



CRANE MAY BE DERATED IN REAR QUADRANTS AS MUCH AS 15%. ACTUAL DERATING SHALL BE BASED ON PHYSICAL TESTING.

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

TOTAL WEIGHT ON FRONT AXLE	= 14,630 LBS.
TOTAL WEIGHT ON TANDEM AXLE	= 26,470 LBS.
FRONT AXLE WT. PERCENTAGE	= 36 %
TANDEM AXLE WT. PERCENTAGE	= 64 %
GROSS VEHICLE WEIGHT	= 41,100 LBS.

**TRUCK, HIAB CRANE & ACCESSORIES WEIGHT DISTRIBUTION, WITH PAYLOAD, TAG AXLE DOWN.**

TOTAL WEIGHT ON FRONT AXLE	= 19,380 LBS.
TOTAL WEIGHT ON TANDEM AXLE	= 32,500 LBS.
TOTAL WEIGHT ON TAG AXLE	= 11,000 LBS.
FRONT AXLE WT. PERCENTAGE	= 31 %
TANDEM AXLE WT. PERCENTAGE	= 52 %
TAG AXLE WT. PERCENTAGE	= 17 %
GROSS VEHICLE WEIGHT	= 62,880 LBS.
WATER WEIGHT PAYLOAD	= 21,780 LBS.

**TRUCK SPECIFICATIONS**

TRUCK MODEL	= WESTERN STAR 4700SF
WHEELBASE	= 289"
CAB TO TANDEM	= 208"
AXLE-TO-FRAME	= 142"
FRONT AXLE CURB WEIGHT	= 10,700 LBS.
REAR AXLE CURB WEIGHT	= 9,300 LBS.
FRONT G.A.W.R.	= 20,000 LBS.
REAR G.A.W.R.	= 46,000 LBS.
YIELD STRENGTH OF EACH FRAME RAIL	MINIMUM SECTION MODULUS REQUIRED
120,000 P.S.I. YIELD	= 30.59 in. <sup>3</sup>
MINIMUM RBM/RAIL OF 3,670,751 IN-LBS	

**NOTES:**  
 DOUBLE FRAME CHASSIS REQUIRED.  
 FRAME RAIL MUST MEET OR EXCEED THE MINIMUM RBM REQUIRED.  
 FULL LENGTH SUBFRAME REQUIRED:  
 6"x4"x3/8" RECT. TUBING (ON TOP OF CHASSIS FRAME)  
 5"x3"x3/8" RECT. TUBING (CROSSMEMBERS EVERY 3 FT.)  
 CURB & BODY WEIGHTS WERE ESTIMATED.  
 LIFT AXLE WEIGHTS WERE ESTIMATED.

TRUCK RUNS IN US (RULES FOR MOST STATES).  
 20,000 LBS. ALLOWED ON FRONT AXLE.  
 34,000 LBS. ALLOWED ON TANDEM.  
 43,500 LBS. ALLOWED ON TRIDEM (9').  
 63,500 LBS. ALLOWED FOR GROSS WEIGHT (32').  
 MAXIMUM LENGTH CANNOT EXCEED 40.'

**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, Inc.**  
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Tolerances - unless otherwise noted.  
 Tolerances are in inches  
 2-PLACE ±.00..... .03  
 3-PLACE ±.000..... .015  
 ANGULAR ± ..... 1'  
 FRACTIONAL ± ..... 1/16"  
 Break all sharp corners unless otherwise specified.

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Dwg/Cad file no. **285K / SALES**

**Hiab 285K-3 HIPRO**

**SALES LAYOUT**

Project Name: **Hiab 285K-3 HIPRO**

Next Assy:

Drawing Title: **Hiab 285K-3 HIPRO**

Drawn by: **EJM** Date: **3-11-21**

Approval: **3-11-21** Date Approved:

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