

SPECIFICATIONS

Rescue Air Cushion System

Introduction

These purchase specifications cover the minimum requirements for a 14-ton capacity medium pressure Rescue Air Cushion System with a 24 in. (61 cm.) lifting height to be purchased by _____ . This system shall consist of the following components and accessories:

- Two Rescue Air Cushions with built in pressure relief valves.
- One Dual Safety Controller with quick connect couplings.
- One length of 3/8 in. (9.5 mm.) diameter high-pressure supply hose with quick connect couplings 16 ft. (5 m.).
- Two lengths of 1 in. (2.54 cm.) diameter low-pressure delivery hose with quick connect couplings 20 ft. (6 m.).
- One storage and carrying case.
- One repair kit.

Instructions to Bidders

Bidders shall conform as much as possible to these specifications. Exceptions or omissions must be set out in writing on a separate sheet entitled “Exceptions” which must accompany the bid. Failure to do so will result in an automatic rejection of the bid.

The buyer shall be the sole interpreter of the intent of any clause of these specifications and shall be the sole judge as to whether the equipment or any part thereof complies with the specifications.

The buyer reserves the right to reject any and all bids, to waive informalities in bidding, to negotiate small options with the successful bidder and to accept the bid, which in the opinion of the buyer, will be in its best interests.

General Construction Features

Each Rescue Air Cushion shall be constructed to a standard which effects a minimum burst pressure of three times working pressure, irrespective of size and capacity. This design criterion shall be corroborated and certified by an independent source. Each Rescue Air Cushion shall have a label placed prominently on it giving the following information:

- Maximum Working Pressure
- Date of Manufacture
- Serial Number
- Manufacturer’s Logo
- Series Identification

Dimensions and Capacities

Each Rescue Air Cushion shall have a maximum load capacity of 14,758 lbs. (6,694 kg.) with a lifting height of 24 in. (61 cm.) and have a packaged weight not to exceed 50 lbs. (22 kg.). The diameter of each Rescue Air Cushion shall be 36 in. (91 cm.) and only require 48 cu. ft. (1,346 liters) of air for maximum inflation. The maximum insertion space required per Rescue Air Cushion should not exceed approximately 2 in. (5 cm.).

Working Surfaces

The working surface of each Rescue Air Cushion in the system shall be a 3-ply Neoprene-Coated Belt with a nominal thickness of 0.2 in (5 mm.).

Sidewall

The sidewall construction shall be of Heavy Coated Neoprene / Kevlar Fabric. The coating shall be applied to both sides of the sidewall.

Built In Reset Relief Valve

Each Rescue Air Cushion shall incorporate a built in reset relief valve. The relief valve shall be molded and threaded with a spring-loaded mechanism to self-reset at 14.5-psi (1bar). **NO AIR CUSHIONS WILL BE ACCEPTED WITHOUT THIS SAFETY FEATURE.**

Inflation Port

The inflation port shall be a Molded Threaded Fitting 1 and 1/16 in. x 12 in. (2.7 cm. x 30.48 cm.). The inlet nipple shall incorporate a quick connect fitting.

Controller

A Dual Controller shall be provided capable of inflating and deflating two rescue air cushions simultaneously and independently. The controller shall incorporate two pressure relief valves that are factory pre-set at 14.5-psi (1 bar) to prevent over inflation of the cushions. The Dual Controller shall be designed so that when the deflation valves are fully opened, the cushions will deflate slowly preventing any quick movements to heavy loads, which could cause damage or injury.

Delivery Hose

The delivery hose (quantity of 2) shall be in standard lengths of 20 ft. (6 m.) with options for 40 ft. (12 m.) and 60 ft. (18 m.). They shall be offered in red and blue for easy identification when working two separate Rescue Air Cushions simultaneously. They shall be constructed of 1 in. (25 mm) bore reinforced thermoplastic with a maximum working pressure of 150 psi (10.3 bar) at 70° F (21° C). The delivery hose service temperature range shall be 14° F (-10° C) to 150° F

(65° C). The system shall also consist of a 16 ft. (5 m.) long and 3/8 in. (9.5 mm.) diameter air supply hose. All hoses shall be equipped with field replaceable dual locking couplings (locking prevents accidental disconnection of fitting) or twist-lock claw couplings.

Warranty

The seller shall be required to furnish a warranty on the complete Rescue Air Cushion System as described in these specifications for the service intended of the buyer. All equipment furnished by the successful bidder shall be warranted against all defects in material and workmanship for a period of at least one year from the date of acceptance. The seller agrees to replace, without charge, any parts shown to be defective under the terms of this warranty.

Use, Care and Maintenance Manual

Seller shall provide an illustrated step-by-step guide on the use, care and maintenance of the Rescue Air Cushion System provided.