

PRICING — TAX — INVOICING — SHIPPING — LOADING DATA
ENGINEERING AND PRODUCTION COPY
FOR
OVERHEAD ELECTRIC CRANES

SOLD TO Kaiser Steel Fabricating Division
13230 San Bernardino Avenue
Fontana California 92335

INVOICE TO Kaiser Steel Fabricating Division
13230 San Bernardino Avenue
Fontana, California 92335

SHIP TO Kaiser Steel
Fontana Fabricating Plant
Fontana, California

CRANE NO. CTL-23540
PROPOSAL NO. LA-959 D
PROPOSAL DATE 12-17-69
RELEASE DATE 1-17-70
CRANE ERECTED BY: Purchaser
INVOICE NO. _____
INVOICE DATE _____

TAX INFO:

EXEMPTION NO. _____
ADD TO INVOICE _____
REFER CUST. ORDER _____

F.O.B. Norwalk California Plant, **FREIGHT** Collect

SHIP VIA Truck
TERMS 80% in cash upon receipt of invoice
and B/L, the balance, or
20% in cash within thirty days
from date of shipment.

SCHEDULED SHIPMENT March 1970

REMARKS

EST. ERECTION DATA — AS ENGINEERED*

FRONT GIRDER _____ #
MACHINERY _____ #
WALKWAY _____ #
CONTROL _____ #
CONDUCTORS _____ #

TOTAL FRONT GIRDER _____ #

REAR GIRDER _____ #
WALKWAY _____ #
CONDUCTORS _____ #

TOTAL REAR GIRDER _____ #

TROLLEY _____ #
CAB _____ #
AUX. GIRDER _____ #
END TIES _____ #
END TRUCKS _____ #
MISCELLANEOUS _____ #

TOTAL NET WT. _____ #

TOTAL SH. WT. _____ # 33,000 #

CRANE WHL. LOAD: _____ # @

IS TROLLEY K/D FOR SHIPMENT? _____

CUST. ORDER NO.

CRANE

S-1

S-2

S-3

S-4

S-5

S-6

S-7

S-8

S-9

S-10

S-11

S-12

CRANE
CODE

A A B

REPRESENTATIVE - DISTRICT

KOWALIK - LOS ANGELES

NO.

REPRESENTATIVE - DISTRICT

NO.

*UPON COMPLETION OF ENGINEERING, FORWARD TO SALES DEPT.

SCF-P&H-1211

FORM NO. 9265

VAR. 1-68

PHM Leek 03934

Sold to Kaiser Steel Fabricating Division						FOR LOS ANGELES SHIPMENTS ONLY Trolley wired in Milwaukee for direct-shipment to Customer					
User Kaiser Steel Fabricating Plant						Trolley to be wired and tested in L.A. Plant					
Plant Site Fontana, California						Customer Project Main Spec. ☐ Specs. Released to: Eng. Service ☐ Inspection Dept. ☐ Elect. Engr. ☐					
Crane No. CTL-23540						Engr. Specs. Estimator Spec. Writer Sales Desk Released by: CRS CES					
Spec. Date Prop. No. LA-959-D											
QUANTITY ONE (1)		CAPACITY 10 Ton		SPAN 71'-2"		SHIP. WT. LBS. 33,000		CLEAR. SKETCH 10TB75		SERVICE (IN) DOOR Light Steel Products Facility	
TROLLEY DATA TYPE OF TROLLEY FRAME											
MAIN HOIST		CAPACITY 10 Ton		LIFT 38'-6"		DRUM DIA. 13-1/4"		REEVING 8@7/16" 4PD		BRAKING Mech. Load	
AUX. HOIST										TYPE HOIST 6E10T	
TYPE OF TROLLEY DRIVE TT-9				WHEELS 9"		DIAMETER F.S.		SPREAD 7'-0"			
BRIDGE DATA TYPE OF SPAN CONDUCTORS Festooned											
TYPE DRIVE BC-13-1/2		WHEELS 13-1/2		DIAMETER & NUMBER 4		TYPE F.S.R.T.					
FRONT PLATFORM None		TYPE OF GIRDERS Torbeam 3048122		TR. RAIL 25		LBS.					
REAR PLATFORM None		OUTRIGGER None									
ELECTRICAL DATA POWER SUPPLY 460 VOLTS AC 3 PHASE 60 CYCLE											
SPEED FT. PER MIN.		MFR.		FRAME		HP		RPM		MAKE & TYPE BRAKES	
MAIN HOIST 30/10		P&H		HEH364RX		20/6-2/3		1650/550		P&H CDR	
AUX. HOIST 125		REU		REU		1		1650		REU	
TROLLEY 175		P&H		AM-15		(2)1-1/2		1650		P&H CDR (2)	
BRIDGE										MAKE & TYPE LIMIT SWITCH Wgt. & Geared	
CONTROL MAKE TYPE (FLOOR) X X X X ATTACH. TO (TROLLEY) X X X X P&H full magnetic, 2-speed hoist Bull. 566 S.S. Bridge & Trolley. Pendant station attached to trolley.											
RUNWAY DATA											
RAIL SIZE 50 LBS.		LENGTH 320'-0"		RAIL TO ROOF 6'-0"							
COLLECTORS Cleveland Saffowrbar		FURNISHED BY P&H		RAIL TO FLOOR 27'-6"							
COND. TYPE Cleveland Saffowrbar				FURNISHED BY Purchaser							
Remarks: See attached Addenda. Part of Order CTL-23534 - 8 & CTL-23540.						SUPPLEMENTAL EQUIPMENT SUPPLIED WITH CRANE					
						Runway Conductors ☐					
						Spares ☐					
						Runway Stops ☐					
PAINT: Yellow Torbeam - Los Angeles											
MAIN HOIST ASSEM.				AUX. HOIST ASSEM.							
TROLLEY ASSEM.				BRIDGE ASSEM.							
ORDER RECORDED		INSPECTION REQUIRED YES ☐ NO ☐		DATE SHIPPED		CRANE NO. CTL-23540					

TORBEAM STOCK COMPONENT CRANE

ADDENDA TO PROPOSAL NO. CTL-23540
LA-959-D

1. Crane as specified to be designed and fabricated in accordance with P&H published commercial standards for TORBEAM type cranes, qualified as specified herein.
2. Four (4) motor crane as specified to consist of a double girder TORBEAM type bridge with a two (2) motor top running trolley. Bridge to have two individual drives, one at each end of bridge, operating in parallel.
3. Crane to be pushbutton floor operated from:
 - ☒ A. Trolley between girders at drive end of trolley ("H" end) as shown on Clearance Drawing 3104E1007. (Standard)
 - ☐ B. Bridge (Fixed Position) as indicated. (Price Addition)
 - ☐ C. Pushbutton pendant station to be suspended from a festooned flexible cable messenger system suspended from anti-friction bearing trolleys operating on a rigid track supported from crane bridge. (Price Addition)
 - ☐ D. Job Engineered Location. (Price Addition)

4. MOTORS:

P&H totally enclosed motors with anti-friction bearings rated 30 minute, 75° rise above ambient temperatures of 40°C.

- ☐ A. Hoist to be furnished with a single winding squirrel cage type motor. Trolley and dual bridge drives to be provided with single winding squirrel cage type motors 220/440V. (Standard)
- ☒ B. Hoist to be furnished with a dual winding squirrel cage type motor. (Price Addition)
Trolley and dual bridge drives to be provided with single winding squirrel cage type motors, 220/440V.

5. BRAKES:

Hoist and dual bridge motors to be furnished with P&H DC rectified brakes. Trolley motor to be furnished with an electric motor brake. In addition to the motor brake, hoist will be furnished with a Weston type mechanical load brake, operating in bath of oil. Bridge and trolley brakes to be of the adjustable torque type.

6. CONTROL:

- ☐ A. P&H full magnetic single speed control on hoist. (Standard)
- ☒ B. P&H full magnetic two speed control on hoist. (Price Addition)
- ☐ C. P&H Primary Reactor Hoist Control Bulletin 567. (Price Addition)
- ☒ D. P&H Primary Reactor ~~Hoist Control Bulletin 567~~ Bridge and Trolley Control Bulletin 566. (Price Addition)

Eight-button pendant station to contain "Start" "Stop" buttons for manual magnetic disconnect switch electrically operable from pendant or manually from control cabinet. Automatic reset type thermal overload relays to be provided. Control to be housed in hoist type NEMA III enclosures for indoor or outdoor operation. Control proper to be mounted on trolley as shown on clearance drawing.

7. HOIST LIMIT SWITCH:

Hoist to be furnished with a lever operated plugging type upper limit switch and a geared upper and lower limit switch both of the control circuit type.

8. SPAN CONDUCTORS:

Span conductors to consist of a festooned flexible cable messenger system suspended from anti-friction bearing trolleys on a rigid track supported from the crane bridge.

9. BRIDGE GIRDERS:

Bridge to be of double girder design with trolley operating on rails attached to top member. Girders to be of P&H TORBEAM (Torsional Beam) (U.S. Patent D202,718) design welded into a one piece frame consisting of two girders and two end trucks to enable one piece shipment and erection of bridge where jobsite conditions allow. Bridge to be provided:

- ☒ A. Without service platform, wherein Purchaser will make full provisions for servicing entire crane from portable or stationary equipment in building. (Standard)

TORBEAM STOCK COMPONENT CRANE

ADDENDA TO PROPOSAL NO. CTL-23540 (Continued)

LA-959 D

- ☐ B. A standard (10' - 0" long) trolley service platform located at ☐ Left; at ☐ Right; at ☐ both ends of bridge. (10' - 0" long) platforms not to be used when a pushbutton traveling control messenger system is furnished. (Price Addition)
- ☐ C. A short (4' - 0" long) trolley service platform located at ☐ Left; at ☐ Right ☐ ; at ☐ both ends of bridge. (4' - 0" long) platform to be used when a pushbutton traveling control messenger system is furnished. (Price Addition)
- ☐ D. Full length service platform. (Price Addition)
All platforms to have checkered steel flooring.
- ☐ E. Full length handrail and walkspace on front girder. (Price Addition)

10. BRIDGE END TRUCKS:

Crane bridge to be provided with two structural end trucks welded into TORBEAM girders for unitized construction as described under Item No. 9 MCB rotating axle design to be used. Bridge wheels

to be high carbon (C-1070) forged steel, rim toughened and to be 3-1/2 inches diameter. Bridge End Trucks to be provided as follows: (Coupled Bridge Drives)

- ☐ A. One piece unitized construction for all cranes under 60' - 0" span, 7' - 0" trolley spread and 10' - 6" overall width (Y and Z) to permit one piece rail shipment. (Standard)
- ☐ B. End trucks having one splice to permit rail shipment for cranes over 60' - 0" span, over 10' - 6" overall width (Y and Z) to maintain proper span to wheel base ratio but within limitation as shown under Table 6, Modification Sheet 217.02(101) Item 6, Part I. (Standard)
- ☐ C. Cranes normally having one piece unitized construction per Item A, but requiring one splice to reduce overall width for truck shipment or because of Purchaser's building restrictions. (Price Addition)
- ☐ D. A single or double end truck splice as required for spans beyond those covered by Modification Sheet 217.02 (101) Item 6, Part I. (Price Addition)

x E. Bolted End Trucks.

11. BRIDGE BUMPERS:

- ☐ A. Bridge end trucks to be provided with solid strike plates at each of four corners to engage suitable end stops erected and furnished by Purchaser. (Standard)
- ☒ B. Bridge end trucks to be provided with rubber bumpers at each of four corners to engage suitable stops by Purchaser. ~~(Price Addition)~~

12. BRIDGE DRIVES:

Individual bridge drives of the integral and coaxial type (U.S. Patent 3,252,586) provided at each end truck. Each drive to be provided with an individual flange mounted motor as specified as an integral part of the unitized drives, which drives will be operated in parallel by a common bridge control. Bridge gearing to be of the planetary type. (Coupled)

13. TROLLEY:

Crane to be furnished with a unitized four wheel structural trolley with a P&H Balanced Design Hoist as specified built into frame. Single MCB rotating axle design to be used. Trolley wheels to be high carbon (C-1070) forged steel, rim toughened, and to be 9 inches in diameter. Unitized frame design to be based upon an impact absorbing torsional tube elastically supported from specified four trolley wheels. Hoist to be furnished with a standard P&H specified latch type safety hook.

14. TROLLEY DRIVE:

A single helical worm speed reducer with a flange mounted motor as specified to be an integral part of complete trolley design.

15. BEARINGS:

Anti-friction bearings to be provided throughout. A minimum of 5000 hours, 75%, B-10 bearing life to be furnished for entire crane.

TORBEAM STOCK COMPONENT CRANE

ADDENDA TO PROPOSAL NO. CTL-23540 (Continued)
LA-959-D

16. LUBRICATION:

All gearing except drum gear to be enclosed in oil tight gear cases and to be oil bath lubricated. All bearings not oil bath lubricated to be either of the lifetime lubrication type or to be provided with individual grease fittings (Alemite) for use with Purchaser's hand pump.

17. PAINTING:

- ☒ A. Two coats, finished in P&H TORBEAM yellow for entire crane, for indoor service. (Standard)
☐ B. Special paint, colors, extra coats, etc. (Price Addition)
☐ C. For outdoor service, rust inhibiting primer where specified. (Price Addition)

18. Crane will be assembled, wired, and tested without load in our shops after which it will be suitably match-marked and dismantled to the extent required for shipment. Machined surfaces will be suitably protected against corrosion. Erection, reassembly, and field wiring will be completed by Purchaser. Unitized construction will be used where jobsite shipment and erection conditions permit.

19. Four erection brackets to be provided with cranes.

20. Two complete sets of standardized parts books with all wearing parts listed and identified on individual isometric sketches for facility of identification and ordering through P&H nationwide parts facilities to be provided. Crane as specified being of stock component design, can be serviced from an immediate stock of spare parts available from manufacturer or duly authorized P&H parts source. (Standard)

- ☒ Extra parts books, special drawings, etc. ~~(Price Addition)~~

21. Two complete sets of erection drawings and erection manuals to be furnished before crane shipment. Where unitized bridge design is being used, erection drawings will so designate. (Standard)

- ☒ Additional drawings. ~~(Price Addition)~~

22. Added Engineered Parts - Mechanical and Electrical:

A. Mechanical

1. ☒ Provide 3-pole Cleveland Safflower collectors with staff for use
☐ with Purchaser mainline conductor system.
 2. ☒ CTL-23540 to operate on a 320'-0" long runway.
☐
☐
☐
☐

B. Electrical

- Mainline conductor material and collectors. (Price Addition)
 1. ☒ Control to be magnetic two speed hoist with mechanical load brake and
☐ Bull. 566 primary reactor on bridge and trolley with all control mounted
☐ on trolley.
☐
☐
☐
☐

23. The services of a P&H Service Engineer to be provided to check out cranes after erection.

24. One set of reproducible autositives of assembly drawings and wiring diagrams on P&H format to be furnished after completion of engineering for use by Purchaser for erection purposes and permanent records. No detail drawings of individual parts will be provided.

25. Five (5) sets of complete parts books and maintenance manuals to be provided. Furnish complete spare parts list.