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June 5, 2012

Mr. Wes Weaver, President
Weaver Construction Management, Inc.
3679 South Huron Street, Suite 404
Englewood, CO 80110

Via Email to: wes@weavercm.com
No Hard Copy to Follow

Re: Harold D. Thompson Regional Water Reclamation Facility (HDTRWRF)
Lower Fountain Metropolitan Sewage Disposal District (LFMSDD)

Dear Wes:

Reference is made to your shop submittal identified as follows:

Submittal No.:	13121-003
Date of Submittal:	April 18, 2012
Submittal No.:	13121-003 – Supplemental Information
Date of Submittal:	May 15, 2012
Title:	Pumping & Disinfection Building: Metal Building; Roof System; Textureclad Wall Panels; Liner Panels
Specification Section:	13121 – Prefabricated Metal Building
Manufacturers:	Lefever Building Systems; VP Buildings/Varco Pruden

The referenced submittal has been stamped "***No Exception Taken***", "***Make Corrections Noted***", "***Revise and Resubmit***" and "***Submit Specified Item***".

GMS, Inc. is in receipt of the additional WCMI review comments submitted on May 15, 2012. Of the 20 additional *submittal review comments*, almost half request confirmation or a verification by GMS, Inc. regarding dimensioning and/or other pertinent information relative to the submittal. Our comments regarding the WCMI submittal review comments are provided with the same numerical designation on the WCMI submittal review comments document, 3, pages, dated April 16, 2012 and received by electronic mail on May 15, 2012.

1. Acknowledged
2. ***Revise and Resubmit***: GMS, Inc. construction drawings, Sheet PD-3A, did not include as-constructed conditions of the anchor bolts and elevation of the pilasters as this was prepared before as-constructed information was available from WCMI. We concur with the WCMI comment.
3. Acknowledged that VP will confirm primer is suitable for the finish coat by others.
4. Review comments indicate GMS, Inc. to confirm that the low side of the haunch is 16' clear. In accordance with Note No. 4 on Sheet PD-2A, "*The metal building height may vary from the 16' height shown to accommodate the minimum hoist lift height clearance requirement of 12'-4"*

AFF, clearance requirements for the bridge crane and minimum clearance requirements for the overhead door to pass above the bridge crane." Coordination of this effort must occur between the CMAR, the metal building supplier/manufacturer, the overhead door supplier and the bridge crane provider.

5. Please reference GMS, Inc. response to Comment No. 4. The CMAR and the building supplier/manufacturer must coordinate with the other suppliers and manufacturers to ensure the clearance requirements being provided work in accordance with their products and proposed installation.
6. It is requested GMS, Inc. confirm column setbacks. As previously noted, the metal building supplier/manufacturer and/or WCMI shall confirm the setbacks of the columns in relation to the wall girts and wall panels. The design locations were provided on the construction drawings in accordance with preliminary information provided by VP/Lefever.

The recitations of the baseplate elevations (bearing surface) are the same as shown on the documents issued for construction.

7. Acknowledged and we take no exception, provided the complete fabrication is compatible with all other design and construction details, fabrications, materials and installation including compatibility with the foundation.
8. **Submit Specified Item:** GMS, Inc. acknowledges receipt of the outset girt proposed for use on the west end of the building. We take no exception to the outset girt as shown on the detail. Based on our conversations with WCMI, the proposed outset girts will eliminate the overhead door clearance issues. We request details be provided on the layout and design of the overhead door at the outset girts on the west end of the building. The detail should include:
 - How the door jamb will be placed.
 - How a seal will be placed under the extended jamb or other alternative.
 - How a long-term, weathertight seal will be accomplished at the overhead door location.

9. Acknowledged

10. Please reference the keyed notes on Sheet MPD-1 of the Construction Drawings for the required elevation of the exhaust fans.

11. GMS, Inc. will not be confirming the open size of the exhaust fans. The size of the exhaust fans has been noted on the Construction Drawings. Based upon the exhaust fan to be provided by the subcontractor and/or supplier of WCMI, the appropriate dimensioning and opening should be determined by the CMAR and the product information and installation requirements should be furnished to the building supplier and erector.

12. Acknowledged

13. The CMAR should review the layout of the submitted drawings and compare those with the design drawings to determine if the location is compatible with the building framing members.

The responsibility of the layout in construction should be coordinated through the CMAR, the supplier and the erector.

14. GMS, Inc. has previously provided building colors to the CMAR for their use on several occasions. Please reference previous information provided to the CMAR regarding this item.
15. We acknowledge the elevation shown for the bottom of the accent strip to be 5414.70 per Sheet PD-1. The color selection for this building was previously provided to WCMI.
16. **No Exception Taken:** We acknowledge Varco Pruden is submitting the 1-3/16" ribbed height in lieu of the 5/8" ribbed height. No exception is taken to the proposed rib height.
17. Coordination of the lift height required is the responsibility of the CMAR, the building supplier and the bridge crane supplier. GMS, Inc. has provided limiting dimension criteria on the Construction Drawings. A minimum dimension of 12'-4" from the highest hook elevation to the upper level finished floor is required per A/PD-2A. In addition, the hook must also extend to the pump room floor.
18. We acknowledge receipt of the information from Lefever and the information on the bridge crane.
19. We acknowledge receipt of the insulation product data.
20. GMS, Inc. acknowledges the certification for the erector will be provided at a later date.

GMS, Inc.'s review other comments for this shop submittal are as follows.

1. Shaw-Box World Series Monorail Wire Rope Hoists: **No Exception Taken** and **Revise and Resubmit**
 - a. We take no exception to the span of 48' as it sits inside of the overall 55' outside dimension of the building.
 - b. We take no exception to the 2-ton lift capacity.
 - c. The submittal indicates the crane has an available lift of 40'-0"; however, the general specifications indicate the actual lift is referenced to the drawing provided. In accordance with Construction Drawing PD-2A, the minimum dimension from finish floor of the pump room to the crane hook must be a minimum of 30'-4". Based on the information provided, it would appear the available lift is 40'-0". Please submit confirmation the 40'-0" lift is available on the crane to be provided.
2. Varco Pruden (VP) Buildings Submittal Drawings 1 through 35: **Make Corrections Noted**
 - a. Sheet 4
 - 1) WCMI must provide as-constructed data on the anchor rod locations to VP prior to fabrication.

b. Sheet 6

- 1) The CMAR in conjunction with VP and the crane supplier/manufacturer must coordinate the height of the top of crane rail to confirm adequate lift height in accordance with Construction Drawing PD-2A.
- 2) A note on Sheet 6 indicates the building eave height must be verified. In accordance with Note No. 4 on Construction Drawing PD-2A, *"The metal building height may vary from the 16' height shown to accommodate the minimum hoist lift height clearance requirement of 12'-4" AFF, clearance requirements for the bridge crane and minimum clearance requirements for the overhead door to pass above the bridge crane."* GMS, Inc. is not requiring the Contractor hold to a 16' eave height. The bridge crane, overhead door and building framing will govern the eave height.

c. Sheet 16

- 1) A note on the drawing identifies the clearance issue with the overhead door utilizing an inset girt. Based upon supplemental information provided through WCMI titled, *"REVISED END WALL @ 1"* (grid line 1), a 6" extension to grid line 1 will be installed. We take no exception to VP Buildings' modification to the west endwall utilizing an outset girt. A copy of the detail numbered 12-6490 HD Tompson has been attached as a reference.

d. Sheet 23: ***Make Corrections Noted***

- 1) The wall panel is to be Textureclad.
- 2) The Textureclad metal gage is 20.
- 3) The panel colors, stated as Sand and Cocoa, are correct.
- 4) A note on this sheet requests verification on whether hat channels are going to be required. This verification must be discussed between the CMAR, the building supplier/manufacturer and the erector.
- 5) A note on the sheet requests verification on trim conditions and colors. The CMAR should coordinate the colors based on previous information provided and materials used on the other buildings in an effort to match prior vendors.
- 6) All Textureclad wall panels shall overlap the foundation wall a minimum of 4". Steps in the foundation wall should be taken into consideration during fabrication.
- 7) The metal building supplier must verify the door leaf opening for the south wall includes the revised width of the chemical feed room door of 4'-6".
- 8) As previously noted, interior wall liner panels will extend 10' above the top of foundation wall. The liner panels are required on the south and east walls and extend from the

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southwest corner of the building to the column located approximately 17'-10" north of the southwest corner. Liner panels are not required above the pump room and north wall of the NPW room.

Please call if you should have any questions.

Sincerely,



David R. Frisch, P.L.S.

DRF/kmw

ec (letter only):

Mr. Jim Heckman, Manager, LFMSDD, lfmanager@lfmsdd.org

Ms. Cindy Murray, Office Manager, Fountain Sanitation District, fsdistrict@fsd901.org

Mr. Jeff Burst, Project Supt., Weaver Construction Management, Inc., jeff@weavercm.com

Mr. John Jacob, Project Mgr., Weaver Construction Management, Inc., john@weavercm.com

Mr. Tyler Ammerman, Weaver Construction Management, Inc., tammerman@weavercm.com

Ms. Leslie Brown, Weaver Construction Management, Inc., leslie@weavercm.com

cc: Mr. Jerry Miller, Resident Project Representative, GMS, Inc.



VP BUILDINGS

MANUFACTURING AND SERVICE

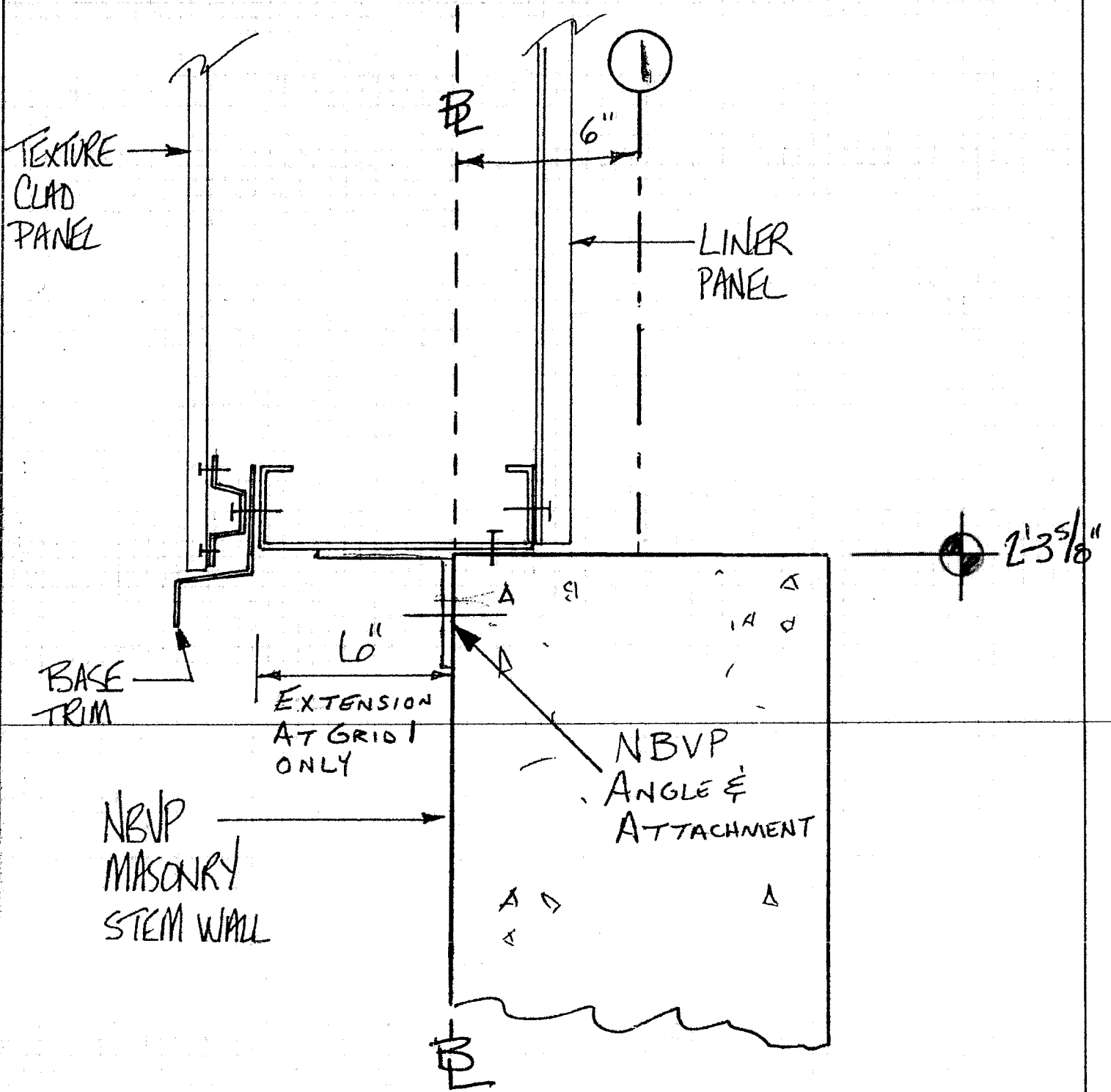
P.O. Box 4369
St. Joseph, MO 64504
Phone: 816-238-7550
Fax: 816-238-8127

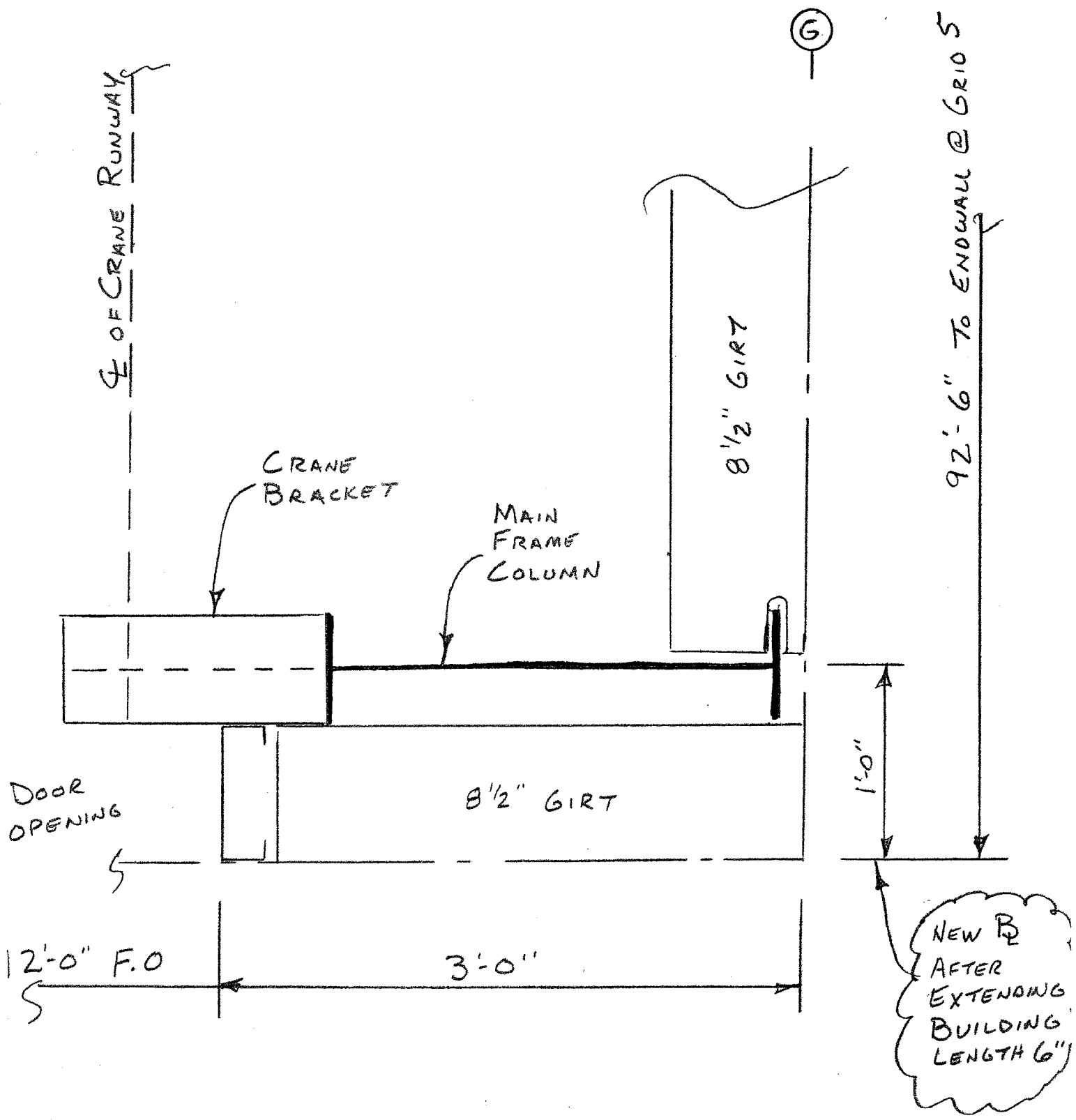
12-6490 HD THOMPSON

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ENGINEERING DATA SHEET

SUBJECT: REVISED ENDWALL @ 1





SHAW-BOX[®] WORLD SERIES[™] MONORAIL HOISTS

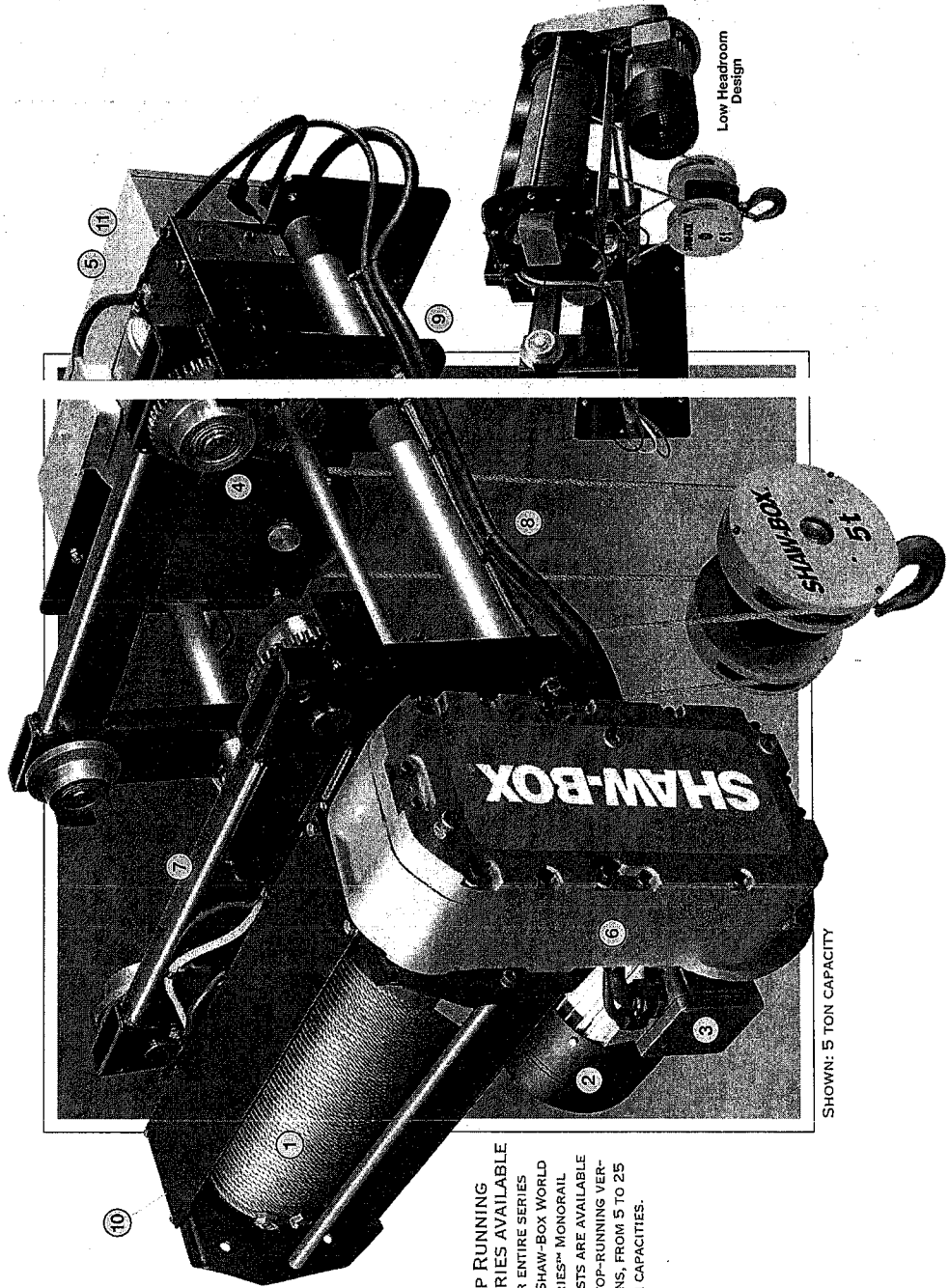
CAPACITIES FROM
1 TO 15 TON

Shaw-Box *World Series* monorail wire rope hoists are built for the world market and combine over 130 years of experience with the latest in manufacturing and materials technology, rigid design standards and the best quality components available to create a feature-filled, rugged, easily maintained hoist line.

All Shaw-Box *World Series* hoists are metric capacity rated, low headroom, heavy-duty, built to meet and exceed either FEM 2m or 3m duty (similar to ASME H4 or H4+ duty) providing long life in heavy applications with the higher lifting speeds and precise positioning control demanded by industry worldwide.

WORLD SERIES[™] MONORAIL HOISTS

Designed and Built to Meet Global Requirements



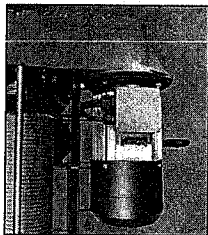
SHOWN: 5 TON CAPACITY

BUILT WITH QUALITY

- ① Rope drum deep-grooved with heavy-duty rope guide as standard.
- ② Heavy-duty DC disc brake rated at 200% torque, provides quick, positive stops and load holding.
- ③ Motors designed and manufactured specifically for hoisting service.
- ④ Steel compound tread wheels for long life and use on either wide-flange or "S" beams. One wheel on each side of trolley driven for positive tracking.
- ⑤ All controls housed in a NEMA 4/12 enclosure with easily accessible electrical components.
- ⑥ Triple reduction hoist gearing in an oil tight gear case.
- ⑦ Heavy steel frame provides a solid foundation and positive alignment of key components.
- ⑧ Low headroom design assures maximum hook travel.
- ⑨ Trolley is easily adjustable to handle a wide range of beam flange widths.
- ⑩ Upper/lower geared limit switch is standard for regulated load travel.
- ⑪ Two-speed hoist and trolley control for smooth acceleration and precise load positioning.

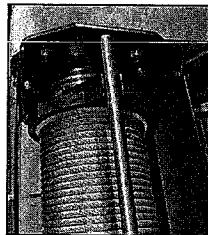
TOP RUNNING
SERIES AVAILABLE
OUR ENTIRE SERIES
OF SHAW-BOX WORLD
SERIES[™] MONORAIL
HOISTS ARE AVAILABLE
IN TOP-RUNNING VER-
SIONS, FROM 5 TO 25
TON CAPACITIES.

SHAW-BOX STANDARD FEATURES



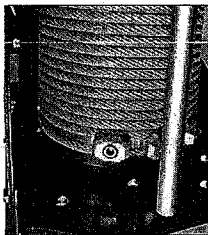
HOIST GEAR CASE & MOTOR

Triple reduction hoist gearing is oil bath lubricated, operating in an oil-tight cast aluminum gear case. The gear case is conveniently located to allow ease of access in the air, while providing a low headroom design with maximum lift. The motor is low speed with a 4:1 ratio from high to low speed; giving a low speed for precise load handling and a high speed for fast throughput.



WIRE ROPE DRUM and ROPE GUIDE

The wire rope drum is machined from quality steel, deep-ground with a rope guide to help ensure the rope stays in the grooves.



DRUM, REEVING and LOWER BLOCK

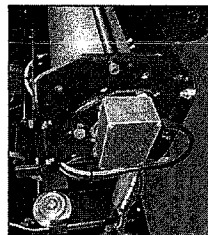
Hoist is reeved to a low-headroom design lower block for minimum headroom and maximum lift. Wire rope is secured to the drum with three heavy duty iron clamps and designed to have three extra wraps of wire rope on the drum with the rope at full extension (low hook).



TRUNNION STYLE BLOCK AND HOOK

Each hoist comes with a bearing mounted trunnion hook that rotates 360° and swings back and forth 180° for easier load adjustment.

NOTE: Standard on 2 to 15 ton capacity hoists.



UPPER/LOWER GEARED LIMIT SWITCH

The hoist is provided with an upper/lower geared control circuit hoist motion limit switch as standard. An additional block-operated upper control circuit limit switch is available as an option.

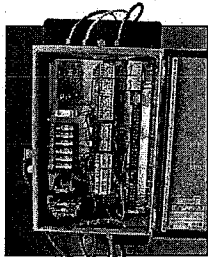
HOIST OVERCAPACITY LIMIT SWITCH

A hoist overcapacity limit switch is provided as standard to prevent lifting excessive overloads.



TROLLEY TRAVERSE DRIVE

Two wheels are driven, one on each side of the frame for maximum traction and uniform tracking. Inverse motor drives a right angle worm gear reducer for smooth starting and stopping.



CONTROL PANEL

Hoist and trolley controls are housed in a common NEMA 4/12 enclosure with the following features as standard:

- Phase-loss detection/protection
- Motor line fusing
- Fused control circuit transformer
- Hoist motion monitor
- Motor thermal overload
- Hoist over capacity limit switch
- All components are of the highest quality and the panel design meets National Electric Code (NEC).

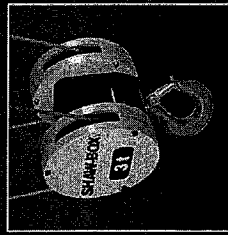
Our Smaller Capacity Hoists Have All The Same Features As Our Larger Hoists

Smaller Capacity. Big Performance.



Shown: 3 Ton capacity

Lower capacity series available from 1 to 3 tons.



Bearing mounted trunnion hook rotates 360° and swings back and forth 180° for easier load adjustment. Standard on 2 to 15 ton capacities.



Ultra-Low headroom design—as low as 16" from wheel tread to saddle of hook.

If a smaller capacity monorail hoist is what you're looking for, you can't beat the Shaw-Box World Series™ 1-3 Ton Series. They're not only made under the same high standards as their big brothers, but come with all the same great features.

For additional information contact your Lift-Tech representative or Lift-Tech headquarters direct.



LIFTTECH

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WARNING
To Avoid Injury:
Do not overload, misuse,
tamper with, or modify
equipment. Read and follow all
instructions.