



METALWORKING

FANUC For Daf Trucks

Task To cope with the sharp increase in production the Company decided to invest in new automation

Solution 3 new FANUC welding robots were integrated for welding components

Result The fact that FANUC Robots are not meant exclusively for welding jobs, but can also be used for spraying, assembly or handling are a special trump card. Robots work continuously in exactly the same manner and can complete long series of actions without a fault, without getting tired or monotony taking its toll



Robots take over monotonous welding work in DAF Trucks (Eindhoven)

In the manufacture of commercial vehicles, there is a lot of human work involved, much more than in a car factory. Robots are being increasingly used here, too. Recently Valk Welding supplied three new FANUC welding robots to DAF Trucks in Eindhoven. They must cope with the sharp increase in production.

Two years ago, around 140 trucks rolled off the belt in Eindhoven every day. In the meanwhile, the number has already risen to 192 and in 2008 it will rise even further. Totally, not fewer than 1200 to 1600 variants of the XF, CF and LF could be built on one assembly line, tractors as well as cooking carts.

The numbers could not be increased without further automation. At the end of the 90s, the PKF Division (flat components plant) of DAF trucks in Eindhoven started using robots. Since then, PKF has 6 welding robots in use and the discussion was whether this number can be increased. Within PKF, side walls are made for the cabins, as well as spars and all kinds of brackets, supports, fenders, lines, fuel tanks and components for axles. Among others, a robot is put into use for the product of the front underrun protection (FUP) of the heavy duty XF trucks; a steel element behind the front bumper to prevent a car upon collision with the truck, and getting caught under the truck.

Valk Welding recently installed a first FANUC welding robot for the production of FUPs and component carriers for the CF range. The parent company PACCAR (which also markets Kenworth and Peterbilt, apart from DAF) has decided to install robots of only one brand within companies of the group all over the world. And hence the choice fell upon FANUC Robotics. Uniformity and a single policy for the spare parts were the goal here. The fact that FANUC Robots are not meant exclusively for welding jobs, but can

also be used for spraying, assembly or handling are a special trump card.

The integration of the FANUC robot in the production line of DAF went smoothly. In-between, two extra robots have been supplied for welding smaller components. In the near future, DAF trucks will further automate welding using FANUC robots.

The prime reason for introducing robots at DAF Trucks is more important than quality. Mainly, the production of safety-critical components is exactly that- of vital importance. Robots always work continuously in exactly the same manner and can complete long series of actions, for example the above-mentioned FUPs, without a fault without getting tired or monotony taking its toll. Moreover, the operator can manually check all pieces for the 'in' as well as 'out' again at the workstation. This requires technical knowledge; the operator is thus an experienced welder who follows the production with knowledge.

Obviously, plants of the DAF size have the means to invest in robotics. But how will that work in the case

of smaller plants? *“If this relates to serial work, one robot is a feasible option for a small enterprise. You save on labour and win simultaneously in terms of quality and safety. I know plants with five employees whose robot has paid for itself within one and a half years”*, we hear from Valk Welding. ■

