



BOBTAIL ASME – DOT MC-331
BOBTAIL VESSELS
For DOT Certified Bobtail Assemblers

VESSELS

ARROW VESSELS

BUILDING BETTER BOBTAIL VESSELS

Stock vessels, custom layouts, skirted and/or non-skirted units are available to suit your needs as an assembler. Arrow Tank state-of-the art bobtail vessels begin their fabrication process with computer aided design (CAD), and utilize various methods of computer aided manufacturing (CAM) to enhance the final fit and finish. Arrow Tank & Engineering's exclusive weight distribution software assures a safe and reliable bobtail by matching each vessel to the selected chassis. Another resource utilized by many upfitters includes our ability to create scale drawings of the assembled unit to verify chassis frame component clearances. Results from these innovations are apparent in the performance and ease of assembly in each completed bobtail.



Options:

- Bi-Fold Rear Doors or Hatchback Rear Door
- Gas Struts For Door Openers
- Stainless Steel Door Handles
- Latches, Rods and Hardware
- Lighting System with Harness Installed



Options:

- Galvannealed or Stainless Steel Skirting
- Meter Cover
- Hose Rack
- Lighting System with Harness Installed

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MOUNTING & LIGHTING OPTIONS

Bobtails are needed most in the harshest environments Mother Nature can offer. The lighting system is an extremely high priority when it comes to safety and reliability. LED lighting and wiring harnesses manufactured by Betts Industries are standard equipment. LED fixtures draw minimal amperage and illuminate brighter making them much more visible than incandescent lamps. Wires are molded into a PVC jacketed harness and plug-in connections at each junction are sealed with shrink tube for superior protection from the elements.

You sell the bobtail and we will build it to whatever extent you want. Some assemblers drop ship the chassis to us for mounting, tie-downs and bumper instalation. When complete, it can ship to your facility under its own power.



Standard lighting components include high mount LED stop and turn lamps as extra measure of safety to warn following vehicles of your intended travel. This is especially helpful when making left handed turns on roads with 2-way traffic (opposing lanes). The stadium work lights cast a combined 200 watts of illumination to provide excellent visibility darkness. Additional assistance is provided via dual 50 watt docking lights mounted midship on front fender with 55° projection angle. Rock guards fabricated from stainless steel are a welded component inside the fenders to protect the fixtures (not shown).

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FABRICATION PROCESS



Plate for the shell is cut to size and openings are created by multi-axis torches on the CNC burn table.



Rolls are used to form the flat plate into shape of the vessel shell.



Column and boom weld manipulators join longitudinal and circumferential seams with submerged arc welding (SAW) process.



Circumferential welds for head and shell seams are produced with the aid of turning rolls. The vessel rotates while the equipment remains stationary.



Submerged arc welding (SAW) is a process where the weld is performed under a shielded blanket of granular flux.



ASME code certified welders control and monitor the procedure from the pilot seat.

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Baffles, relief valve flanges, and other openings are welded in place once the shell is complete.



A department specializing in head layout prepares and installs openings as specified.



Heads are fitted to the shell after all the couplings and internal piping is installed. One final pass on the manipulator and the seams are complete.



Outlet flanges with beveled inside radius are manufactured by Arrow Tank and welded into the shell opening.



Manway assemblies are machined and fabricated by personnel onsite.



All seams are 100% X-rayed to verify purity and structural integrity.

ARROW VESSELS FABRICATION PROCESS



Vessel frame pads are attached to the shell.



In the final stage, vessels undergo hydro-test followed by internal inspection to complete the fabrication process.



Quality control personnel, design certifying engineer, registered inspector and office staff create and procure documentation, such as Form U1-A Data Report and Incomplete DOT Certificate of Compliance.



A dedicated framing apparatus provides vessel frame rails that are perfectly true.



Leadman supervises the fabrication process from beginning to end. This assures vessels are built to specification and in accordance with ASME and DOT MC-331 code requirements.



Completed truck ready for shipment.

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FABRICATION PROCESS



Vessels are available in a variety of finishes. Beginning with raw finish or choice of high performance primers and coatings supplied by companies such as DuPont, Diamond Vogel, Viking, Sherwin Williams, Valspar and PPG.



Preparations for coating takes place in our 24' x 96' grit blast booth.



Shown above - Single coverage with high build epoxy. Typical dry film thickness 4-8 mils.



Arrow Tank & Engineering's grit blast and paint facility.



Shown above - Dual coverage with high build epoxy and zinc phosphate. Typical dry film thickness 5-9 mils.



Primers and industrial coatings are applied in our 24' x 83' booth by means of electro static, air or airless application.

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Arrow Tank & Engineering

HISTORY...

From quote to completed bobtail, Arrow Tank & Engineering will take extra measures to make certain your needs are satisfied. Serving the industry fabricating vessels and bobtails for over 50 years the most important value we've learned is to "listen to our customers".

NOT JUST A BOBTAIL...

A bobtail serves as a multifunction tool for the marketer. A bobtail is not just a vehicle that pumps gas; it also acts as a mobile office, information center, and a top source for advertising.

QUALITY & DEPENDABILITY...

We do not build "cookie cutter" bobtails and will not sacrifice quality in materials or craftsmanship to sell merely based on price. We use only the highest quality materials in the bobtails we manufacture. Take a close look at our bobtails and let them speak for themselves. From Sales to Engineering to Production every employee at Arrow Tank puts their stamp of pride on each bobtail we manufacture.

TOTAL VALUE...

Based on the materials and quality our bobtails are competitively priced. Arrow Bobtails have stood the test of time and we continue to improve. The performance and quality engineered in the bobtails we manufacture is second to none.

