

**STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION**

EQUIPMENT SPECIFICATION

39-13

4/2019

**TRAILER MOUNTED
ATTENUATOR**

GENERAL: This attenuator unit must be new and the Manufacturer's latest current production model as offered to the commercial trade with all standard accessories and equipment fully serviced and ready to operate. All variations from the model indicated must be described in the Vendor's Compliance section of this Specification.

FILL IN ALL SPACES SHOWING SPECIFIC INFORMATION, FAILURE TO COMPLY COULD RESULT IN BID REJECTION.

The intent of this unit is to:

- 1) Reduce the severity of impact for occupants of errant vehicles that collide with the rear of a shadow or barrier vehicle.**
- 2) Reduce crash severity for occupants of shadow vehicles.**
- 3) Minimize or prevent damage to the shadow or barrier vehicle.**
- 4) Reduce the time required to clear the accident scene and restore traffic flow.**

EXAMPLE MODELS: Vorteq TL-3

VENDOR'S PROPOSED TRAILER: MAKE: _____ MODEL: _____

<u>MINIMUM REQUIREMENTS</u>	<u>VENDOR'S PROPOSED</u>
<u>MAJOR COMPONENTS</u>	
1. A-Frame assembly	_____
2. Energy absorbing tubes	_____
3. Axle assembly with push rods	_____
4. Fender, wheel and tire assembly	_____
5. Mandrels	_____
6. Impact Head	_____
<u>TRAILER DIMENSIONS:</u>	
Maximum - 96"W x 36"H x 23' 6"L	_____

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<u>GENERAL ASSEMBLY:</u>	
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Two (2) energy absorbing tubes shall be attached to the A-frame assembly with a special splice connection.	
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The A-frame and the two (2) energy absorbing tubes will serve as the primary longitudinal frame elements as well as the primary energy dissipation system.	
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The axle assembly shall be bolted on the energy absorbing tube and shall include the axle, fenders and wheels and tires.	
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There shall be two (2) push rods welded to the axle	
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Two (2) over-sized mandrels shall be inserted into the energy absorbing tubes on one end and attached to the impact plate on the other end.	
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A lunette ring shall be attached to the end of the A-frame assembly for connection to the tow vehicle equipped with a 20 ton pintle hook.	
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NO MODIFICATION OF SUPPORT VEHICLE SHALL BE REQUIRED FOR OPERATION

MUST BE TESTED AND CERTIFIED TO NCHRP 350 OR MASH 2016 CRITERIA
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<u>LIGHTS AND VISIBILITY:</u>	
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Integrated light bar shall be bolted to the top of the impact head	
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Side lights and markers	
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Reflective tape on sides	
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Chevron panels on the face of the impact head utilizing highly reflective sheeting in yellow/black stripes	
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LIGHTING ASSEMBLY MUST MEET OR EXCEED THE LIGHTING REQUIREMENTS SET FORTH UNDER FMVSS No. 108
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<u>MINIMUM REQUIREMENTS</u>	<u>VENDOR'S PROPOSED</u>
<u>ARROW BOARD:</u>	
Dimensions: 48" x 96"	
Must be Solar Powered	
Shall contain 15 LED lights	
Must have battery bank	
<u>Flashing Mode:</u>	
1. Right Arrow	
2. Left Arrow	
3. Double Arrow	
4. Caution Bar	
5. Four Corner	
Self-contained power to raise and lower unit	
<u>HARDWARE:</u>	
To include all mounting hardware for installation on 33,000 Dump Truck	
<u>CORROSION PROTECTION:</u>	
All components of the energy dissipation system, including the impact head, tub bursting mandrels, bursting tube, trailer frame assembly, all exposed bolts and attachment hardware shall be hot-dip galvanized to prevent corrosion.	
<u>PAINT:</u>	
All exposed Metal shall be primed and painted with a protective Metal Primer; then painted Oklahoma Department of Transportation Yellow to comply with Federal Standard #595, Chrome Yellow Enamel #13432, DuPont #93-75306, School Bus Yellow or equal in color, shade and tone.	

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TRAINING:

Successful Bidder shall provide technical assistance for installation, maintenance and operation at the Bidders expense.

SERVICE AND PARTS:

- a) Bidder shall furnish upon request, a list of established manufacturer's authorized locations where an adequate stock of current parts and service are available.
- b) Consideration in awarding bids shall be given to parts and service availability.

SERVICE MANUALS & PARTS BOOKS:

Successful bidder shall furnish one (1) Operators Instruction Manual for each attenuator. In addition, one (1) Parts Book and one (1) Illustrated Repair Manual shall be furnished to each Division purchasing one or more attenuators.

SPECIFICATIONS:

Each bidder shall submit complete manufacturer's specification in duplicate and shall submit all other data to show that his proposal meets these specifications.

**INSPECTION AND DELIVERY OF EQUIPMENT TO COMPLY WITH VENDOR'S
INSTRUCTION SHEET.**

MUST BE DELIVERED TO ODOT CENTRAL OFFICE BY MAY 17, 2019.

**THE STATE OF OKLAHOMA RESERVES THE RIGHT TO WAIVE MINOR
TECHNICALITIES UNDER THESE SPECIFICATIONS.**

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COMPLIANCE:

Bidder shall furnish a statement in writing on the Bid, in the Vendor's Statement below, or by an attached letter stating the Equipment proposed strictly meets these Specifications. If not, he shall list each variation therefrom.

VENDOR'S STATEMENT (EQUIPMENT PROPOSED COMPLIES): YES: _____ NO: _____

DEALER: _____ **DATE:** _____

SIGNATURE: _____ **PHONE:** _____

ADDRESS: _____
