



# Ramp flap innovation helps keep ports quiet

An innovative solution, MacGregor Soft Flaps, not only keeps noise down in ports, but eliminates fatigue issues associated with steel ramp ends; operators and ports are already seeing the benefits

**T**he familiar 'ka-dunk' noise as a vehicle drives over the end of a metal ramp is a fixture in the lives of many living and working around ports. With hundreds of vehicles being loaded and offloaded at all hours of the day and night, the problem becomes immediately apparent. Add to this the fact that sound is amplified over water, and noise problems in ports become even bigger.

This was exactly the issue for leading European ferry operator DFDS, but it is certainly not alone. "DFDS had problems with noise levels when loading/offloading its RoRo vessels in the port of Gothenburg," explains **Magnus Göransson**, Branch Manager Denmark

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and Sweden, Global Lifecycle Support, MacGregor. "Complaints were not predominantly received from people living very close to the port itself, but rather from those living in the idyllic Långedrag area on the opposite side of the bay; really showing how sound travels.

"By working together with different specialist teams within MacGregor, we came up with the solution," he continues. "We now have a product, Soft Flaps, which replaces the traditionally used steel flaps at the end of a ramp. Soft Flaps solve the problem of noise pollution caused by vehicles driving over a ramp's steel flaps, eliminate the issue of fatigue in these flaps and remove any sharp edges that might damage vehicle tyres."

## Silence: a great outcome

The first complete installation was successfully carried out towards the end of 2017 on the Kaj 700 linkspan in the port of Gothenburg. "The outcome was great, no more noise," notes Mr Göransson. "DFDS will equip more vessels with Soft Flaps, and other leading ferry operators, as well as various ports,

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Made from an industrial polymer, the flaps are resistant to chemicals, oils, ultraviolet rays, saltwater and mechanical abuse. The temperature limits of the flaps match MacGregor RoRo equipment; they harden below -20°C, and can easily withstand -40°C without becoming brittle. At the other end of the scale, they can withstand temperatures of above 80°C.

"You can cut it, drill it and saw it and produce a very high-quality end product," he says. "Our Soft Flaps prototypes have now been in service for almost two years and despite daily wear and exposure to extremely hard and heavy loads, they are as good as new."

MacGregor Soft Flaps are available for newbuildings as well as being ideal for retrofits, and can be easily and cost-effectively replaced. ■