



Defense Safety Systems



RESTRAINTS | STEERING WHEELS | ADVANCED SAFETY | CARGO MANAGEMENT

ADVANCING SURVIVABILITY®

It's a life-long mission.

For more than 60 Years as a global leader in safety, IMMI designs, engineers, manufactures, tests, and markets the safety solutions of tomorrow while delivering innovative products that protect millions of lives around the world today.

## Over 62+ Years of Safety

*Founded in 1961*



## Company Overview

**Over 46 Countries Served | 7 Global Locations** : *US [3], Mexico, UK, Italy, China*

**Strong North America Footprint**

**Non-Automotive Vehicle Product Focus:** *Restraints, Airbags, Child Safety, Steering Wheels, Cargo Management, Testing*

**2,200 Team Members | 100+ Engineering Staff**

**CAPE® Testing**

**Legal Support**



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# RESTRAINTS

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0 LIFT



## 3-POINT LAP-SHOULDER BELT

Vehicle Application: M915



### Komfort Latch

Encourages seat belt usage by making them more comfortable to wear

### C2 Buckle

Designed for the gloved operator in rugged environments



## Testing & Compliance

FMVSS 302

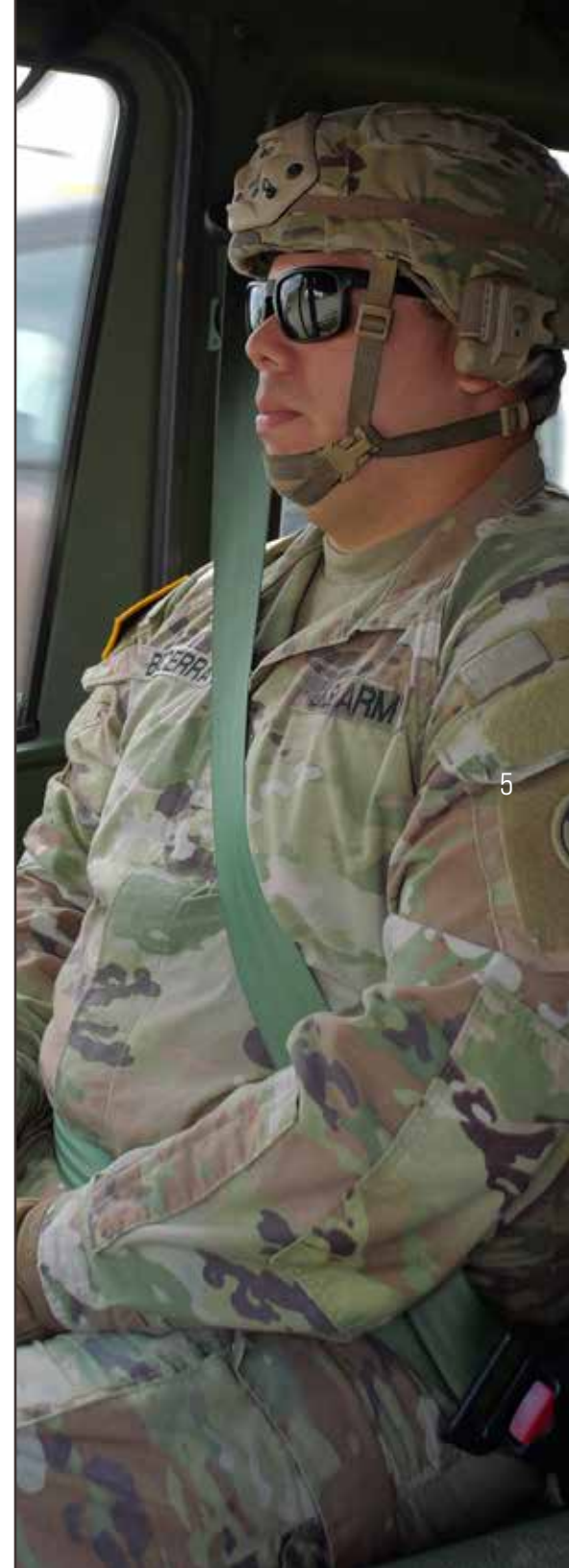
ECE R12

FIA 8854

Def Stan 25-9

### Emergency Locking Retractor (ELR)

- Allows for freedom of movement when needed
- Durable cover protects the retracting mechanism from the elements
- Webbing stowed when not in use and automatically adjusts to fit the wearer





## 4-POINT STATIC HARNESS - LATCH & LINK

Vehicle Application: FMTV



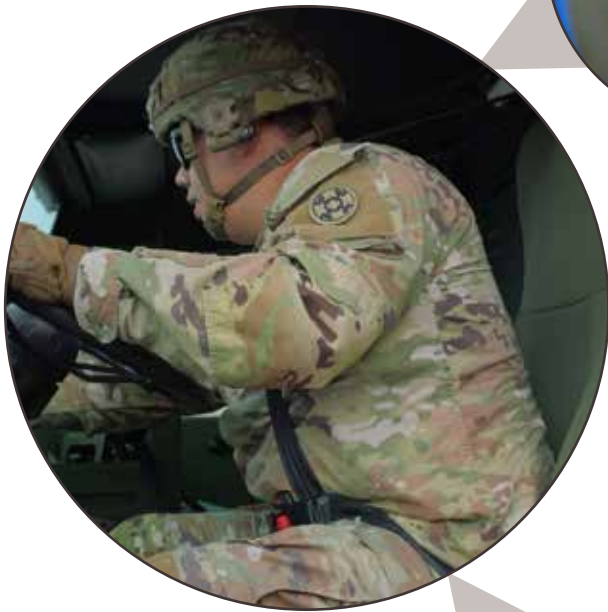
Shoulder and lap-belt  
adjusters

## 4-POINT ALL RETRACTABLE

Vehicle Application: HEMTT



Four retractors - two shoulder/two lap-belt - allow freedom of movement while keeping the occupant safely buckled. Easy ingress and egress.



### Automatic Locking Retractor (ALR)

- Designed so the webbing stays clean and is easily accessible for the occupant
- Tested to provide optimal comfort and durability



### Testing & Compliance

FMVSS 209

FMVSS 302

ECE R12

FIA 8854

Def Stan 25-9

### Emergency Locking Retractor (ELR)

- Designed for heavy duty environments
- Configurable for different sensitivities, retraction force and web length



### C2 Buckle

Designed for the gloved operator in rugged environments





## 5-POINT ROTARY HARNESS

Vehicle Application: JLTV



### 5-Point Rotary Buckle

Rapid egress single-action bi-directional turn lever



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Adjustable  
Lap-Belt Straps

### Lap-Belt Positioner

Rigid positioner keeps harness in place and out of the door when not in use

### Emergency Locking Retractor (ELR)

- Designed for heavy duty environments
- Configurable for different sensitivities, retraction force and web length





## CLICK6® MULTI-POINT HARNESSES

Vehicle Application: MRZR

### 6-Point Harness

- Six points of protection and one point of connection; Also available in four point configuration
- No uncomfortable crotch strap
- Click6 buckle for easy one-click egress; v-strap configuration helps keep webbing on shoulders

### Severe Duty Retractor

Sealed retractor designed to keep the elements out

Side by side mud test comparison



IMMI



Competitor

Now featured on HMMWV 3-pt seat belts

### Leg Adjusters

Allows for customized secure restraint



## STEERING WHEELS







**IMMI VIP  
DEFENSE**

## IMMI-VIP STEERING WHEELS

- Designing, manufacturing and marketing steering wheels since 1969
- Proudly made in the USA
- IATF 16949 certified
- Full engineering services available to design, test, and produce custom wheels and controls

### VALOR SERIES



- Vehicle application: JLTV
- Diameter: 16" | 406 mm
- Depth w/o hub: 1.82" | 46 mm
- Grip options:
  - Polyurethane foam*
  - Leather wrap*
- Emblem options:
  - Center cap or horn button*
  - VIP logo, custom, horn trumpet, blank*
- Emblem size: 35 mm
- Application options: Military-spec quick release hub

### VISION SERIES



Programmable haptic feedback  
Programmable LED display  
Flat bottom design for easy ingress/egress

- Diameter: 16.7 | 424 mm
- Depth w/o hub: 3.36" | 92.2 mm
- Grip options:
  - Polyurethane molded foam*
  - Leather wrap*
- Emblem options:
  - Integrated horn pad*
  - VIP logo, custom, horn trumpet, blank*
- Emblem size: 46 mm
- Application options:
  - Available with V4-style control pods*
  - Available with optional IMMI 4Front airbag mounting system*
  - Standard or custom control pods*

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### VANISH SERIES



- Vehicle application: FMTV & HEMTT
- Diameter: 18" | 457 mm or 20" | 508 mm
- Depth w/o hub: 2.56" | 66 mm
- Grip options:
  - Flexible vinyl*
  - Polyurethane foam (18" only)*
  - Leather wrap*
  - Woodgrain & leather (18" only)*
  - Custom graphics & leather*
- Emblem options:
  - Center cap or horn button*
  - VIP logo, custom, horn trumpet, blank*
- Emblem size: 35 mm



**ADVANCED SAFETY**



## M.A.R.S. - MBRACE™ and ROLLTEK® SYSTEMS

As seen on  
NBC News  
Today



*Patent Pending*

### Integrated Dual Air Bags

Designed to deploy when the sensor detects an unrecoverable roll

**4-Point Harness with 4 Retractors** Allows for freedom of movement while safely secured



### NEW Severe Duty Buckle

- Purpose-built side release multi-point buckle
- Easy ingress and egress with one click
- Rugged design for harsh environments



### Seat Pretensioner System\*

Tightens the belt to keep occupant securely in their seat; suspension seat is pulled down to its lowest level to increase survivable space



### Roll Sensor\*

Triggers multiple safety devices

\* Components may vary from those shown

## ROLLTEK® SIDE ROLL AIRBAG SYSTEM

Available on commercial vehicles through these quality manufacturers:



According to the FMCSA more than half of occupant fatalities in large trucks are due to a rollover. That's why IMMI invented RollTek.

RollTek combines side roll airbag protection with the latest advances in seat belt technology. **Custom engineered** for each truck model, RollTek is designed to work in the blink of an eye deploying within a quarter of a second to significantly reduce the potential for serious injury or death.



Roll Sensor



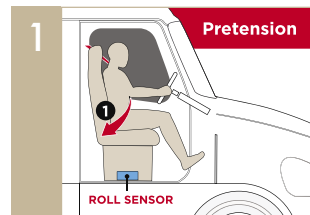
Buckle Pretensioner



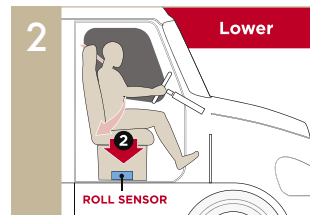
Airbag

### How RollTek works

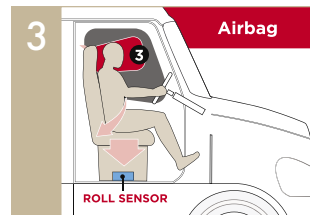
A roll sensor monitors the truck's position, and when a rollover is detected up to three RollTek components are deployed per seating position:



*Seat pretensioner keep the driver or front seat passenger secure in their seats.*



*Suspension seat is pulled down to its lowest level to increase survivable space in the cab.*



*Side airbag deploys to cushion the head and neck.*

## 4FRONT® AIRBAG SYSTEM

4Front was designed to reduce the risk of serious injury or death in one of the most common vehicular accidents - a frontal collision. It protects the driver's head and neck, while an optional knee bolster airbag can protect the passenger's knees.



### 4Front

Large surface area when deployed to protect head and neck



IMMI VIP Steering Wheel with Integrated Airbag



Sensor





## CARGO MANAGEMENT





## CARGOBUCKLE® RETRACTABLE TIE-DOWN SYSTEM

The CargoBuckle professional grade retractable ratchet tie-down system takes the hassle out of securing gear. Whether you need to tie down packs or secure a UTV or ATV for transport, CargoBuckle's longer heavier web enables you to tie down more equipment in more applications, quickly and securely.



**CARGOBUCKLE  
QUALITY**

- *Coated s-hook*
- *Protective plastic cover*
- *Self-retracting web*
- *Seat belt quality web*
- *Stainless steel internal spring*
- *Zinc coated plated steel anti-corrosive frame*
- *Permanent one-bolt installation*
- *Easy push-lever release*



1" and 2" versions

Adapters available





## CUSTOM TIE-DOWN SYSTEMS

When you need it secure,  
IMMI has a solution.

Cargo Netting



Ammunition Box Tie-Down



Equipment Tie-Down



Fire Suppression Equipment Tie-Down



TESTING

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CAPE  
OVERVIEW

## CAPE® - Center for Advanced Product Evaluation

CAPE understands the need for confidentiality. Our parent company, IMMI, invents and manufactures custom restraints for the men and women who serve our country. We know discretion is necessary to keep them safe, that's why we strictly adhere to any and all military requirements for confidentiality.

### CAPE test capabilities include:

*Frontal impact - barrier wall and movable objects*  
*Side impact - 90° degree and oblique*  
*Rear impact*  
*Rollover*  
*Dynamic sled*  
*Quasi-static pull testing*

### Post test assessments:

*Electrical architecture*  
*Insulation resistance*  
*Battery compartment intrusion*

### Test standards (Applicable to defense industry):\*

#### **Dynamic Testing**

*FMVSS 201U, 201U, 202, 202a, 203, 204, 206, 208, 212, 213, 214, 218, 219, 301*  
*SAE J2249, J2418, J2419, J2420, J2422, J2425*  
*ECE R16, R44, R94*  
*ISO 10542*  
*APTA-SS-C & S 016-99*  
*Custom Tests*

#### **Quasi-Static Testing**

*FMVSS 207, 210, 220, 222, 225*  
*FMCSR 393.76*  
*ECE R14, R29*  
*SAE J386, J1948, J2292,*  
*Custom Tests*

#### **Vibration/Shock**

*Mil-Spec 810H*

#### **Drop Tower**

*Custom Tests*

#### **Rollover**

*SAE J2426*

\* Visit [capetesting.com](http://capetesting.com) for a full list of capabilities or to schedule a test



**QUALITY**





## **Deliver Excellence.**

It's more than a promise. It's a Core Value.

We deliver the kind of quality that exceeds our customer's expectations through innovation, performance, and durability. We test every part and every product extensively. End users depend on our products to work exactly as they were designed. And we wouldn't have it any other way.

## **Quality:**

***Incoming Inspection:***  
*ISO/TS 16949: 2009 Certified*  
*ISO 14001*



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