

Case Suomen Tivoli
A white-knuckle service ride





The Mega Flip is one of the fair's most exciting and popular rides.



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Customer benefits	
Fixed price of repair	A fixed price for the Drive Exchange service was confirmed right away and it was much lower than the customer had anticipated.
Quick and reliable solution	A reliable solution and its quick delivery ensured that the customers could enjoy the funfair's most popular ride.
One-year warranty	All exchange units are remanufactured and load-tested drives and carry a one-year warranty.

When the drive in a funfair's star attraction failed at the last moment, only rapid service from ABB could save the day.

In August 2014, Suomen Tivoli, Finland's largest traveling funfair, was being set up in the lakeside town of Kuopio. Following normal procedures, the fair's crew began a day of testing prior to the opening, which was scheduled for the following afternoon. To their consternation, one of the most popular rides, the Mega Flip, failed to activate.

Timo Virta, the fair's electrician, was on the scene, and recognized the seriousness of the malfunction immediately: "Leaving the Mega Flip out of the carnival in Kuopio would have been unthinkable," he says. "It is our newest ride and one of our main attractions. It's very impressive."

An unexpected turn

One of the fair's more extreme rides, the Mega Flip is so named due to the 360-degree rotation it makes about its axis. Seating 16 adventurous visitors, and towering 21 meters above ground level, even watching others take the ride is an experience to remember. Naturally, the device is in heavy use whenever the fair is open.

Virta immediately began to trace the fault to its root cause: "First of all, I made sure that the problem was not with the motor itself. I climbed the mast and measured that there was no short-circuit in the motor. Then the person in charge of the ride and its construction noticed that one of the larger drives was hot."

Hitting the hotline

Drives are critical components of the Mega Flip ride, as the system includes three high-power motors, each of which needs to run smoothly while conserving energy and staying within the stringent safety limits.

"When we made that discovery, I called ABB right away", Virta recalls.

Lulu Sariola reaffirms the urgency of this particular maintenance request: "When the drive broke down, it was vital to get some expert help quickly. The equipment needs to be verified as safe before we can take any customers for the ride, and time was short."

This is no exaggeration. From the moment the call to ABB was made, only 22 hours remained before the fair's opening ceremony.



Lulu Sariola, managing director, Suomen Tivoli

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Thanks to the Drive Exchange service, the refurbished drive could be installed in time for the fair's opening.



With installation and testing completed, the fair's opening ceremony took place as planned.

Drive like the wind

ABB quickly dispatched a service technician from its local authorized value provider, FC Automation. Having inspected the drive, he recommended ABB's Drive Exchange service as the most suitable solution and ordered it from the company's Helsinki office right away.

The Drive Exchange service is an efficient alternative to repairing an installed drive or purchasing an entirely new one. By simply swapping a failed drive for an exchange unit, critical applications can be up and running again quickly.

Exchange units – refurbished and fully tested in ABB's drive service workshop and covered by a one-year warranty – are dispatched within 24 hours from the moment of order. In cases of extreme urgency such as this one, ABB also offers express delivery services.

FC Automation's Jukka Heiskanen takes up the story: "The exchange unit was sent from Helsinki the next morning, and I was already at the fair, dismantling the old unit."

With Helsinki 400 kilometers away, the only way to get the exchange unit to the site in time was by taxi. "We received the exchange unit in Kuopio at 1 pm," Jukka continues, "and by 3 pm it had already been installed and tested."

Fast, effective, and cost efficient

With the installation and essential testing successfully undertaken, the fair's opening ceremony took place as planned at 4 pm. Sariola was both impressed and relieved: "We got the help we needed very quickly. Of course, we were in Kuopio, which is quite some way from Helsinki, but a taxi brought us the spare parts quickly. Everything went very well."

The combination of prompt service and tailor-made solution evidently meant a great deal to the customer. But another welcome surprise was the price tag. Having expected to pay high repair fees, Suomen Tivoli were very happy to hear that the entire solution, including delivery, would cost much less than they had anticipated. What's more, this information was already confirmed at the order time, enabling the customer to make a swift decision – and in this case an easy one.



Suomen Tivoli

Suomen Tivoli is a traveling funfair which has been entertaining Finnish families for over a century. Since the very beginning, the fair has been owned and operated by the Sariola family. Its current managing director, Lulu Sariola, represents their fifth generation at the helm. With thrillingly named rides like Gravitron and High Energy, they have preserved their place as the biggest such fair in the country, drawing large crowds wherever they go.

Contact us

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