



OSHKOSH
SPECIALTY
VEHICLES

SPECIFICATIONS AND FEATURES FOR AN OSHKOSH SPECIALTY VEHICLES MOBILE CARDIAC CATHETERIZATION LAB

Certified and approved mobile cardiac cath lab units are designed and manufactured by the Oshkosh Specialty Vehicles in accordance with the site plan requirements of the medical equipment manufacturer selected by the customer. The following features apply:

I. CHASSIS

- Chassis: The foundation of every mobile cardiac cath lab unit is a custom designed chassis consisting of two (2) 17" deep, welded steel I-beams. All structural members are welded and gusseted together, yielding the strongest and most durable medical trailer chassis on the market.
- Axles: Cardiac cath lab trailers include two (2) heavy-duty 20,000 lb. capacity axles.
- Hub-O-Meter: A Hub-O-Meter is installed on one of the axles to allow the driver to maintain a record of the trailer movement.
- Air Ride Suspension System: The axles are installed on an automatic air ride suspension system. The proper ride height is set at the factory.
- Air Ride Kingpin Bolster Plate: A low profile air ride kingpin bolster plate is installed on the front of each chassis to provide air-cushioning support for the sensitive electronics installed in the mobile unit.



I. CHASSIS (Continued)

- Mounting Plates: Steel plates for the cardiac cath lab system and the electronics cabinets are welded in place, ensuring that critical components will be secure during transport.
- Radial Tires: Eight (8) premium quality radial tires are provided for durability and extended service life.
- Aluminum Wheels: The radial tires are mounted on eight (8) aluminum rims: the outer four (4) rims are polished aluminum and the inner four (4) rims are machined aluminum.
- Landing & Leveling Legs: Four (4) electro-hydraulic landing legs with security stabilizing pins are installed on the front and rear of the trailer, to both offload the trailer from the tractor and to assure positive fixed height of the unit at the operating site. Landing leg controls are conveniently housed in an underbody compartment, shielding them from weather and road grime for reduced repair cost and extended operational life.

II. Structural

- Body Structure and Framing: Specifically designed and constructed steel body for cardiac cath lab use, consisting of 2" x 2" steel tube in the floor and 1½" x 1½" steel tube in the walls, welded into an incredibly strong framework, yielding a 93" overall width, excluding slide-outs. This conservative approach yields an exceptionally strong, rigid super structure for the installation of slide-out sections, doorframes, patient lift and exterior body panels.
- Slide-out Sections: OSV mobile cardiac cath lab trailers include two slide-out sections to increase the overall interior space in the gantry room. The slide-outs are suspended from the ceiling and guided in and out with a synchronized gearing system. With the touch of a button, the air-over-hydraulic cylinders deploy each slide-out and automatically lower the slide-out floor.



II. Structural (Continued)

- Body Panels: The exterior skin of the trailer consists of commercially available aluminum panels that are mechanically fastened in place.
- Insulation: The walls, floors, ceiling, and underbody compartment are fully insulated with sprayed in, expanding polyurethane foam. This produces an effective vapor and insulation barrier for heat, cold, and exterior noise.
- Vapor Barrier: A vapor barrier, installed along the full length of the trailer floor, prevents moisture and odors from emanating into the trailer.
- Underbody Compartments: The underbody storage compartment is manufactured of welded steel. The open plan arrangement is insulated, heated and coated with a commercially available spray-on bed liner. The result is a highly durable coating that is easy to clean, reduces maintenance, increases sound attenuation, and provides an excellent appearance.

III. EXTERIOR

- Painted Surface: The entire trailer body is painted to commercial grade specifications. This ensures the aluminum exterior panels, compartment and entry doors, air conditioners and generator are all the same shade.
- Platform Lift: A high capacity, vertical movement platform lift with hand rails, is installed on the curbside of the mobile unit. Patients prefer the OSV lift because of its smooth, straight up and down travel. The platform lift is stowed on the side of the mobile unit for transport, thus yielding additional underbody compartment space. Two (2) security storage pins are mounted on the platform lift cradle to lock the lift platform in place during transport from one location to the next. The “face” of the lift is fitted with a high-density plastic scratch guard to prevent the paint from being chipped by stones at the site.



III. EXTERIOR (Continued)

- Platform Lift Controls: The platform lift can be controlled by either a flexible, handheld, low voltage, waterproof toggle switch assembly or switches located near the patient entry door. This allows the attendant, while on the platform lift, to effortlessly raise or lower the platform lift as required.
- Main Entry Door: A high quality, insulated main entry door with door closer and window is installed. The door is fitted with an adjustable privacy blind on the window. The exterior handle and deadbolt lock is located 80in. from the ground, allowing easy access to the lock without the entry stairs being deployed.
- Patient Entry Door: Patients enter the mobile unit through a door in the slide-out section.
- Drip Rails: Drip rails are installed over the main entry door and along the roofline on all sides of the mobile unit.
- Aluminum Stair/Platform Assembly: An aluminum stair/platform assembly with handrails for staff entry into the control area is provided. The stairs include two (2) adjustable feet to assist with leveling the stairs at the site. This entire assembly is pneumatically powered.
- Underbody Compartment Doors: Underbody compartment doors are corrosion resistant and lockable with gaskets to minimize the risk of road grime and rainwater entering into the storage compartments. The doors are hinged at the top, open from the bottom and are held open with a gas assist cylinder.
- Digital Levels: Three (3) digital levels are mounted in the mobile unit. The gauges are located in the underbody compartment next to the hydraulic controls. These digital levels read front-to-rear and side-to-side.
- Bubble Style Level Gauges: Four (4) permanently mounted bubble levels are mounted on the trailer for quick reference.



III. EXTERIOR (Continued)

- Reflective Tape: Red and white striped highly reflective tape is installed around the perimeter of the trailer for safety and increased nighttime visibility.
- Lockbox: A steel combination lockbox is mounted on the front of the trailer to store keys.
- Exterior Graphics: An allowance of \$1,150.00 is included in the price of the mobile unit for the provision and installation of custom vinyl graphics on the exterior of the mobile unit.

IV. INTERIOR

- Lead Shielding: A proprietary and highly effective lead shielding system is installed in the gantry room walls and doors.
- Lead Windows: Lead shielded windows are installed in the patient prep and gantry room walls and doors. This allows easy patient monitoring from either a standing position or a sitting position at the operator's console.
- Solid Surface Countertops: An ergonomically designed solid surface countertop is installed in the control, gantry and patient prep areas. This provides a tough wearing surface that will look great for years and adds a pleasant touch to the working environment.
- Ceilings: The ceiling in the mobile unit is constructed with highly reflective, insulated acoustical tiles for reduced noise. To enhance the work area, a combination of lighting is installed throughout the mobile unit.
- I.V. Track: A ceiling mounted I.V. drip holder rail track is installed in the gantry room.
- Storage Cabinets: Decorative laminated storage cabinets with adjustable shelves and positive cam latches are provided in the gantry and control areas to accommodate customer needs and the storage of linens and supplies.



IV. INTERIOR (Continued)

- **Wall Coverings:** The mobile unit incorporates extensive use of high quality hospital grade wall coverings. All materials have been selected for ease of cleaning and durability. Particular attention has been paid to the selection of color schemes to insure proper contrast and compatibility with the medical equipment.
- **Floor Covering:** An attractive hospital grade, durable linoleum flooring is provided throughout the mobile unit. This single piece flooring is easy to keep clean, eliminating the build-up of dirt in seams.
- **A/C Discharge Louvers:** Ceiling mounted air-conditioning discharge louvers are configured to minimize downdrafts while providing the proper airflow to maintain specified ambient environmental conditions.
- **Stereo System:** A name brand AM/FM Stereo receiver and CD player is installed in one of the cabinets in the control room. High quality ceiling mounted speakers are installed in the control room and gantry room ceiling providing a comfortable working atmosphere.
- **Backlit Film Illuminator:** A backlit, film illuminator is mounted in the control room above the solid surface countertop.

V. ELECTRICAL & ENVIRONMENTAL SYSTEMS

- **Main Electrical Disconnect Panel:** The main 480V AC electrical incoming power disconnect panel is located in the driver's side underbody storage compartment.
- **Electrical Distribution Panel:** An electrical distribution panel is located in the rear of the gantry room. This panel provides the ability to isolate the certain sections of the unit for maintenance and service.



V. ELECTRICAL & ENVIRONMENTAL SYSTEMS (Continued)

- Automatic Transfer Switch: An ATS is installed in the underbody compartment. This unit will automatically start the on-board generator and switch to generator power in the event of a power loss.
- Emergency Lighting Inside the Unit: An automatic emergency lighting system is installed in the mobile unit to provide light, when the power supply is disconnected.
- Warning Lights: Warning lights are provided on the mobile unit to warn of the following conditions:
 - An amber light on, located on the left side of the trailer, indicates that the trailer has A/C power.
 - A red light on, located on the left side of the trailer near the front of the trailer, indicates the platform lift is not properly stowed for trailer transport.
 - One (1) yellow light on, located on the rear and driver's side of the trailer, indicates the ABS is on.
- Underbody Compartment Low Voltage Lighting System: A manually operated, low voltage lighting system is located in the underbody compartment, providing light during set-up of the unit.
- Lighting Controls: Separate lighting system controls for the gantry room, control room and patient injection room permit the operator to individually control the lighting in each area.
- Service Outlets: One (1) GFCI 120 VAC duplex service outlet is installed on each side of the underbody compartments.



V. ELECTRICAL & ENVIRONMENTAL SYSTEMS (Continued)

- Marker Lights: Extra L.E.D. type marker and side turn signal lights are installed on the trailer body to assist the driver with maneuvering the trailer.
- Cable Reel Service Light: A cable reel service light is installed in the equipment room. This retractable light comes in handy for servicing the system cabinets
- Time, Temperature and Humidity Level Indicator: A wall-mounted time, temperature and humidity level indicator is installed in the control room and in the gantry room.
- Main Entry Door Light: An exterior recessed, weatherproof light fixture is mounted on the wall adjacent to the staff entry door and patient lift.
- DC power supplies: One DC power supply is located in the underbody to maintain the 12V DC lighting. The other DC power supply consists of a 1.5 amp trickle charger mounted on the generator to charge the generator batteries.
- Air Filters: Replaceable air filters are mounted in the air conditioning units on the rear of the mobile unit. This includes 90% efficient filter with magnetic pressure differential monitoring.
- Air Conditioning Systems: Two (2) custom designed, high performance air conditioning systems are mounted on the rear of the mobile unit. These systems provide close tolerance temperature levels to assure proper cardiac cath lab system function as well as staff and patient comfort.
- Thermostats: Fixed temperature, “Penn Controls” ensure the proper operating temperature ranges for the medical equipment and staff. This eliminates the operators from adjusting temperatures that could result in damage to the system electronics and reduced performance.



V. ELECTRICAL & ENVIRONMENTAL SYSTEMS (Continued)

- HVAC Distribution: Separate air supplies for the gantry, control and patient injection room ensure an adequate air supply to the temperature sensitive medical equipment.
- A/C Ductwork: The air conditioning ductwork is lined with a sound absorbent material for reduced noise and operator and patient comfort.
- Environmental Testing: OSV mobile units are environmentally tested and certified for operation at temperatures ranging from -20° F to +110° F.
- Generator: An 80KW diesel generator, with engine block heater, is installed on the front of the mobile unit in a corrosion resistant cabinet. The generator maintains the environmental control system and emergency backup power for the medical equipment while the mobile unit is in use or in transit.
- Fuel Tank: A 70-gallon fuel tank with level indicator is installed in a separate underbody compartment.
- Humidifier: A packaged steam humidifier system with 15-gallon water storage tank, installed in the rear of the gantry room, interfaces with the air conditioning ductwork to provide consistent humidity levels throughout the mobile unit. Maintaining humidity levels for the medical equipment is critical for proper operation and reduced downtime.
- Main Power Cable and Connector: A flexible, five (5) core, fifty (50') long electrical power cable with a weather resistant Russellstoll DS2504MP000/DF2032 connector with protective rubber collar is provided and stored in the underbody storage compartment. The cable can be deployed from either side of the underbody compartment.
- Telephone and Data Connections: Three (3) telephone and two (2) data connection are installed in the control room of the mobile unit. Three (3) fifty (50') weatherproof Hubbell-cords are provided with the unit. They are stored in the underbody compartment.



V. ELECTRICAL & ENVIRONMENTAL SYSTEMS (Continued)

- Certification: The OSV trailer and installation of the medical equipment is “certified” by the cardiac cath lab system equipment manufacturer.
- Medical Equipment Installation: The cardiac cath lab gantry, system components, and cabling are installed by experienced OSV installers.

VI. ADDITIONAL FEATURES and SERVICES

- Site Planning: OSV mobile unit site planning guides are available upon request. This comprehensive guide provides essential dimensions and specifications to prepare your site pad, electrical connections and communication connections.
- Manuals: Every new mobile cardiac cath lab unit comes with a set of operator maintenance and service manuals.
- Training Program: OSV offers a product orientation and training program for key personnel with the delivery of each mobile cardiac cath lab unit. This four (4) hour training session is available at the manufacturing facility at the time of delivery. If you prefer to have the training at your facility, one of our Field Service Technicians can perform this for an additional charge.



VII. SAFETY FEATURES

- Common Floor Height: The patient entry, personnel entry and operating interior floor are all at the same height for safety.
- Warning Lights: Warning lights are provided on the mobile unit to warn of the following conditions:
 - An amber light on, located on the left side of the trailer, indicates that the trailer has A/C Power.
 - A red light on, located on the left side of the trailer near the front of the trailer, indicates the platform lift is not properly stowed for trailer transport.
 - A red light on, located on the left side of the trailer near the front, indicates the suspension system is not working correctly.
 - One (1) yellow light on, located on the rear and left side of the trailer, indicates the ABS is on.
- Entry Lighting: An exterior light fixture is installed near the entry door and patient for safety.
- Automatic Transfer Switch: An automatic transfer switch is installed to provide an automatic switch from shore power to back-up generator power in the event of a power failure.
- Emergency Off: A medical system “Emergency Off” button is conveniently located in the gantry room.
- Platform Lift Pins: Two safety, locking, pins are located near the platform lift cradle. These two pins, when properly installed, prevent the platform lift from coming loose and deploying during transit.
- Emergency Lighting: Exit signs and emergency lighting are placed in key areas of the mobile unit to help in an evacuation upon a power failure.



VII. SAFETY FEATURES (Continued)

- **ABS Braking System:** An approved anti-lock braking system is installed for increased safety.
- **Fire Extinguisher:** Three (3) hand-held ABC all-purpose, dry chemical fire extinguishers are provided. One is installed in control room, gantry room and equipment room.

VIII. CUSTOMER SERVICE and WARRANTY

- **Customer Service Center:** OSV operates a toll free Customer Service Hotline, 1-800-839-0630, for all of your service, parts and warranty issues. The hotline is answered by a “human being,” 24 hours a day, 7 days a week, 365 days a year.
- **Warranty:** A one (1) year warranty is standard on all of our mobile units. However, OSV does offer extended service contracts if you’re interested.
- **Parts:** We carry a large inventory of replacement parts for your OSV mobile unit. We also offer on-line part ordering on our web site.
- **Field Service:** Customer service support is provided by a combination of OSV field service technicians, original equipment manufacturers and authorized third-party service centers.

IX. OPTIONS

- **Patient Gurney:** A non-ferrous metal, padded patient gurney can be added to your order.
- **Fire Detection System:** An automatic fire detection system is installed in the gantry, control and equipment rooms. Contacts for connection to a remote fire alarm enunciator panel are provided in the underbody compartment.
- **Fire Suppression System:** The entire mobile unit can be protected with a fire suppression system. The system tanks are installed in the equipment room to minimize its effect on operating space in the control room.



IX. OPTIONS (Continued)

- ❑ Bottled Gas Connections: Oxygen and suction connections can be located in the gantry room, allowing the use of facility gases and suction eliminating the need to carry bottles on the unit.
- ❑ Sound Attenuation Package: A special sound attenuation package is available for the Kohler 80 KW generator system.
- ❑ Catheter Storage Cabinet: OSV offers an optional catheter storage cabinet that is placed in the gantry room for convenience
- ❑ Intrusion Alarm: An intrusion alarm system can be installed to monitor activity in the underbody compartments and in the operator's area.
- ❑ Privacy Curtain: A privacy curtain on a ceiling mounted rail is installed in the control room to allow for patient changing. When not in use the curtain is stored in a small storage cabinet.
- ❑ Custom Exteriors: OSV offers custom painted exteriors or bus wrapped exteriors to help you with your branding campaign or to simply get your marketing message out to the public. If you wish to make your mobile unit a rolling billboard we can help you develop the paint or graphics scheme to get your message across.



X. SITE PLAN HIGHLIGHTS

<input type="checkbox"/> Tractor Specifications:	<ul style="list-style-type: none">• Tractor weight of 17,000 pounds or less• Air ride suspension• 81" swing clearance between kingpin and cab• 34,000 lb. rear bogie rating• 12,000 lb. front axle rating
<input type="checkbox"/> Site Pad Requirements:	<ul style="list-style-type: none">• Recommended size 12' x 52'• Pad thickness based on local soil conditions• Pad levelness should be not less than 1/4" per 10 feet.
<input type="checkbox"/> Mobile Unit Specifications:	<ul style="list-style-type: none">• Overall length: 52'-4"• Overall width: 8'-6"• Overall height: 13'-6"• Power requirements: 480 V, 3Ø fused at 150 amps• Personnel door width: 44" O.D. 42" I.D.• Patient Lift Entry Width: 44" O.D. 42" I.D.
<input type="checkbox"/> Water and Plumbing:	A 15-gallon water tank for the humidifier is located in the equipment room. The tank is fitted with a standard garden hose connection for convenience.
<input type="checkbox"/> Telephone and Data:	There are three phone and one data cable connections located in the underbody, near the main power cable. These are standard marine type, Hubbell connections. There are three 50ft. Hubbell cords supplied with the trailer.