

Nothing simpler than this...

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When snow and icy conditions make our infrastructure freeze up, they ensure that our roads stay safe – the winter maintenance crews are deployed day and night during the winter. They always carry a heavy responsibility. Manoeuvring winter maintenance vehicles – often in poor visibility or dark conditions – is the least of their challenges. At the same time, they usually have to operate several attachments, from a plough to a steering wheel, and various settings need to be monitored or changed. The driver has to react with lightning speed to changing road conditions and in addition consider the increasing volume of traffic in cities and on motorways. Skill and concentration are important attributes for drivers and reliable technology is therefore a vital "companion" when they are on duty.

"We can't control weather conditions or the rising volume of traffic, but we can offer our customers a maximum degree of safety, efficiency and comfort with a completely new generation of operating concepts," says Martin Halder from the technical support team at Aebi Schmidt Deutschland GmbH. A project team working across different locations therefore came up with a completely new operating concept – EvolutionLine. The spreading control system and the new Stratos was developed in Holten (Netherlands), and the plough controller comes from St. Blasien (Germany). The focus is always on providing intuitive control that meets the specific needs. Following a development phase lasting around two-and-a-half years and a successful launch on the market, the feedback from customers has been more than positive.

Test of endurance for EvolutionLine – out on the road with the Titisee-Neustadt road maintenance depot in the High Black Forest

The crews at the Titisee-Neustadt road maintenance depot in the Breisgau-High Black Forest region are also firm advocates of the new EvolutionLine concept. The drivers were able to put a winter maintenance vehicle from Schmidt through its paces during practical use over the course of several weeks. The vehicle was equipped both with the new control panels incl. joystick and with the latest Stratos generation. The new type of control system has been accepted surprisingly quickly. Even older colleagues who had become accustomed to using buttons and knobs over many decades quickly became familiar with how to operate the system. Another major benefit of the new system is that as a driver you can concentrate better on what is happening on the road in front of you, which is definitely a big advantage when it comes to safety.

The joystick is always ready to operate in the hand

The snow plough is now controlled via the joystick which - with an ergonomic design - is attached to the driver's seat. The individual adjustment possibilities have also proved their worth, such as the free assignment of functions for the buttons on the ES control panel; the most important functions can be operated here by one hand for each attachment or deployment situation. The same set-up between the spreading and plough control panel also enables efficient equipment settings. The days of reflective displays that are difficult to read are long gone. The luminosity is now adjusted automatically depending on the incidence of light and the menu combined with the graphic touch screen display can be navigated quickly and easily. The option to show the current rate of consumption of grit on the display in real time has received particular praise. This has not only helped with optimising routes, but also enabled colleagues to get a quicker overview of the available resources when there was a change of shift.

The vehicle was also equipped with the ThermoLogic technology. This automatically and reliably ensures temperature-dependent dosage of the grit material and permits faster and much more efficient control than manual operation. This is also another way that Schmidt relieves some of the burden on drivers.

Schmidt as a pioneer when it comes to control technology

Even during the development phase, it was important for the people responsible at Schmidt to be in close contact with the people who use the products in practice so that they could identify and understand specific requirements. "The constant dialogue with customers and selected depots made a substantial contribution in enabling us now to state with pride that we have developed a system that is completely user-friendly and is highly efficient at the same time," says Florian Rau from the project team at Aebi Schmidt Deutschland GmbH in St. Blasien. "With all of this technology, we also attached importance to having a uniform design of the control elements and exporting data is now also a very simple task – whether it be for evaluating the plough and spreading deployment data for the customer or service management of the system by our service colleagues."

With this new operating concept, Schmidt therefore once again underlines its role as a pioneer for control technology and sets new standards with EvolutionLine. The control system looks to the future and includes a preparation for advanced modules such as AutoLogic (automatic spreading with navigation) or online communication via web applications. In addition to the municipal winter maintenance vehicles, in the future the airport technology sector will also be equipped with EvolutionLine operating elements. This is because when it comes to clearing snow and ice from airfields and runways the motto in the future should also be: "Nothing simpler than this..."

Source: Aebi Schmidt Holding AG