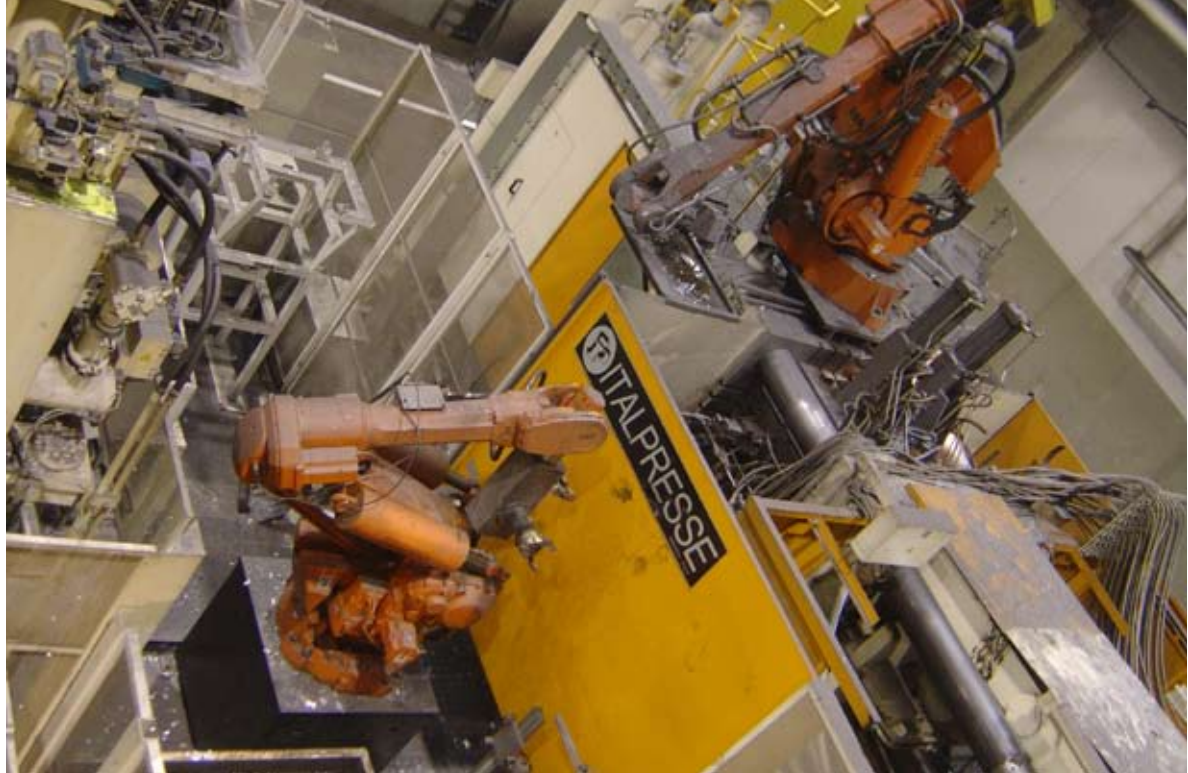


### Applications

- Lubrication

### Products

- Light alloy pressure die-cast engine components



## User-friendly lubrication

**Robot Application Builder software from ABB gives Acheson a cutting edge in providing a user-friendly lubrication system for Volkswagen.**

> VW Poznan is Volkswagen's Polish facility assembling cars, primarily for the local market, and Transporter vans for export. The site includes a state-of-the-art light alloy pressure diecasting foundry producing engine components.

When Volkswagen committed to foundry investment in Poznan it conceived of a facility that would utilize the latest technology to achieve the repeatable, consistent and controllable process required to produce the highest quality automotive castings.

Volkswagen turned to Acheson for die lubrication technology that would provide the required degree of process control; Acheson in turn looked to ABB as its

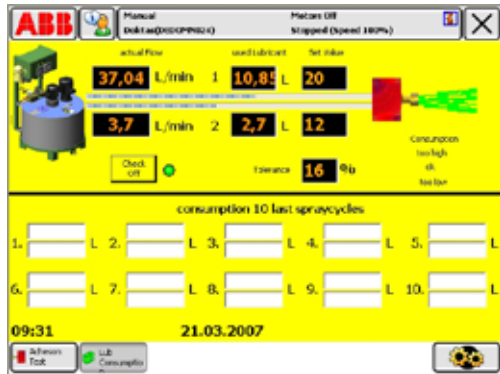
partner in the project. Acheson and ABB have a long history of cooperative development in the foundry field, having developed the first fully-integrated robotic die spray equipment together; RoboSpray was delivered to its first customer, Almec in Italy, in 1996.

For Volkswagen, the combination of ABB's knowledge and experience of robot applications and Acheson's process lubrication know-how led to the installation of the high-tech, water-free, environmentally-friendly die management technology called Deltacast Liquid Powder. This system consists of the Acheson designed and patented spray tool linked to a "Plug & Go" closed lubrication system for supplying the specially designed water-free die



# Acheson

## Case study: Foundry/Die casting



Robot Application Builder makes programming easy.

lubricant, coupled with an ABB robot equipped with the latest electronic and hydropneumatic control.

By adopting the Deltacast Liquid Powder technology combining robot and the specially designed process chemical that allows for the lubricating film to be formed independent of die temperature - and therefore across a wide temperature range - Volkswagen achieved its process control objectives and has additionally been able to significantly reduce the porousness of castings and extend the life of its dies.

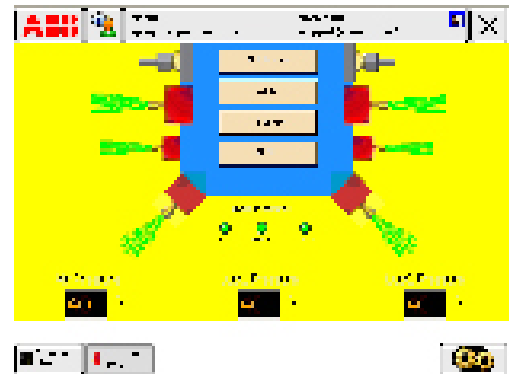
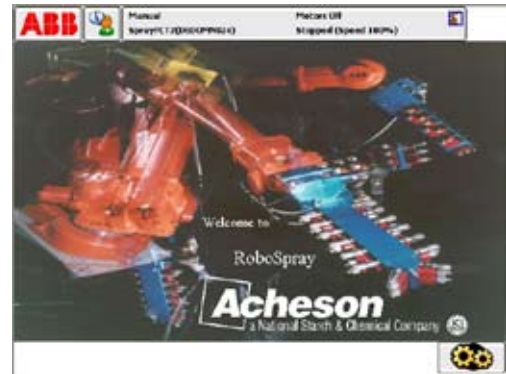
### Vital ingredient

Acheson's support for the customer started well before installation and training in the implementation phase of the project. By utilizing ABB's Robot Application Builder software and building on the previous decade of combined experience of providing fully integrated robot-based systems, the interface between lubrication equipment and Volkswagen's foundry personnel was made as user-friendly as possible.

### >FACTS

#### Benefits

ABB's Robot Application Builder software allows Acheson to integrate its application software with the ABB control so that for the customer it appears to be just one programming system. The combined software has a maximum user-friendliness while maintaining full functionality. The fully integrated software allows for all of the Acheson spray control functions to be easily accessed by Volkswagen's operators.



"ABB's Robot Application Builder software was the vital ingredient allowing us to integrate the Acheson application software with the ABB control to the extent that it appears as one seamless programming system to the customer," says Dieter Thumm, business director of Acheson's equipment division. "We focused on delivering maximum user-friendliness while maintaining full functionality to ensure that our customer can take advantage of all of the process control features that the Deltacast Liquid Powder system offers." The fully integrated software allows for all of the Acheson spray control functions to be easily accessed by Volkswagen's operators.

Installation, implementation and process optimization in Poznan was driven by a team of engineers from all three companies, ensuring full functional utilization of a complex system to quickly achieve the efficiency and quality goals set by Volkswagen.

Since then Acheson has upgraded to using the IRC5 controller from ABB. "We've followed the same principles of full integration to add new features, such as the use of graphic symbols when programming, to enhance the level of user-friendliness without having to compromise any system functionality," says Thumm. ☺