

# Built to perform everytime



3 YEAR WARRANTY

## Fallshaw castors outlast the competition.

Choosing the cheapest wheels or castors might seem like a cost-effective decision at first, but not all castors are created equal. Opting for low-cost alternatives can end up costing you significantly more in repairs, replacements, and downtime over time.

### The problem with cheap castors

Many businesses opt for cheaper castors to save money upfront. However, in demanding industries such as healthcare, logistics, and warehousing, castors endure constant wear and tear. Low-quality, imported castors often fail prematurely, leading to increased maintenance costs, frequent replacements and operational downtime.

For example, outfitting a fleet of trolleys with low-grade castors might reduce your initial expenditure. But over time, the need for repeated replacements drives up costs, interrupting workflows and productivity.

### Why quality matters

Cheap castors are often made from inferior materials, with poor bonding and designs that aren't suitable for heavy, continuous use across varied surfaces. They also frequently fail to meet ISO testing standards, making them unsuitable for high-demand or abusive environments.

Another hidden issue lies in misleading ratings. Some companies advertise *static load ratings* (the weight a castor can hold when stationary) rather than *dynamic load ratings* (the weight a castor can support while moving). Static load ratings are always higher, making the product appear more capable than it truly is. Fallshaw, by contrast, provides accurate dynamic load ratings to ensure transparency and reliability.

### The Fallshaw advantage

Fallshaw castors are engineered in Australia to meet the rigorous needs of high-demand environments, providing reliability, performance, and durability.

To demonstrate the difference in quality, Fallshaw conducted a comprehensive *dynamic test* to directly compare its O Series castor 'HUR150/HZP' with imported counterparts from EHI and QHDC under identical, real-world conditions.



## Dynamic test

Designed to simulate intense conditions that castors face daily:

- **Speed:** 1.1 meters/second (equivalent to 4 km/h).
- **Load:** 450 kg.
- **Movement pattern:** Alternating directions every 3 minutes for even wear.
- **Obstacles:** Traveling a series of 4mm impact bumps 500 times, representing rough and uneven surfaces.
- **Duration:** A maximum of 15,000 wheel revolutions with no bumps.

This assessed each castor's operational load capacity and ability to withstand continuous use without structural or functional impairment.



## Fallshaw's unique manufacturing

Fallshaw castors use virgin urethane for the tyre and nylon 6 for the centre, with a proprietary chemical bonding process that fuses the materials under pressure and high temperatures. This chemical lock ensures a permanent, robust bond that resists separation under impact and stress.

Unlike imported brands, which often rely on a weaker mechanical lock with a polypropylene centre (which is about half the strength of nylon), Fallshaw's method provides a significantly stronger and longer-lasting bond.



*Pictured (left to right): Fallshaw, QHDC and EHI castors.*

## The results

The results clearly showed the superiority of Fallshaw castors:



### Fallshaw castor

Passed the test without any sign of tyre separation or centre distortion. The advanced chemical bonding kept the tyre firmly intact, even after thousands of revolutions and impact cycles.

Fallshaw's castor maintained its original shape and load-bearing integrity throughout the test.



### QHDC castor

After 500 bumps, signs of tyre separation and wear appeared. The castor flattened due to the mechanical bonding limitations, with a visible decrease in tyre thickness.

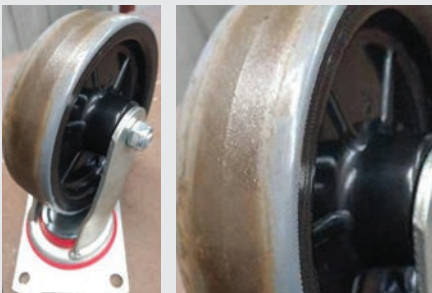
While it managed to complete the test, the performance degradation would result in a shortened operational lifespan.



### EHI castor

Completely failed early in the test, with tyre detachment occurring after just 208 cycles into the 500 bump test. The bonding between the tyre and the centre broke, and the bearing hub displayed significant structural damage.

The castor was effectively unusable well before the test concluded.



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GROUP

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