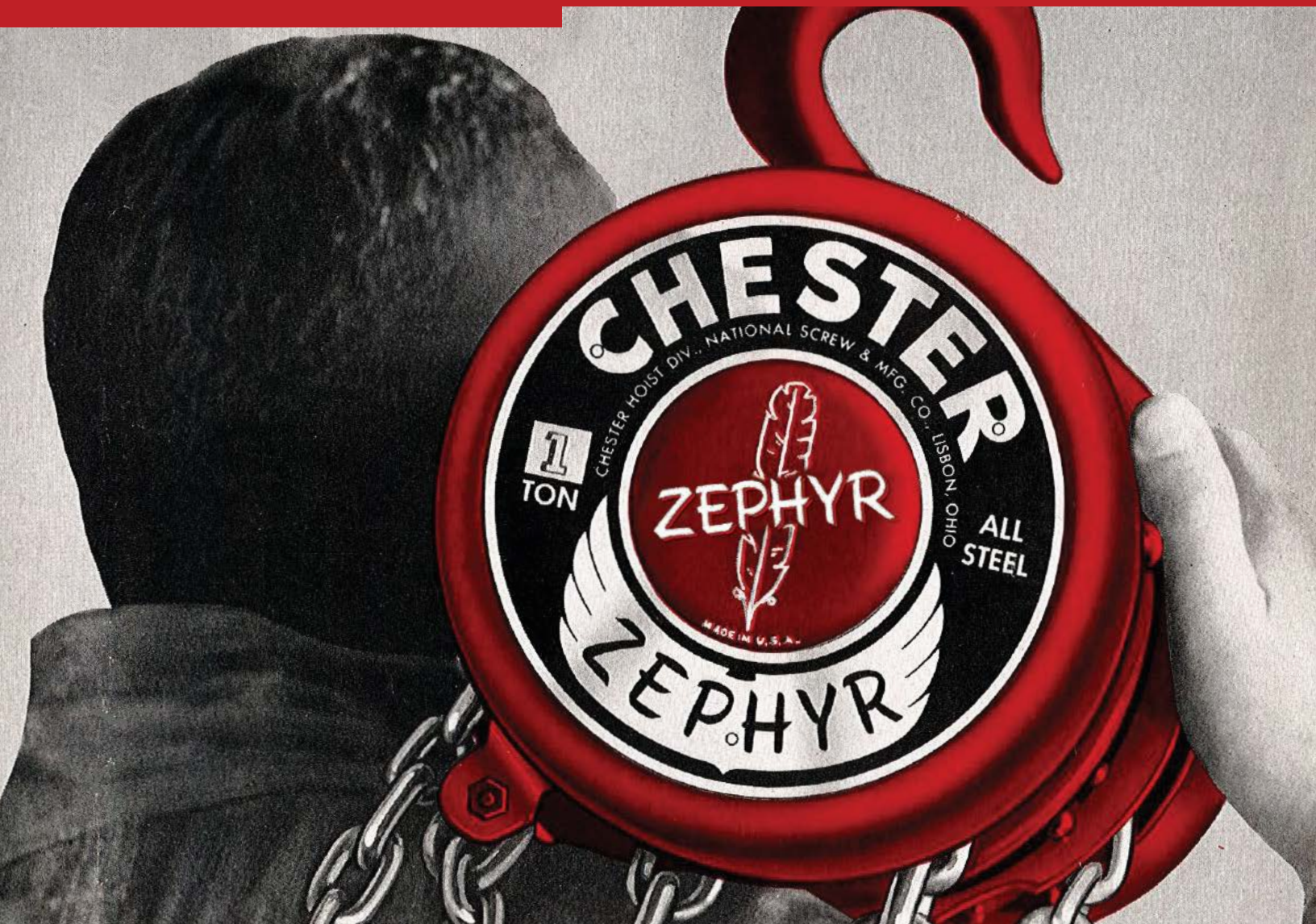
**< HOOK-SUSPENDED  
MODEL**



**CLEAN ROOM >  
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MODEL**



**SPECIFICATIONS**

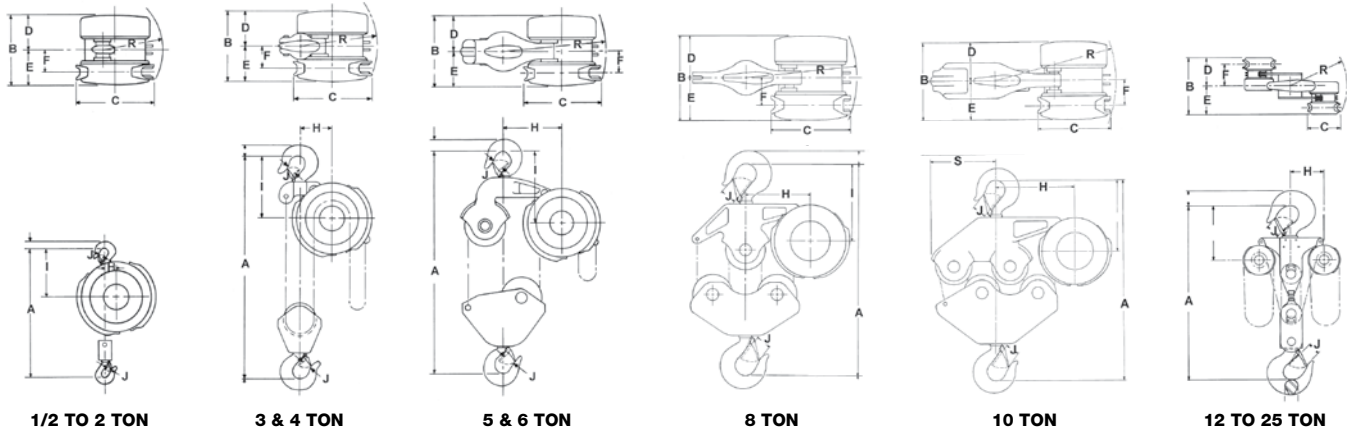
Capacity (tons)	Catalog Number	Standard Lift (ft.)	Minimum Distance Between Hooks (in.)	Chain Pull to Lift Full Load (lbs.)	Chain Overhauled to Lift Load One Foot (ft.)	Strands of Chain		Length of Chain		Weight (lbs.)	
						Load	Hand	Load	Hand	Net	Gross
1/2	130-1/2	8	12-1/8	31	33	1	2	9' - 0"	14' - 0"	44	46
1	130 - 1	8	12-1/8	62	33	1	2	9' - 0"	14' - 0"	46	48
1-1/2	130 - 1-1/2	8	15-7/8	57	58	1	2	9' - 4"	14' - 6"	85	88
2	130 - 2	8	15-7/8	76	58	1	2	9' - 4"	14' - 6"	85	88
3	130 - 3	8	21-1/4	60	116	2	2	18' - 6"	15' - 6"	122	140
4	130 - 4	8	24-1/2	79	116	2	2	18' - 6"	15' - 6"	130	144
5	130 - 5	8	25-1/2	65	174	3	2	27' - 6"	15' - 6"	184	208
6	130 - 6	8	25-1/2	78	174	3	2	27' - 6"	15' - 6"	184	208
8	130 - 8	8	26-3/4	81	232	4	2	36' - 0"	16' - 0"	245	283
10	130 - 10	8	30-3/4	84	290	5	2	45' - 0"	16' - 6"	310	355
12	130 - 12	8	49-5/8	*78 (2)	*174	6	4	67' - 0"	(2) 19' - 0"	660	720
16	130 - 16	8	53-1/2	*81 (2)	*232	8	4	84' - 0"	(2) 19' - 0"	825	900
20	130 - 20	8	56-3/8	*85 (2)	*290	10	4	101' - 0"	(2) 19' - 0"	1050	1130
25	130 - 25	8	5 - 3/8	*93 (2)	*348	12	4	120' - 0"	(2) 19' - 0"	1070	1160

\* One each hand chain. 12 Ton & up have two hand chains

**A QUICK HISTORY**

The Chester Manufacturing Company first launched the Zephyr hand chain hoist in 1956 as a lighter and more compact replacement for their "Model 41" hoist.

Because the Zephyr was designed and tested to the rigorous military standard, MIL-H-904, the hoist exceeded all applicable standards for the U.S. industrial hoist market. Building on its robust product platform, Chester introduced the first spark-resistant Zephyr hoist later that same year, which quickly became the hoist of choice for many users in the oil and gas industry.



**DIMENSIONS**

Capacity (tons)	Dimensions (In.)										
	A	B	C	D	E	F	H	I	J	R	S
<b>REGULAR UNITS</b>											
1/2	12-1/8	8-1/2	8-3/4	4-1/4	4-1/4	3	1-3/8	6-7/16	1	7	-
1	12-1/8	8-1/2	8-3/4	4-1/4	4-1/4	3	1-3/8	6-7/16	1	7	-
1-1/2	15-7/8	10	11-1/2	5	5	3-1/4	1-3/4	7-5/8	1-1/8	8-1/2	-
2	15-7/8	10	11-1/2	5	5	3-1/4	1-3/4	7-5/8	1-1/8	8-1/2	-
3	23-1/2	10	11-1/2	5	5	3-1/4	4-7/8	9-1/8	1-11/32	11-1/2	-
4	24-1/2	10	11-1/2	5	5	3-1/4	4-7/8	9-5/8	1-11/16	11-1/2	-
5	25-1/2	10	11-1/2	5	5	3-1/4	6-3/8	10-1/2	1-11/16	13-1/2	-
6	25-1/2	10	11-1/2	5	5	3-1/4	6-3/8	10-1/2	1-11/16	13-1/2	-
8	26-3/4	10	11-1/2	5	5	3-1/4	8-1/2	11	2-1/16	14	-
10	30-3/4	10	11-1/2	5	5	3-1/4	10-1/4	10-5/8	2-1/4	17	9-1/4
12	49-5/8	14-5/8	11-1/2	7-5/16	7-5/16	5-9/16	11-1/8	13-9/16	3	18-1/2	-
16	53-1/2	16-3/8	11-1/2	8-3/16	8-3/16	6-7/16	11-1/8	15-1/8	3-5/8	18-3/4	-
20	56-3/8	18-1/4	11-1/2	9-1/8	9-1/8	7-3/8	11-1/8	15-1/8	3-5/8	19-3/16	-
25	56-3/8	20-1/8	11-1/2	10-1/16	10-1/16	8-5/16	11-1/8	15-1/8	3-5/8	19-11/16	-
<b>SPARK-RESISTANT UNITS</b>											
1/2	13	8-1/2	8-3/4	4-1/4	4-1/4	3	1-3/8	6-7/8	1	7	-
1	13	8-1/2	8-3/4	4-1/4	4-1/4	3	1-3/8	6-7/8	1	7	-
1-1/2	16-7/8	10	11-1/2	5	5	3-1/4	1-3/4	8-1/8	1-13/16	8-1/2	-
2	16-7/8	10	11-1/2	5	5	3-1/4	1-3/4	8-1/8	1-13/16	8-1/2	-
3	23-1/8	10	11-1/2	5	5	3-1/4	4-7/8	9-1/8	1-11/16	11-1/2	-
4	26-1/4	10	11-1/2	5	5	3-1/4	4-7/8	9-13/16	2-7/32	11-1/2	-
5	26-1/4	10	11-1/2	5	5	3-1/4	6-3/8	10-11/16	2-7/32	13-1/2	-
6	28-1/4	10	11-1/2	5	5	3-1/4	6-3/8	11-11/16	2-1/4	13-1/2	-
8	31-13/26	10	11-1/2	5	5	3-1/4	8-1/2	13-7/32	3-1/32	14	-
10	34-1/4	10	11-1/2	5	5	3-1/4	10-1/4	14-1/8	3-1/32	17	9-1/4
12	52-5/8	14-5/8	11-1/2	7-5/16	7-5/16	5-9/16	11-1/8	15-1/16	3-1/4	18-1/2	-
16	59	16-3/8	11-1/2	8-3/16	8-3/16	6-7/16	11-1/8	17-7/8	3-3/8	18-3/4	-
20	62-1/2	18-1/4	11-1/2	9-1/8	9-1/8	7-3/8	11-1/8	18-3/16	3-3/8	19-3/16	-
25	62-1/2	20-1/8	11-1/2	10-1/16	10-1/16	8-5/16	11-1/8	18-3/16	3-3/8	19-11/16	-