



## Dead weight and CG comparisons

Simply comparing dead weights is not a true indication of vehicle capacity or tip factor in a lift truck.

Position of counterweight is equally as important as actual weight. Positioning weight as far rearward as possible maximizes counterbalance action while positioning the weight as low as possible provides a more stable unit with a lower center of gravity (CG). Hoist is able to maximize counterweight effectiveness in this fashion by utilizing state of the art solid-modeling design tools to optimize counterweight position and by pouring lead counterweight integral to the frame. The increased density (weight) of lead results in a less bulky, lower counterweight providing the additional benefit of increased rearward visibility, allowing for safer operation of the unit.

Hoist Neptune Marina Trucks have a designed tip factor of 25%. In other words, the Neptune has 25% reserve lifting capacity prior to the rear tires coming off the ground. It is not uncommon in the material handling industry in general, when questioning an operator as to how he knows when he is overloaded, to hear "when the rear tires come off the ground". Obviously at that point the operator has exceeded the rated capacity of the truck AND the reserve capacity. In an effort to eliminate that possibility, Hoist limits the hydraulic lift pressure such that the vehicle cannot exceed the rated capacity and compromise the reserve. Additionally, safety overload warning devices alerting the operator when the truck approaches maximum capacity are included as standard on all Neptune Marina Lifts.

Although a relatively new entrant in the marina lift industry, the Hoist companies have been in the high capacity material handling business for literally the last century. This vast experience has taught us that ultimately the *optimal* truck provides a sufficient tip factor and increased visibility without unduly stressing components and maximizing floor loading. In the future, other manufacturers of marina lifts have indicated that they will emulate this approach. The goal at Hoist from the onset has been to set the industry standard for what a marina lift should be. Hoist will continue to strive to provide the optimal truck to all of our customers.



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