



Modec, Inc.

Over/Under Roller Spray System

"From Tactical to Practical"

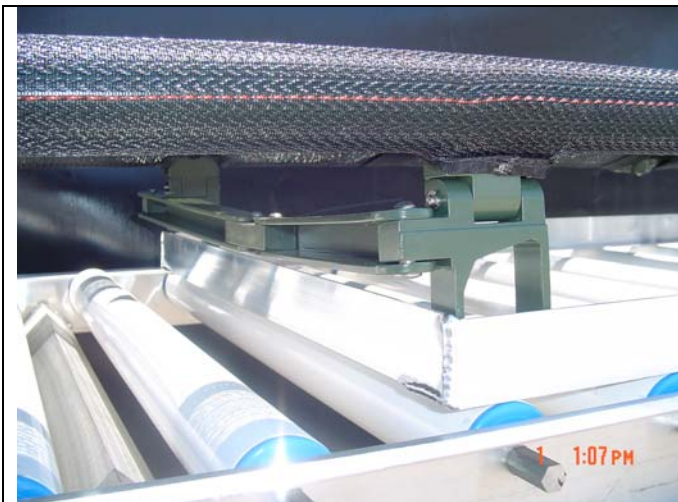
The Purpose of this Section is to demonstrate the capabilities and methods employed by Modec in taking conceptual "tactical" ideas and making them a reality. Modec has been a leading innovator in the development of decontamination applications and componentry commonly used by other vendors in the industry. This includes our flooring system, exterior modesty barriers, automated decon injectors, exterior boom operations, and custom exterior roller systems. Modec's unique fabrication abilities allow us to take ideas from the white board directly into functional working components that we will install for the MABAS Program.

Concept Stage: During the Pre-bid meeting, an operational concept of an "under" carriage type spray system was discussed. From the rough drawings taken from this meeting, a conceptual rendering was made. From here, we discussed internally the various operational considerations that would impact the use of this equipment - interchangeability, transport, affixed use versus detached use, etc.



Prototype Development: Modec's shop staff is highly adept at custom metal fabrication, especially stainless steel that requires special skills. This has afforded us the ability to not only develop our own custom designs such as extra-wide rollers at 24" as opposed to "stock" type units, but also provide proof-of-concept of varying ideas that we are evaluating. This also is invaluable during the initial phases of production to incorporate customer desired or directed changes.

Operational Design: Modec then takes into consideration all the potential operational and storage issues that the final end-users may face. In this case, we looked at the MABAS requirements that the roller system have several operating positions inside and out. Therefore, we incorporated the underside spray boom underneath the actual rollers. This boom is low profile and permanently welded into position. An on/off valve and quick-disconnect fitting are then added. The roller unit can be used in all possible situations.



Custom Designing: Decon pole stretchers pose a unique issue for the roller system as they have "feet" that do not freely roll on standard rollers. Consequently, Modec designed and fabricated a Raven "tray" that allows the decon stretcher to easily roll down the unit and provide underneath spray access.

Cell Testing: Modec then conducts spray head testing in a bench test to authenticate spray pattern, volume and other facets of the system. This confirms the specific spray heads that will provide us the most desirable results. We also add the "over" portion of the automated spray system that will utilize the existing boom ports to be mounted on the exterior of the MABAS unit. This provides a true "hands-free" decon processing capability.



Design Finalization: Modec then runs the equipment several dozen times to confirm and authenticate the operational aspects and to look for design enhancements and improvements including types of fittings, heads, etc. The final design provides an automatic method to process ambulatory stretched-borne patients - inside and outside. Now finalized, it is incorporated into our MABAS technical proposal. In addition, Modec can customize the system for changes proposed by MABAS staff while in the initial production phase.

