

EQUIPMENT

Ro/Ro

Specialty Roll Trailers

By: Martin C. Pilsch, Equipment & Port Development

Roll Trailers

As a port manager, stevedore or marine terminal operator, the issue of moving specialty and oversized cargo can be a problem. This can be especially vexing when faced with the perils of handling tank containers or standard ISO containers loaded with drums of liquid. Whether hazardous or not, the possibility of a spill can be quite daunting and no matter how hard you try, or how carefully you handle them during the loading or unloading process, you are going to have a percentage of leakers.

Depending upon what is leaking from the container, and this can often be a difficult question to answer immediately, the appropriate response can save lives and avoid creating a damaging, environmental mess. The impact of a spill can mean many things, not the least of which is cost and the runoff from a leaking container, especially on the string piece, can quickly escalate to a hazardous spill. The closer the spill is to the water the more potential damage, the more intensive the response required and the more costly the cleanup.

Today, most port organizations have staff members and on-call contractors trained to respond to potential hazardous conditions. Terminal management organizations include at least one individual to respond. This individual is trained to advise or make the difficult decision- what to do next. This staff member usually is assigned to perform a combination security and environmental management task, supporting the operating staff to ensure that proper procedures are followed and that the organization is prepared to respond correctly. He is also responsible to ensure that the organization is operating within Federal, State, and local regulations. To do his job, he needs all the tools available.

At most facilities, leaking containers at shipside are placed aside until someone can be called in to deal with them. Containment booms or absorbing materials can be spread to eliminate the potential of an overboard spill, however, more than likely the leaking will continue until someone can get into the container or inspect the tank to discover the problem. On call contractors are set to move in, assess the issues and make the corrections necessary to resolve the problem. All of this takes time and in most cases the more time the worse the situation becomes. Like a fire, the more time it takes to react, the more the damage realized.

LIQUID WASTE ROLL TRAILER

Martec International, a company well known in maritime circles for its line of chassis, container and trailer repair parts, has been leasing and selling roll trailers and bomb carts for a number of years. One of its newest products is a liquid waste

environmental roll trailer, affectionately called the “Bath Tub”. Admittedly, it looks a bit like one.

The “Bath Tub” is a product that is designed to decrease the potential impacts of an unattended leaking container. Whether it is a an ISO container with a load of leaking drums or liquid containers or a standard industry tank container, the “Bath Tub” is designed to temporarily contain the leaking substance.

The liquid waste roll trailer is a 45’ by 9’, low profile, water-tight specialty trailer that is specifically designed to provide emergency response to liquid spills. It has been adapted from the original roll-trailer design and is among a group of roll trailer models offered by Martec. With standard roll-trailers, the customer has a number of options that include length, capacity, and style of connection to motive power. The liquid waste roll trailer offers many features such as heavy duty steel construction, a low profile, low center of gravity, hard rubber wheels with no brakes or suspension and a standard length that will accommodate either 20’ or 40’ containers. It connects to either a detachable tow attachment called a goose neck or can have a goose neck permanently attached.

The liquid waste roll trailer is designed for intra-terminal use to transport leaking 20’ or 40 containers to a safe area where the container or its contents can be inspected and either repaired or unloaded. The trailer’s capacity is 55 tons. The trailer also has a built in sludge tank with a 2” diameter drain valve covered by a removable steel grill. The sludge tank will hold 264 gallons of liquid.. At the rear of the trailer is a 5’ platform so that repairs can be conducted or the container doors can swing clear if necessary for unloading.

MARTEC LEASING, LLC

Martec’s line of roll trailers includes the Liquid Waste Roll Trailer as well as 40’ and 62’ roll trailers that range in capacity from 45 metric tons to 120 metric tons. Martec will special order trailers for customized uses. The trailers can be either leased or purchased. The 40’ versions can be connected to yard tractors by way of the portable goose neck or, they also can be fitted with a permanent attachment.

Original roll trailers were manufactured by MAFI a German equipment manufacturer and as is common in the maritime industry, the name has become synonymous with all roll-trailer products. The first roll trailers in use in the North Europe to North American trade, were designed without a fixed goose neck so that they could be moved in and out of the lower decks of a roll-on/roll-off vessel and stowed with a minimum length. Today, the majority of roll trailers purchased come without the goose neck attachment. For the steamship line and the terminal operator, empty roll trailers without the goosenecks can be stacked and left on the terminal or returned to the vessel for transport to another port to take on new cargo.

The roll-trailer was originally designed as a shipboard tool rather than a terminal asset, however, terminal operators began to use them when they were left behind. Martec’s roll trailer customers include many of the largest ro/ro vessel operators as well as a growing number of port and marine terminal operators.

The roll trailer with or without a fixed goose neck has become a valuable terminal support tool. It offers a low platform height, low center of gravity, increased capacity, cargo carrying versatility, durability and low maintenance. Today, terminal operators

utilize their roll-trailers for a variety of cargo handling activities including the movement of project cargoes such as large generators and power plants, over-sized vehicles, cranes, and large farm and construction equipment. They are also adaptable for the movement of motor and sailing yachts, windmill components, over-sized crates, paper rolls, steel coils and slabs, lumber and logs, and general palletized cargo. Many European terminal operators utilize them to move containers and their capacity and low center of gravity allows multiple, stacked container handling.

The Mafi roll trailer and the many look a like's that followed were produced in 20' and 40' versions. Today, Martec offers 40' models ranging from 45 MT capacity to 120 MT capacity. In addition, there is a 62' model. While normally 8' wide, the platform can be special ordered with up to a 10' width.

Martec also offers specially equipped roll trailers for steel coil handling and special designs for handling windmill blades and columns.

MAGNUM TRAILER & EQUIPMENT, INC.

Magnum is located in Abbotsford, British Columbia, near the port city of Vancouver, BC. The manufacturer specializes in on and off road cargo trailers and marine terminal trailers and accessories. Their marine terminal products include twin twenty bomb carts, crane training equipment, spreader trailers, twin steer cargo trailers, and mafi-style roll trailers.

Magnum indicates that its roll trailer is specially designed to handling any cargo type. Magnum will provide special lengths, deck sizes and capacities. The options they offer include, single or double wide decks, fixed or detachable goose neck attachments, solid or pneumatic tires, optional air brakes and lighting systems, and a choice of deck surfaces. Magnums roll trailer decks can be ordered with flat steel, diamond plate, stainless steel, galvanized steel or UHMW plastic or wood. Decks can also be ordered with removable or outboard walkways and deck lengths. ISO container sockets can be placed on the deck.

Mel Wubs, Vice President Marketing and Sales for Magnum reports that they have produced a number of specialty roll trailers designed to handle windmill components. They have designed 9 trailers for West Coast marine terminal operators that are utilized for all components of the windmills. These particular trailers were 48' long and 10' wide with a capacity of 100 ton. The capacity of these trailers allows them to handle the cassell, the heaviest of the windmill components at from 60 to 70 tons.

Magnum has also sold roll trailers to a number of East Coast terminal operators including Delaware River Stevedores in Philadelphia and Maher Terminals in New Jersey.