

# PROUDLY TESTED IN THE U.S.A.

**MASH TESTED, PASSED, FHWA ELIGIBLE  
AND DOT APPROVED**

## No.1 ON RESULTS

This patented BLADE TMA is proudly full scale crash tested according MASH 2016 at the Texas Transportation Institute (TTI), with unbelievable test results! All the ride down values were within the preferred values (MASH preferred a Longitudinal ride down of 15.0 g with a maximum of 20.49 G).

The BLADE TMA is also full scale crash tested according the UK optional 70mph / 110 kph This TMA is the Highest Safety level you can get.



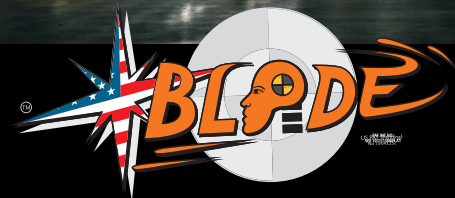
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**THE No.1 MASH**  
TRUCK MOUNTED ATTENUATOR

**WWW.BLADE-TMA.COM**



## THIS IS BLADE

The No.1 MASH TMA; Finally a new leader is born. BLADE, the long awaited new Truck Mounted Attenuator. Full scale crash tested according the Manual for Assessing Safety Hardware (MASH) that supersedes the 20 year old NCHRP-350.

## WHY MASH?

The safety changes are mainly necessitated by alterations made to vehicles over the past decade. Cars have greatly increased in size, so different safety regulations are required to keep the occupants safe. The average bumper height on light trucks has risen considerably since 1993, so previous highway safety designs are no longer adequate.

## WHAT'S THE DIFFERENCE FOR TMA'S

The new MASH 2016 standard sets stricter criteria for Truck Mounted Attenuator's, bigger, heavier and newer test Vehicles has to be used during testing, also the shadow vehicle criteria are stricter and much heavier, upper and lower truck weight has to be tested, ballast has to be fixed and also the arrow board together with the TMA construction must have been tested. The optional offset- and offset angle tests are now required in MASH!

## GET YOUR GOODIES

Buy a BLADE TMA and get **free goodies!** Upload your BLADE TMA TRUCK picture to our Wall of Fame Gallery and choose your goodies!

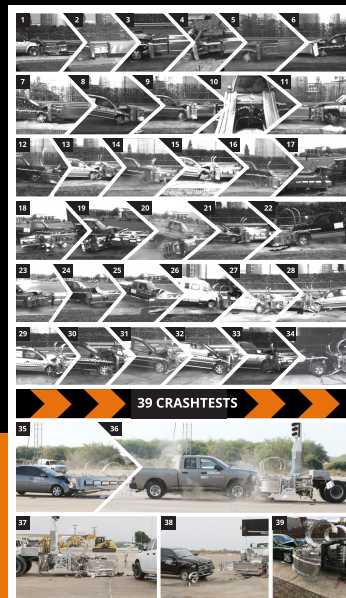


## WHY BLADE AND HOW IT WORKS

Let's explain how this patented invention works. The TMA strength comes out of the composite aluminum welded profiles, this machine has 12 internal blades. During an impact the first 4 blades cut through the aluminum composite H-beams and after unlocking 8 blades cut through the welded tubes. The remaining weak aluminum parts will bend away in safe directions. The patent is based on cutting aluminum H beams and tubes using BLADES.



## THIS TMA HAS THE HIGHEST SAFETY LEVEL



## THIS IS WHY!

- No.1 MASH TMA
- MODULAR & REPAIRABLE
- No.1 ON INCREDIBLE TEST RESULTS
- HIGHEST SAFETY LEVEL TMA
- MASH TESTED, PASSED, FHWA ELIGIBLE AND DOT APPROVED
- TESTED TD49/07 AT 70MPH /110KPH

**INCLUDING**  
The cabin control unit



# BLADE-TMA TL-3

(62.5mph/ 100kph) / TD49/07 (70mph/110kph) Truck Mounted Attenuator (TMA)

## THIS IS WHY YOU WANT THE No.1!

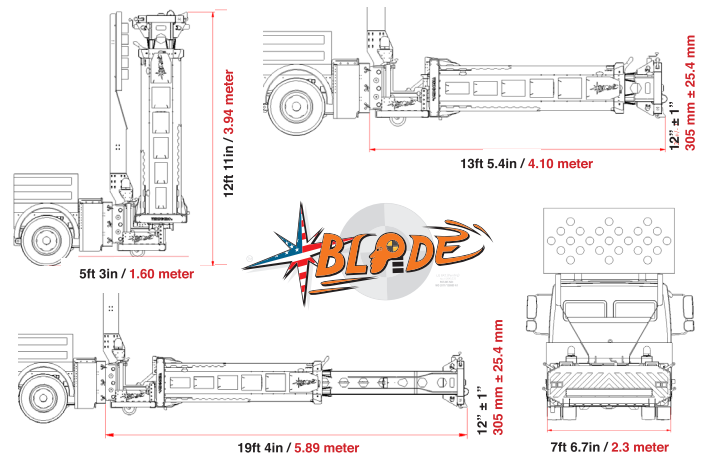
### Benifits of the BLADE-TMA:

- Only available MASH TMA within the preferred values of 15G acc. MASH!
- The No.1 MASH TMA with the highest safety level.
- Optional tested and passed TD49/07 at 70 mph/110kph
- Protect your workers with the safest, most innovative and highest safety level, Truck Mounted Attenuator available.
- Safely protects and redirects the impacting vehicle away from the "coffin corner" area at the rear of the truck.
- FHWA eligible and DOT approved in most states within the US and Canada
- Best service available by the Verdegro service team.
- Fully assembled BLADE-TMA attenuators shipped and easy to install using the truck bracket, no additional assembly (labor) costs!
- Optional truck bracket for quick and easy installation without any welding or fabrication costs (crash tested truck bracket, required by MASH)
- Innovating new and patented design to absorb energy in retracted position
- Fast deployment within 20 seconds from transport position to full operation mode. Can be deployed while driving at a speed of 50 mph / 80 kph
- Modular design, which results in lower repair costs and easy parts replacement
- No need for an expensive hydraulic raised arrow board frame
- The optional arrow board is mounted on top of the attenuator
- Swap your attenuator + arrow board over to another truck in 10 minutes
- Hydraulic powerpack located in the attenuator.
- Vertical position. Not losing any space on the truck bed as with a fold over attenuator.
- The open design and vertical transport position creates less wind resistance and vibration while driving.
- No hydraulic hoses or extra pivot points in the impact absorbing area.
- No need to install a bracket on your truck body or flatbed! Keep your loading space for what it is meant for!

### Standard equipped with:

- Galvanized steel parts
- Aluminum parts powder coated for maximum durability
- Level system
- Quick connect system
- Wired cabin controller with function lights
- Complete electric plugs for easy installation.
- Available with optional Dr. Airbrake automatic braking system, instantly locks brakes of host vehicle upon impact.
- Tested on a host vehicle from 16,010 lbs. (7262KG) with an upper weigh limit of 22,160 lbs. (10,033KG). Tested how it is used in real life! Additional tested up to 40,000lbs/ 18000 kg
- Useable on all boxtrucks

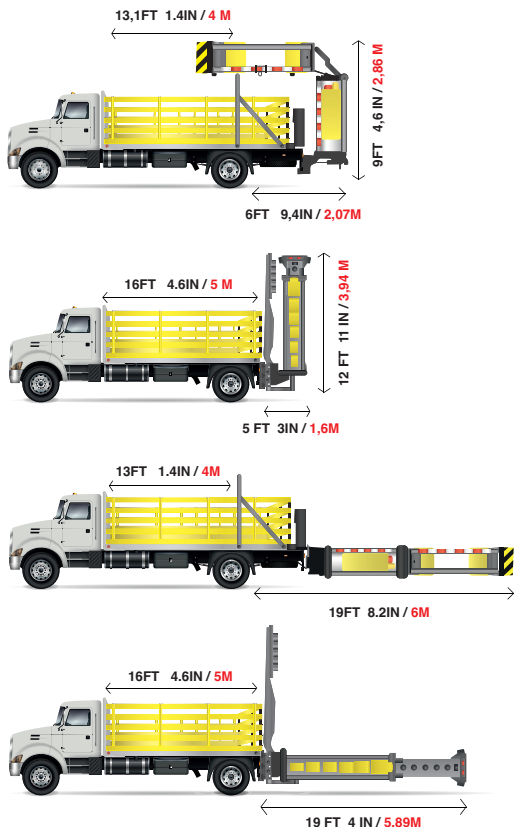
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Comparison MASH TMA results		MASH Test 3-50*	MASH Test 3-51*	MASH Test 3-52*	MASH Test 3-53*
Max. g-force by MASH	Preferred: 15.0G Max: 20.49G	15.0G	15.0G	15.0G	15.0G
BLADE-TMA G-force (ride down)		12.0G	15.0G	13.8G	11.5G
Other MASH available TMA G-force (ride down)		19.2G	20.1G	18.6G	12.5G
Roll-ahead BLADE-TMA					4420mm
Roll-ahead other MASH TMA (+15% more!)					5121mm
BLADE-TMA G-force reduction compared to another brand!		-37,5%	-24,9%	-25,8%	-8%

\*FHWA website

### Attenuator Truck Benifits



### Accessories



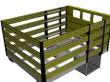
(standard)  
Quick connect  
• Level system



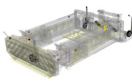
Truck bracket



Arrow board  
bracket



Truck body



Jockey wheels



Foil

### BLADE-TMA BENEFITS

- MORE USEABLE FLOORSPACE
- SHORTER OVERALL LENGHT
- USEABLE ON ALL BOXTRUCKS

All dimensions are indicative, there are no rights to this data

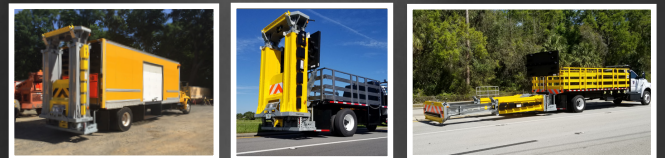


## THE ONLY AVAILABLE TMA WITHIN THE PREFERRED VALUES OF MASH

In fact, the MASH testing guidelines specify that 'longitudinal & lateral occupant ride down acceleration (ORA) should fall below the preferred value of 15.0 g. or at least below the maximum allowed value of 20.49 g.' MASH 16 requires a max. RDA of 20.49 G but prefers a 25% lower value for longitudinal occupant ride down accelerations namely 15.0G! The BLADE-TMA had all test results within the preferred value of 15.0g making it the safest TMA in the market.

## BLADE-TMA WALL OF FAME

THE NO.1 MASH TMA | IT'S ALL ABOUT SAVING LIVES.



**MASH**  
BLADE TMA: MASH TL3 ELIGIBLE

**VERDEGRO**  
Manual for assessing  
safety hardware  
Tested in the USA  
PAT. INT. NO. WO 2017/138807 A1

TESTED, PASSED AND ELIGIBLE