



425/65R22.5
TIRES REQUIRED

TRUCK, HIAB CRANE & ACCESSORIES WEIGHT DISTRIBUTION, NO PAYLOAD, PUSHER & TAG UP.	
TOTAL WEIGHT ON FRONT AXLE	= 15,770 LBS.
TOTAL WEIGHT ON TANDEM AXLE	= 26,670 LBS.
FRONT AXLE WT. PERCENTAGE	= 37 %
TANDEM AXLE WT. PERCENTAGE	= 63 %
GROSS VEHICLE WEIGHT	= 42,440 LBS.

TRUCK, HIAB CRANE & ACCESSORIES WEIGHT DIST. WITH PAYLOAD, PUSHER & TAG DOWN.	
TOTAL WEIGHT ON FRONT AXLE	= 17,680 LBS.
TOTAL WEIGHT ON PUSHER AXLE	= 8,500 LBS.
TOTAL WEIGHT ON TANDEM AXLE	= 31,820 LBS.
TOTAL WEIGHT ON TAG AXLE	= 8,500 LBS.
FRONT AXLE WT. PERCENTAGE	= 27 %
PUSHER AXLE WT. PERCENTAGE	= 13 %
TANDEM AXLE WT. PERCENTAGE	= 47 %
TAG AXLE WT. PERCENTAGE	= 13 %
GROSS VEHICLE WEIGHT	= 66,500 LBS.
WATER WEIGHT PAYLOAD	= 24,060 LBS.

TRUCK SPECIFICATIONS	
TRUCK MODEL	= WESTERN STAR 4700SB
WHEELBASE	= 274"
CAB TO TANDEM	= 210 1/2"
AXLE-TO-FRAME	= 139 3/4"
FRONT AXLE CURB WEIGHT	= 10,937 LBS.
REAR AXLE CURB WEIGHT	= 8,918 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	= 28.89 in. ³
MINIMUM RBM/RAIL OF 3,466,800 IN-LBS	

NOTES:
 DOUBLE FRAME CHASSIS REQUIRED.
 FRAME RAIL MUST MEET OR EXCEED THE MINIMUM RBM REQUIRED.
 FULL LENGTH SUBFRAME REQUIRED:
 6" x 4" x 3/8" RECT. TUBING (ON TOP OF CHASSIS FRAME)
 5" x 3" x 3/8" RECT. TUBING (CROSSMEMBERS)
 BODY & LIFT AXLE WEIGHTS WERE ESTIMATED.
 CURB WEIGHTS WERE PROVIDED.

TRUCK RUNS IN US (RULES FOR MOST STATES).
 20,000 LBS. ALLOWED ON FRONT AXLE.
 34,000 LBS. ALLOWED ON TANDEM.
 42,500 LBS. ALLOWED ON TRIDEM (9').
 50,500 LBS. ALLOWED ON FOUR AXLE GROUP (13').
 66,500 LBS. ALLOWED FOR GROSS WEIGHT.
 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.

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

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Next Assy.
 Dwg/Cad file no.
285K / SALES

Drawing Title:
 HIAB 285K-3 HIABRO

Project Name:
 SALES LAYOUT

Drawn by/Date:
 CSV 8-4-17

Approval/Date Approved:
 [Signature]

Size: []
Part No.: []
Scale: unit wt.
Eng. Job no.: []