# ZEPHYR HOOK-SUSPENDED HOISTS

CAPACITIES 1/2 to 25 ton LIFT 8 feet standard **OPTIONS** Spark & Corrosion Resistance

Chester Zephyr steel framed hook suspended hoists are designed, built and tested to rigid specifications of quality and performance, to exceed industry standards. The Chester Zephyr is a thoroughly engineered hoist from every standpoint. With available capacities from 1/4 through 25 ton, its simplicity of design makes it easy to service and maintain.

## **KEY FEATURES**

### MECHANICALLY ENCLOSED

Heavy steel housings keep out most foreign material, protecting precision machined working parts.

### **GREASE TIGHT-ENCLOSED**

Complete enclosure, sealed construction keeps lubrication in, making the Chester Zephyr a lifetimelubricated hoist under normal conditions. No protruding parts, resists snagging.

### SHOCK RESISTANT

Heavy gauge steel in the stamped covers, two rolled steel sections in the frame, and use of strong alloy steels in suspension members make the Zephyr a sturdy hoist.

### EASIER HANDLING

Lightweight, compact construction makes the Zephyr a shoulder-weight hoist, portable to practically any location in the plant, easy to carry up a ladder, able to operate in tight corners.

### EASY DISMANTLING

Making periodic inspections, or replacing chains or parts, requires only a small wrench and screwdriver.

### **GEAR TRAIN**

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

### **INTERNAL GEAR**

Nickel-chrome-molybdenum alloy steel, machine-cut teeth. Internal gear is heat treated and welded to frame.

### **GEARS AND PINIONS**

Nickel-chrome-molybdenum alloy steel, machinecut teeth, heat treated, and mounted on heavy duty roller bearings.

### **GEAR AND PINION SHAFTS**

Rigidly mounted alloy steel, surface-hardened and ground.

### PINION CAGE

Spline fitted to the steel load wheel shaft.

### DRIVING SPINDLE

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 with uniform composition lining and quiet-action forged alloy pawl.

### LOAD CHAIN GUIDE

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

### LOAD CHAIN

Steel, with accurately formed links to fit pockets of load wheel. Heat treated for high tensile strength and hardness.

### HAND CHAIN GUIDE

Designed to eliminate fouling, and to 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.







### **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**

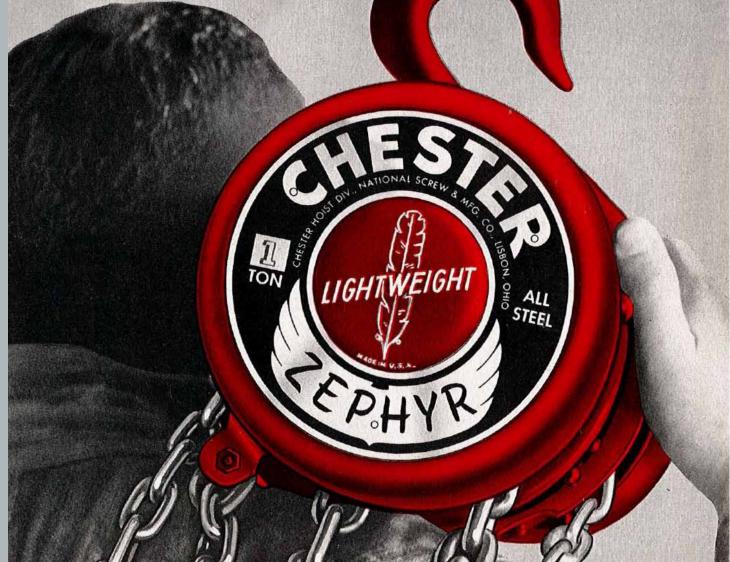
### SPECIAL CORROSION RESISTANT FINISHES Created specifically for operation in salt laden

environments.

< HOOK-SUSPENDED MODEL



**ZEPHYR** HOOK-SUSPENDED HOISTS

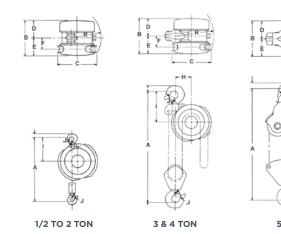


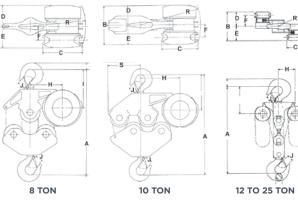
### SPECIFICATIONS

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	23-1/2	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' - O''	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







# DIMENSIONS

Capacity (tons)	Dimensions (In.)										
	А	В	С	D	E	F	н	1	J	R	S
REGULAR UNITS											
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	-
SPARK-R	ESISTAI	ΝΤ UNIT	S								
1/2											
1											
1-1/2											
2											
3											
4											
5											
6											
8											
10											
12											
16											
20											
25											



5 & 6 TON







# **A QUICK HISTORY**

Joe - Can we use this area to give a brief history or interesting facts on the Zephyr? - When was it created?

- Who designed it? Where is it manufactured?
- What are some popular applications?Maybe focus on a specific application
- or a specific component of the hoist

# ZEPHYR Hook-suspended hoists