

AVR Waste Processing Rotterdam: Professionalising the integral Maintenance process successful

Every year, AVR Afvalverwerking Rotterdam converts 400,000 tonnes of waste into 127,000 MWh of electrical energy. Energy that is then supplied to the public electricity grid. In order to be able to process this enormous mountain of waste every year, 110 people work 24 hours a day, 7 days a week. There must be no failure of the incineration lines, which is why AVR Rotterdam called in PDM to radically professionalise the integral maintenance process. Maarten Sluimer, Head of the Technical Service at AVR tells us about it.

Every year, AVR Afvalverwerking Rotterdam, a subsidiary of AVR, burns about 90% of the household waste and 10% of the industrial waste for the municipality of Rotterdam and its surrounding municipalities in four incineration lines. The energy released by burning all this waste is converted by steam turbines into electrical energy and then supplied to the public grid. It's a process that requires continuous work in no less than 5 shifts.

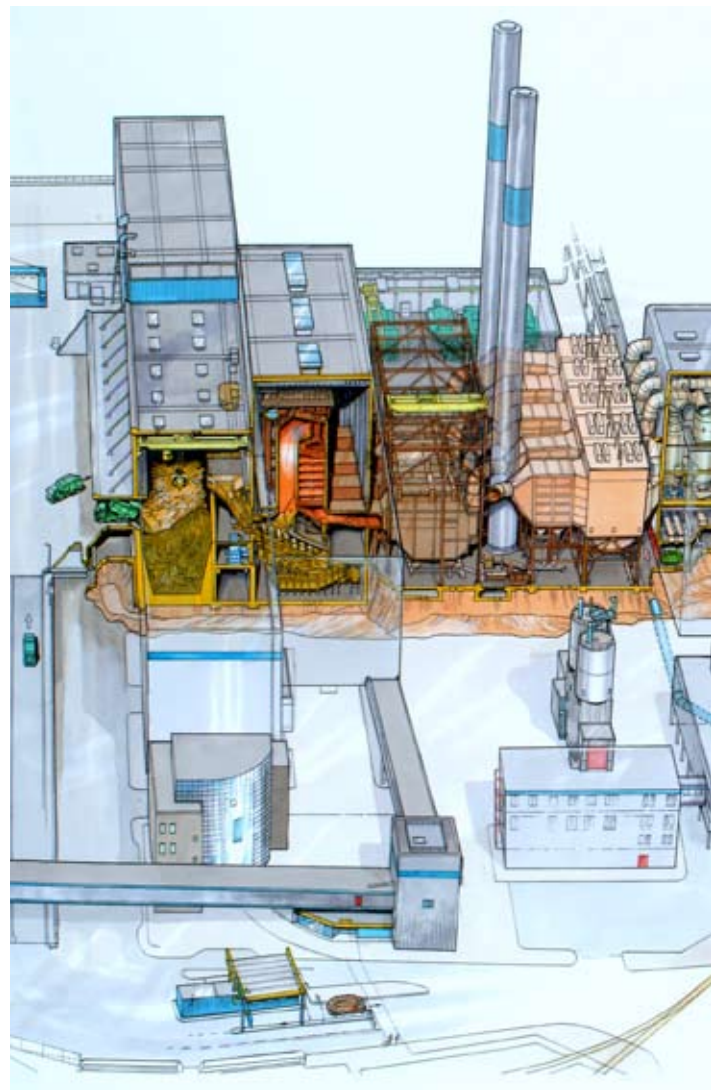
Reorganisation

“Because our four incineration lines, the electricity generating plant and the flue-gas scrubbers are in constant operation and because we had to continue with a slimmed down organisation following various reorganisations, we tightened up the requirements set for the people taking part in the maintenance process. In particular, co-operation between the various departments and making and keeping to agreements had to be better. After all, we were faced with the heavy task of delivering the same performance with fewer people and we also wanted to reduce maintenance costs. At that point, we called in the help of PDM,” says Sluimer.

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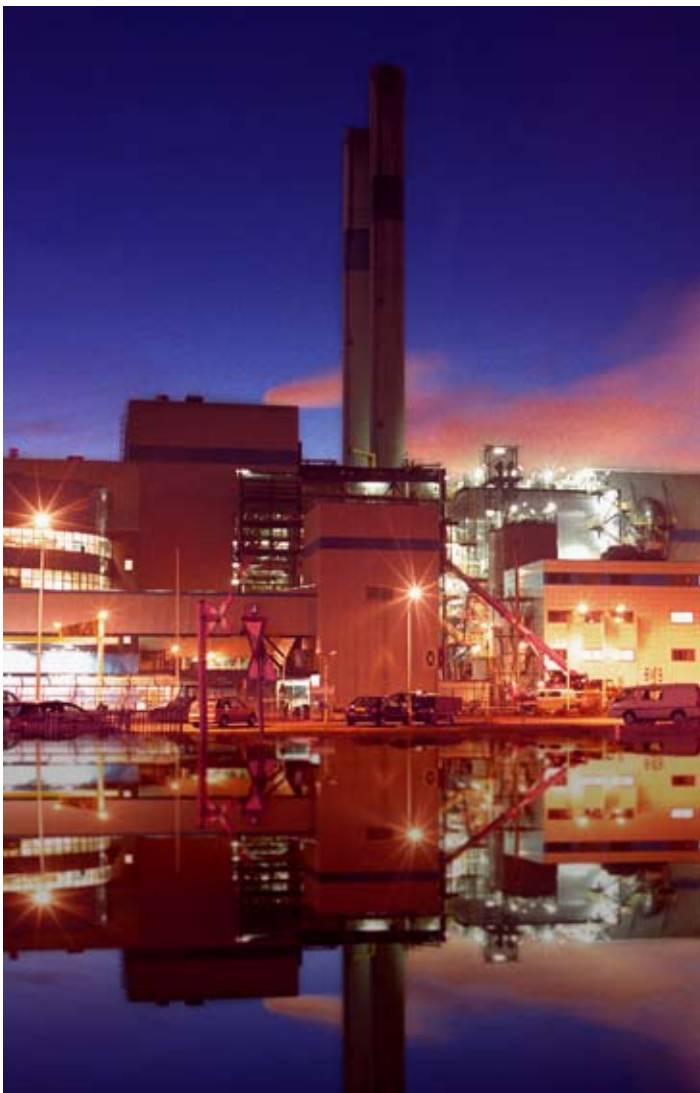
Approach

“We started by analysing the work-flow processes relating to maintenance,” says Frans Uijlenbroek, Managing Consultant at PDM. “This led to defining four sub-projects, in close collaboration with AVR, that were completed in a period of 1 year, namely optimising work-flow management, defining the job of Maintenance Engineering, analysing the shutdown organisation and associated processes and setting up a



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management system and organisation. In the first of these projects, we started by improving the work preparation and planning of AVR's Technical Service, so that the technicians could be deployed more efficiently.”

Maintenance concepts

In the case of the second project mentioned above, we taught the maintenance engineer how to draw up and implement maintenance concepts, and how to tackle performance killers structurally. We also devoted attention to the role of engineers in the organisation. “It was particularly this last aspect that was crucial,” says Sluimer. “But at the same time, it was complex because we wanted everyone in the organisation to be actively involved in the integral maintenance process. It was also complex because we had to handle a culture change and because everyone's responsibilities were once more clearly brought to the fore, so that they could be held accountable from now on.

That looks easy at first sight but in practice it boiled down to learning to work together in our own department and with other departments. After all, we had to achieve a particular objective together.”

In the case of analysing the shutdown organisation and processes, PDM analysed a 4-week shutdown and made recommendations for improvement. In this period, a method was also implemented for optimising smaller shutdowns. “In the fourth project, we drew up performance indicators and appointed owners. After all, it's only in this way that AVR can effectively steer on the performance of the most important maintenance processes,” explains Uijlenbroek.

Result

“Owing to the shift in ownership, we are now better able to manage the work,” says Uijlenbroek. “We have also reduced working stocks by 32% and the efficiency of the Technical service has increased by 15%. We have also succeeded in improving co-operation between the group leaders and work preparers on the one side and the technical service, production and engineering on the other. The art is now to put into practice what we have learned in such a way that we can reap the benefits of it every day, namely by achieving the same performance with less effort.

And that's a process that actually never finishes. As the management, we will have to be constantly alert to this, maintain it and adjust it where necessary. In other words, it's a challenge for us at AVR,” says Sluimer. ■