

Over the lifetime of the machine, OEM/reference brake discs will provide savings of 15\% compared to the alternative part.

Lifetime Costs Report.
OEM versus Alternative Brake Discs.

The overall study:
In 2017, Kalmar commissioned three studies with Tampere University of Technology in Finland to evaluate the claim that even though OEM parts are generally priced higher than alternative parts they are more economical over the lifetime of the equipment The first test looked at wet system disc brakes.

The test:
The alternative disc is approximately $30 \%$ cheaper than the OEM part. However, the alternative disc has both a narrower outer diameter and wider grooves, which would indicate that it would not last as long as the reference disc.

Due to these differences, the service life of the alternative disc has been reduced to 2.1 years versus the 3 years of the reference/OEM disc. On the assumption that 8 discs are required per machine and the lifetime of the machine is 9 years, we can calculate that:

- The reference disc would need to be changed 3 times
- The alternative disc would need to be changed 5 times

This gives a cumulative cost over 9 years of:

When you take into account, service and maintenance costs the price difference becomes more apparent:

- Reference discs: Servicing and annual parts cost: $3,978 €+(490 € \times 3)=5,448 €$
- Alternative discs: Servicing and annual parts cost: $3,951 €+(490 € \times 5)=6,401 €$

This resulting in an annualised cost of:

- Reference discs 605.33€
- Alternative discs 711.22€

The conclusion.
Over the lifetime of the machine, OEM/reference brake discs will provide savings of $15 \%$ compared to the alternative part.

Even though alternative disc brakes may be cheaper to buy, they are a false economy and costs you more in the long run. We would always recommend genuine parts be fitted to any Kalmar Equipment as they will cost less in the long run.

- Reference disc with 3 changes: $3,978 €$
- Alternative disc with 5 changes: $3,951 €$

