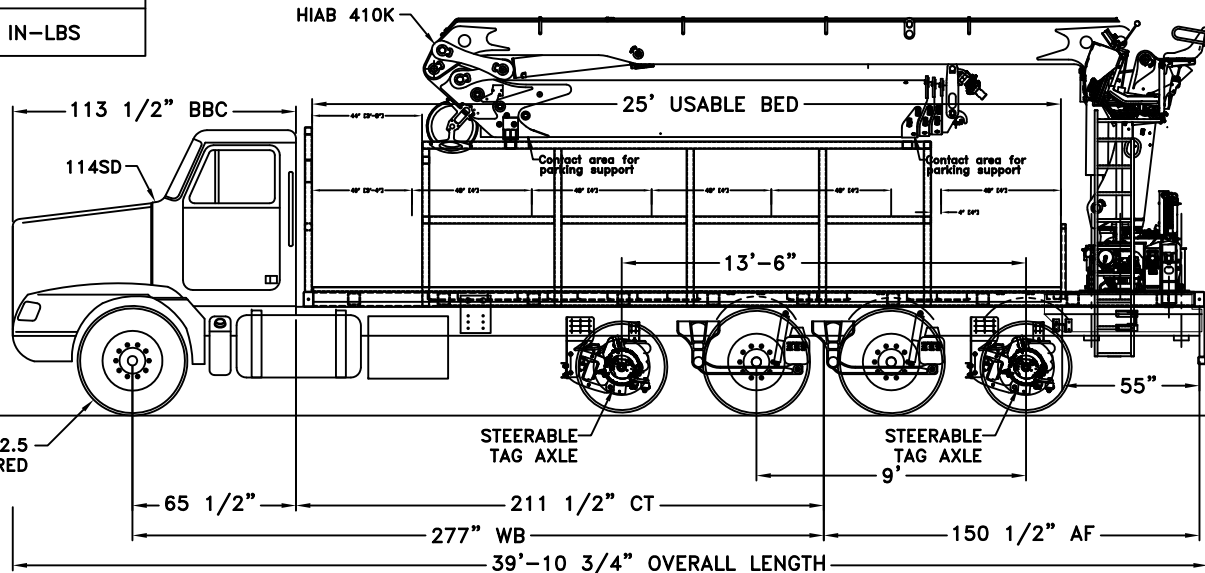


YIELD STRENGTH  
120,000 P.S.I. YIELD

CRANE MINIMUM SECTION  
MODULUS REQUIRED  
= 49.58 in.<sup>^3</sup>

CRANE MIN. RBM/RAIL = 5,950,000 IN-LBS



CRANE MAY BE DERATED  
IN FRONT QUADRANTS AS  
MUCH AS 50%. ACTUAL  
DERATING SHALL BE BASED  
ON PHYSICAL TESTING.

**TRUCK, HIAB CRANE & ACCESSORIES WEIGHT DISTRIBUTION, NO PAYLOAD, TAG AXLE DOWN.**

TOTAL WEIGHT ON FRONT AXLE	=	14,180 LBS.
TOTAL WEIGHT ON TANDEM AXLE	=	22,900 LBS.
TOTAL WEIGHT ON TAG AXLE	=	8,500 LBS.
FRONT AXLE WT. PERCENTAGE	=	31 %
TANDEM AXLE WT. PERCENTAGE	=	50 %
TAG AXLE WT. PERCENTAGE	=	19 %
GROSS VEHICLE WEIGHT	=	45,580 LBS.

**TRUCK, HIAB CRANE & ACCESSORIES WEIGHT DIST, WITH PAYLOAD, PUSHER & TAG DOWN.**

TOTAL WEIGHT ON FRONT AXLE	=	16,000 LBS.
TOTAL WEIGHT ON PUSHER AXLE	=	8,000 LBS.
TOTAL WEIGHT ON TANDEM AXLE	=	34,000 LBS.
TOTAL WEIGHT ON TAG AXLE	=	8,500 LBS.
FRONT AXLE WT. PERCENTAGE	=	24 %
PUSHER AXLE WT. PERCENTAGE	=	12 %
TANDEM AXLE WT. PERCENTAGE	=	51 %
TAG AXLE WT. PERCENTAGE	=	13 %
GROSS VEHICLE WEIGHT	=	66,500 LBS.
WATER LEVEL PAYLOAD	=	20,920 LBS.

**TRUCK SPECIFICATIONS**

TRUCK MODEL	=	FREIGHTLINER 114SD
WHEELBASE	=	277"
CAB TO TANDEM	=	211 1/2"
AXLE-TO-FRAME	=	150 1/2"
FRONT TARE WEIGHT	=	10,800 LBS.
TANDEM TARE WEIGHT	=	9,100 LBS.
FRONT G.A.W.R.	=	20,000 LBS.
TANDEM G.A.W.R.	=	46,000 LBS.
YIELD STRENGTH OF EACH FRAME RAIL	MINIMUM SECTION MODULUS REQUIRED	120,000 P.S.I. YIELD = 38.00 in. <sup>^3</sup>
MINIMUM RBM/RAIL		= 4,560,000 IN-LBS

**NOTES:**  
DOUBLE FRAME RAIL REQUIRED.  
FRAME RAIL MINIMUM OF 38.0 SECTION MODULUS REQUIRED.  
FULL LENGTH SUB-FRAME REQUIRED:  
6"x4"x3/8" RECT. TUBING (ON TOP OF FRAME RAIL)  
5"x3"x3/8" RECT. TUBING (CROSSMEMBERS EVERY 3 FT.)  
3/8" TOP & 1/4" BOTTOM PLATE REQUIRED.  
CURB WEIGHTS ARE ESTIMATED.  
FLATBED AND LIFT AXLE WEIGHTS ARE ESTIMATED.

TRUCK RUNS IN KENTUCKY.  
20,000 LBS. ALLOWED ON FRONT AXLE.  
34,000 LBS. ALLOWED ON TANDEM AXLE.  
42,500 LBS. ALLOWED ON TRIDEM. (9')  
50,500 LBS. ALLOWED ON 4 AXLE GROUP. (13')  
66,500 LBS. ALLOWED FOR GROSS WEIGHT. (30')  
MAXIMUM LENGTH CANNOT EXCEED 45'.

**NOTICE:**  
THE DRAWING PURPOSE IS TO INTRODUCE A GENERAL CONCEPT OF A PROPOSED IDEA.

**NOTICE:**  
THIS WEIGHT DISTRIBUTION IS BASED ON ESTIMATED WEIGHTS AND IS ONLY AS ACCURATE AS THOSE ESTIMATES. ACTUAL WEIGHTS MAY CHANGE THE RESULTS OF THIS WEIGHT DISTRIBUTION.

**Hiab**  
Hiab, Inc.  
12233 Williams Road  
Perryburg, Ohio 43551  
Tel (419) 482-6000  
Fax (419) 482-6001

Tolerances - unless otherwise noted.  
Tolerances are in inches.  
2-PLACE ±.00..... .03  
3-PLACE ±.000..... .015  
ANGULAR ± ..... 1'  
FRACTIONAL ± ..... 1/16"

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Next Assy.

Dwg/Cad file no.  
**410K / SALES**

**Drawing Title:**  
HAIB 410K-3

**Project Name:**  
SALES LAYOUT

**Drawn by/Date:**  
EJM 2-21-19

**Size:** unit wt.    **Part No.:** Eng. job no.:

**Approval:** Date Approved:    **Scale:**