

▶ **Field Maintenance**



On a 3 piece lock ring type wheel, it is impossible to change a tire in the field. A tyre mounting/dismounting machine or vertical press is needed.

▶ **Solution :** The 2 piece bolted together wheels manufactured by Hutchinson can be disassembled and reassembled in the field with standard hand tools.

▶ **Hutchinson Integrated Systems**

Hutchinson, which is known for its life saving mobility products, developed a two-piece aluminum wheel which can be integrated with the Hutchinson VFI™ and CMRF runflat systems, as well as the Hutchinson BEADLOCK. A tire bead locking device that allows for continued mobility by preventing the tire from unseating while traveling at low pressure and in soft terrain. The Hutchinson Tire SAVER SHIELD composed of rubber or plastic, protects the tire sidewalls from cuts in rocky terrain. The Tire SAVER SHIELD can also be integrated with the Hutchinson two-piece wheel by way of tactical or retrofit mounting.

▶ **BEADLOCK**

Locking device for the tire, to allow increased mobility on soft terrains with low air pressure.



▶ **RUNFLATS (VFI™/ CMRF)**

One piece runflat device in reinforced rubber that protects the rim from damage when riding on little to no air pressure.



▶ **TIRE SAVER SHIELD™**

Provides "Military Tough" protection to the highly stressed sidewalls of industrial and construction tires.



# WHEELS

AN  
SERVICE



We make it *possible*

**HUTCHINSON INDUSTRIES INC - USA**  
Phone: +1 609 394 1010  
sales@hutchinsoninc.com

**HUTCHINSON GmbH - Germany**  
Phone: +49 (0) 621 39 71 399 - Fax: +49 (0) 621 39 71 406  
info@hutchinson.de

**HUTCHINSON SNC - France**  
Phone: +33 (0)1 39 37 42 97  
sales@hutchinson.fr

**HUTCHINSON UK**  
Phone: +44 (0)1952 677749 - Fax: +44 (0)1952 608498

**HUTCHINSON SRL - Italy**  
Phone: + 39 02 93474192 - Fax: +39 02 93474178



**Hutchinson, the world leader in mobility systems, provides aluminum wheel solutions to the military, security and commercial markets.**

**The Hutchinson wheel has been field tested and continues to perform on many commercial and security vehicle applications.**

# Hutchinson Wheels

Vehicle builders, have special needs when it comes to adapting their platform to their customers' demands. HUTCHINSON proposes a turnkey solution, from concept to production. HUTCHINSON is flexible and can adjust to accommodate special demand regardless of the potential production quantities. As a partner Hutchinson will:

- Develop a concept
- Optimize the design
- Produce prototypes
- Validate and certify the product to any standard requested
- Deliver production

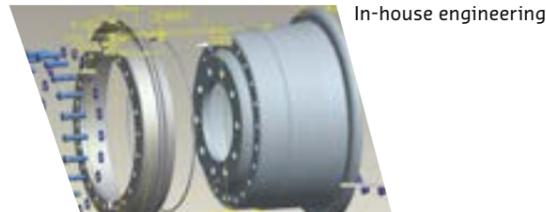


Prototype

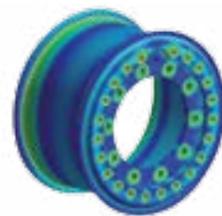
## ► Custom design

Typically, wheels are selected from a catalogue or from existing platforms. Many times this results in additional changes on the vehicle. This constrains the ability to optimize the weight, wheel offset, tire match, load carrying capacity or brake design. The Hutchinson wheel permits the wheel to be designed for the vehicle rather than the vehicle being designed for the wheel.

- **Solution :** Each new Hutchinson wheel is designed by our in-house engineering department. We use state of the art solid modelling CAD and FEA software technology. We design, prototype, test, validate and document our products to meet the stringent and unique customer requirements.



In-house engineering



In-house machining

## ► Optimized weight

Any reduction of wheel weight allows for additional options, increased payload, improved fuel mileage, and optimized suspension/dynamic behaviour.

- **Solution :** The Hutchinson lightweight aluminum wheels can save up to 60% of the weight of a comparable steel wheel.



## ► Impact resistance/toughness

Construction vehicles are often exposed to considerable impacts to extreme loading during both off-road and highway use.

- **Solution :** Hutchinson aluminum wheels have been proven to perform in the toughest environments, including off-road durability tests and military applications. The 2 piece fully machined structure offers improved longevity over the 3 piece lock-ring designs.



## ► Integrated CTIS (Central Tire Inflation System)

The traditional CTI system plumbing on the wheel is a source of leaks and is also time consuming and difficult to assemble due to its complexity.

- **Solution :** Hutchinson has a patented design of internalizing the air chambers of the CTIS inside the wheel. This drastically reduces the number of components from 30 to just 3 components. This simplified solution offers many advantages:

- Fewer leak points, improved reliability and tire life
- Faster installation
- Reduced Weight

