

**CASTER CONCEPTS** 



# **CASTERSHOX**<sup>®</sup>

**PATENTED SHOX® ABSORPTION SYSTEM** WITH UNPARALLELED NOISE REDUCTION

% NOISE **REDUCTION**<sup>1</sup>

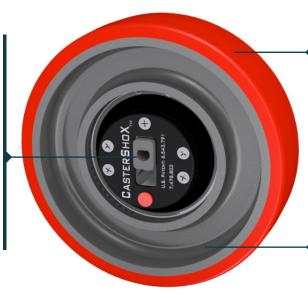
Achieves up to

REDUCES SHOCK LOADS up to %

### REDUCE UP TO 15 DECIBELS (DB) OF NOISE

### Patented ShoX<sup>®</sup> **Absorption Unit**

- Fully enclosed shock absorber integrated into the caster core
- Custom formulated elastomer spring achieves optimal damping
- Dissipates shock at the source, reducing impact on cart and contents



### **Reliable & Rugged**

- Aluminum SHOX housing
- 1,500 lbs maximum capacity
- Maintenance free
- Precision sealed ball bearing

### Safety Matters

"The second most claimed workplace disability is hearing loss linked to manufacturing related noise exposure. The most effective means of reducing occupational noise is to attenuate it at the source." (OSHA)

1. Based on third party testing in a clients production facility, compared against conventional casters

2. Based on in-house testing, compared against conventional casters

#### **CASTERSHOX**<sup>®</sup> SPRING LOADED VS.

- Designed to achieve ultimate noise and shock reduction
- •Patented design with customer formulated elastomer spring and damping quickly stops vibration
- Absorbs shock at the axle level reducing impact on cart and contents
- Designed to reduce impact of shock
- Metal coil spring expands and contracts continuously until shock is fully dissipated
- •Springs are external to wheels, spreading vibration on to the cart and contents

### **SPECIFICATIONS**

Capacity:	Maximum 1,500 lbs. per caster
Wheel Sizes:	6x2 8x2
Wheel Core:	Aluminum   Cast Iron
Durometer:	70A 85A 95A 70D Custom polyurethane available
Bearing Type:	Precision machine sealed ball Bearing maintenance free







## **FAQ's**

### **PATENTED SHOX® ABSORPTION SYSTEM**

WITH UNPARALLELED NOISE REDUCTION

### What is CASTERSHOX<sup>®</sup>?

CasterShoX<sup>®</sup> is Caster Concepts' patented shock-absorbing technology, integrated into a heavy-duty caster. The ShoX<sup>®</sup> absorption system that is integrated into the center of a CasterShoX<sup>®</sup> wheel is considered a revolutionary technology for casters.

### How is CASTERSHOX<sup>®</sup> different than traditional casters?

CasterShoX<sup>®</sup> were designed specifically to help reduce noise in manufacturing facilities. This is achieved via the integration of a patented ShoX<sup>®</sup> absorbing technology at the core of the industrial caster. The ShoX<sup>®</sup> serves to provide a smoother ride while also adding damping – defined as an influence on a repetitive motion that reduces, restricts or prevents the motion. This greatly reduces noise caused by carts. Traditional spring-loaded industrial casters use a coiled metal spring implemented above the wheel. When the wheel is shocked, it vibrates repeatedly, causing the carts and its contents to shake. CasterShoX<sup>®</sup> fully integrates the ShoX technology into the wheel, unlike any other caster with shock absorption. The placement of the shock at the wheel level contains most of the impact of the shock below the cart, while the damping qualities greatly reduce the noise and vibration caused by the shock.

### What's the benefit of CASTERSHOX®?

Because of its innovative design, CasterShoX is able to achieve up to 90 percent noise reduction and reduce the impact of a shock by up to 80 percent. Also, the CasterShoX<sup>®</sup> fully integrated design makes it user replaceable and easier to service.

### Why is reducing noise so important?

Noise in the workplace is the second-leading cause of worker illness and injury, causing 12 percent of such maladies. Hearing loss leads the list of the most commonly known health effects caused by excessive exposure to noise. Whether temporary or permanent, hearing loss can often lead to downtime and lost productivity for both the company and employee. Exposure to constant or high levels of noise can cause countless adverse health effects beyond hearing loss as well. These include stress-related illness, high blood pressure, speech interference and more.

Noise also causes other detriments in the workplace including, increased risk of accidents, interference with communication and performance, and greater probability of error. Furthermore, noisy work environments lead to a sense of isolation, annoyance, difficulty concentrating, lowered morale, reduced efficiency, and absenteeism.

### What is the load capacity for CASTERSHOX<sup>®</sup>?

The ShoX® absorption system maximum load capacity is 1,200 lbs per caster.

