



Photo: Smurfit Kappa

SMURFIT KAPPA PITEÅ

Efficiency and security was key when Smurfit Kappa Piteå were searching for a new communication system. The solution was found surprisingly close.

Smurfit Kappa is an international enterprise that develops and manufactures paper-based packaging solutions. They have about 46 000 employees, an eight billion euro turnover and operate in 350 locations in 35 countries.

One of their biggest paper mills is located in the far north of Sweden. With an annual production of more than 700 000 metric tons Smurfit Kappa Piteå is Europe's largest producer of kraftliner, the high quality paper that constitutes the exterior layer on corrugated paper.

In Piteå they are highly dedicated to health, safety and environmental issues. The entire mill is for instance CO2 neutral and they have a clear mission of becoming a workplace free from accidents. In an industrial setting, the latter naturally puts high demands on internal communications.



THE CHALLENGE

Like many similar companies, Smurfit Kappa Piteå has relied on a conventional two-way radio system for a long time. When the system was implemented it was state-of-the-art, but by today's measures there was a lot of room for improvement concerning everything from capacity to audio quality.

The decision to move to a modern digital system was therefore easy to make. They realised that it was time to catch up with technology and look for a new solution. They found a recommendation close by, at a paper mill on the other side of the bay in Piteå. The two are formally competitors but that does not prevent them from cooperating locally. They lend each other spare parts and other equipment and if one needs advice the other one answers to the best of their ability. That is how they do it in Piteå, they may compete on the global market but at home it is important to stick together and help each other.

They had recently installed a new two-way radio system right across the bay. Their testimonial was so good that Smurfit Kappa Piteå considered it unnecessary to conduct their own tests, something that typically is conducted in this type of procurement. They tried some other systems but concluded that they wanted a similar solution as their local colleagues, i.e. a TETRA system from Motorola Solutions that Celab was entrusted to deliver.





THE SOLUTION

TETRA is a long established international standard and the technology is the base of many countrywide two-way radio systems, like the Swedish public safety network RAKEL. Motorola is considered as the world leader among the manufacturers and we are one of the most experienced suppliers in Sweden.

A project like this always begins with a thorough survey. Our visit in Piteå did not suggest any future issues, even if the measurements revealed some areas where coverage could be difficult. Those areas were places where no one usually is, like underground passages covered with large stacks of wood chips.

The basic solution is simple, a local network based on redundant base stations, which minimises the risk of the system breaking down. To achieve complete coverage in certain areas additional repeaters and antenna solutions were installed.

The actual calls are placed using hundreds of portable terminals from Motorola. The digital technology provides the ability to priorities different users and types of calls. This way you can be sure that certain important broadcasts, like emergency calls, always gets through no matter system load.





THE RESULT

Smurfit Kappa Piteå has chosen to lease their equipment, giving them with control of costs and one less complex system to worry about. We remotely monitor and manage the system, giving us the opportunity to quickly detect and correct any issues. It cannot be any simpler for the users.

Sometime after delivery, we for instance noticed an area where reception was one hundred percent. It was a cramped space underneath one of the dryers, precisely one of those locations where no one was expected to be. The cause was the large aluminium hood that covered the machine. Once the issue was established, it was easily remedied using an additional repeater and antenna.

Besides that, everything has gone according to plan and Smurfit Kappa Piteå now has a highly reliable two-way radio system that functions in all possible conditions.

The fact that no one misses any calls because of overload, bad reception or noise and disturbances greatly contributes to streamlined processes and interruptions in production are solved quicker.

But the most important thing is safety. For a lone worker it provides a security that cannot be measured in money. For Smurfit Kappa Piteå it also means a step towards the ultimate goal of an accident free workplace.



Photo: Smurfit Kappa