



STATE OF LOUISIANA  
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT  
TECHNICAL SPECIFICATIONS FOR  
**CRASH ATTENUATOR, TRUCK OR TRAILER MOUNTED**

**SERIES NO. 281-000****REV. 10/9/2024****EQUIPMENT SPECIFICATION 281-000C****GENERAL**

This specification sets forth the minimum requirements for either a truck-mounted crash attenuator or a trailer-mounted crash attenuator.

Equipment shall be new, a production model of current manufacture, and must meet all state and Federal safety and emission standards in effect at time of order.

**REPRESENTATIVE SPECIFICATIONS**

A Traffix Devices Scorpion II truck-mounted attenuator, MASH TL3 and a Traffix Devices Scorpion II trailer-mounted attenuator, MASH TL3 with appropriate options and standard features, was used to develop these specifications and establish equivalency evaluation criteria.

Equipment of similar style, type, character, quality, features, and purpose conforming to the following detailed requirements/specifications will be considered. For evaluation purposes, bidder's proposing an exception/equivalent option/feature to those specified herein, may be required to provide manufacturer/product information (catalogue sheets, detailed specifications, pictures, etc.). This information will be evaluated against the minimum requirements of this specification. Proposed submittals that are determined to not be equivalent to the established criteria will be rejected.

**LOUISIANA AUTHORIZED DEALER(S)**

Proposed item(s) must be from a manufacturer who has at least one authorized dealer within the State of Louisiana where parts and service can be obtained. Authorized dealer(s) must have properly trained technicians plus all other resources necessary to perform warranty and repair services in complete accordance with the manufacturer's requirements. A letter certifying the ability to meet this requirement, inclusive of the company name(s) and address(es) of the Louisiana authorized dealer(s), should be supplied with the bid submittal and may be required prior to award.

**DELIVERY & ACCEPTANCE**

Vendor shall perform a test run of each unit to verify that all features and capabilities are operating properly at time of delivery. Documentation of testing may be required prior to acceptance by the Department.

Unit(s) must be delivered completely assembled (including all components, accessories, etc.) and ready for operation without any additional preparation including, but not limited to, ensuring all fluid levels are at their full mark, fuel tank(s) is full, all necessary lubrication has been performed, etc.

Any unit delivered under this specification is subject to rejection if there is evidence of poor workmanship, by either the vendor or the original manufacturer. Noted defects and/or nonconformance findings may



be corrected by the vendor. Corrections must be completed and approved by the Equipment Engineer or his representative prior to final acceptance.

**EACH UNIT MUST BE SUPPLIED WITH THE FOLLOWING DOCUMENTATION:**

1. Notarized Bill of Sale
2. Certificate of Origin (MSO, for trailer)
3. Dealer's Service Policy
4. Owner's/Operator's Manual(s)
  - a. One Hardcopy
  - b. One Digital Copy
    - i. Acceptable Formats: PDF delivered via USB "Flash Drive", or E-mail
5. Service Manual(s)
  - a. One Hardcopy
  - b. One Digital Copy
    - i. Acceptable Formats: PDF delivered via USB "Flash Drive", or E-mail
6. Build Sheet(s) – as applicable
  - a. One Hardcopy
  - b. Build sheets should be written in plain language (not company specific codes) and include, at a minimum, all standard & optional features of the delivered unit.

**NOTE:** Invoices will not be processed for payment until the unit(s) have been inspected by the Equipment Engineer or their representative and deemed in compliance with the specifications.

**BID SUBMITTALS**

Any additions, deletions, or variations from the specifications should be noted in the "Bidder's Exceptions" page of this specification. Exceptions that are noted to be less than a minimum requirement will not be accepted.

Any additions, deletions or variations from the manufacturer's standard published specifications should be noted on the "Bidder's Exceptions" page of this specification. Unless otherwise noted, any items appearing in the manufacturer's standard published specifications furnished by the Bidder are assumed to be included in the Bidder's submittal.

Bidder should note on their submittal any installation(s) to the equipment that will be performed by the vendor instead of the manufacturer.

Failure to note any specification exceptions, manufacturer specification alterations, and/or vendor installations prior to award may result in rejection of the equipment at the time of delivery.



## EQUIPMENT SPECIFICATIONS

### NOTICE TO BIDDERS

Bidder should review the detailed "Equipment Specification" completely and respond to the compliance question at the end of each section by marking "X", in the space provided, for "Yes" or "No". Mark "Yes" to indicate that the equipment bid meets the section exactly as specified. Mark "No" if there are exceptions to any part of that section. Exceptions/deviations to any part of the specification are to be detailed on the "Bidder's Exceptions" page of this specification.

**IN ORDER TO BE CONSIDERED FOR AWARD, BIDDER SHOULD RETURN THIS SPECIFICATION, COMPLETED IN FULL, WITH THEIR BID SUBMITTAL.**

**Note: All Values listed below are minimums unless noted otherwise.**

### 1. Performance

- 1.1.** The attenuator must be tested and certified by an ISO 17025 accredited laboratory to meet or exceed all AASHTO MASH Test Level 3 (TL-3) requirements for truck and trailer mounted attenuators. In order to be considered responsive for this solicitation, testing and certification must be successfully completed prior to award. Documentation may be required.

Comply: \_\_\_ Yes \_\_\_ No

### 2. Truck Mounted Attenuator

#### 2.1. Design

- 2.1.1.** The attenuator shall have progressively collapsing modular components which can be replaced in successive stages depending on impact severity for lowest repair costs and easy parts replacement.
- 2.1.2.** The attenuator must prevent potential vehicle pocketing at the non-cushioned truck support region
- 2.1.3.** Impact cartridges shall prevent intrusion of moisture and the interior material of the cartridges must not deteriorate if exposed to water
- 2.1.4.** Positioning of the attenuator from the travel mode to deployed mode shall be accomplished hydraulically with a self-contained power unit having controls located both in the truck cab and at the rear of the truck.
- 2.1.5.** Power unit must receive electrical power through the electrical connection with the truck
- 2.1.6.** The attenuator's electrical system must be heavy duty, pre-manufactured, and preset

#### 2.2. Accessories

- 2.2.1.** Four (4) jacks with wheel(s) (support when detached)
- 2.2.2.** Support brackets for retention of the attenuator in transport mode
- 2.2.3.** Quick attachment feature to allow easy connect/disconnect from the truck without bolting
- 2.2.4.** A 48" x 96" arrow board, WANCO or TRAFCON with 25 Par46 LED Lamps and 12 preset patterns shall be provided and permanently installed on the truck-mounted attenuator
- 2.2.4.1.** Arrow board shall have a powered raise/lower feature and a weather-tight controller included
- 2.2.5.** All identification lighting, reflective tape and other standard safety features to be included

Comply: \_\_\_ Yes \_\_\_ No



## EQUIPMENT SPECIFICATIONS

### 3. Trailer Mounted Attenuator

#### 3.1. Design

- 3.1.1. The attenuator shall have progressively collapsing modular components which can be replaced in successive stages depending on the impact severity for lowest repair costs and easy parts replacement.
- 3.1.2. The attenuator must be sufficiently wide to prevent potential vehicle pocketing at the non-cushioned truck support region
- 3.1.3. Attenuator design must include an anti-rotation system
- 3.1.4. Impact cartridges shall prevent intrusion of moisture and the interior material of the cartridges must not deteriorate if exposed to water
- 3.1.5. Attenuator shall attach to a tow vehicle via a single point attachment with standard 20-ton pintle hitch
- 3.1.6. All electrical requirements must be provided by the truck through one multi-pin connector

#### 3.2. Accessories

- 3.2.1. A 48" X 96" arrow board, WANCO or TRAFCON with 25 Par46 LED lamps and 12 preset patterns shall be provided and permanently installed on the trailer-type attenuator
  - 3.2.1.1. Arrow board shall have a powered raise/lower feature and a weather-tight controller included
- 3.2.2. 2,000 lb. tongue jack
- 3.2.3. All identification lighting, reflective tape and other standard safety features to be included

Comply: \_\_\_ Yes \_\_\_ No

### 4. Operation, Testing and Demonstration

- 4.1. Unit(s) must have been test run by the vendor for proper operation of all features and capabilities of the make and model described in the successful bidder's proposal. Documentation of the test(s) may be required prior to acceptance by DOTD.
- 4.2. Upon request by a DOTD District, vendor shall provide an informal, hands-on, manufacturer-authorized maintenance and operational demonstration. Demonstrations shall be held at up to nine different district locations throughout the State.

Comply: \_\_\_ Yes \_\_\_ No



### BIDDER'S EXCEPTIONS

**Instructions:** Bidder should note all exceptions in space provided below. List the detail number from the aforementioned specification in the column to the left and the exception in the column to the right. Responses may be typed or hand-written. Handwritten responses must be legible. If additional space is needed, please print a duplicate copy of this sheet. "Bidder's Exceptions" page(s) should be returned with the bid submittal.

Examples:

1.6	Engine has 325 horsepower
1.18.3	Batteries have 2000 CCA combined.
2.2.8	Crossmembers are 4" channel on 12" centers.

**Spec./Detail  
Reference**

**Exception**

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____