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Extracting **Maximum Economic Value** from Ageing Assets

More than 40 maintenance professionals from chemical production plants in Benelux joined Mainnovation last month to discuss challenges facing their industry. The key message of the event was straightforward: maintenance is an increasingly critical factor for industrial companies. More attention must, however, be devoted now to extending service life of ageing plants and to technological modernisation.

THE KEY TOPIC of the special event was ageing assets. The subject is important because industry in the western countries is ageing rapidly. Not so much in terms of employees, but in terms of production assets. Moreover, the phenomena is not only facing the chemicals industry, but other industries as well, including the pharmaceutical and food and beverage sectors of western economies.

– Many plants especially in the chemicals industry in western countries were built after World War II, and after 40-50 years of operation they are now rapidly approaching the end of their service life. This is the new challenge faced by many modern-day maintenance managers, says **Mark Haarman**, Managing Partner of consultancy company Mainnovation N.V. of the Netherlands.

Mainnovation specialises in Maintenance & Asset Management. The company has developed a so-called VDMXL methodology for Value Driven Maintenance and Asset Management, which explains how to extract maximum economic value from an existing plant, fleet or infrastructure using a professional management approach. Now, with the firm having successfully staged its first a sector-specific event with focus on the chemicals sector, it plans to organise similar happenings this autumn for professionals operating in the pharmaceutical and food and beverage industries as well.

Mark Haarman, Managing Partner of consultancy company Mainnovation N.V.

Learning from Good Examples

Several case examples were introduced in the event's presentations by representatives of major chemicals businesses. These included industry leader BASF from Germany, maintenance organisation Sitech from the Netherlands, and EVAL Europe N.V. – Belgium-based division of Japanese chemicals company Kuraray, which specialises in the production of various barrier materials. Each company presented examples of how they have themselves managed to compete against ageing assets in the highly competitive global chemicals market.

– We started with chemicals companies because the challenges of ageing assets is quite notable in the industry. The event also marked a kick-off start to building a new maintenance network for the sector, which will give its companies the opportunity to learn from each

other, Haarman says.

Haarman adds that the core message, which stood out from all presentations, was similar: to survive in the globalizing industry, we must increase the competitive strength of our ageing assets.

– The challenge confirms that maintenance is an increasingly critical factor for industry. It also means that maintenance managers of industrial companies need to start replacing old technologies with modern solutions.

Maintenance departments of the future must be drivers of improvement. This means that if a company is faced with ageing assets maintenance management is not enough – the company must also focus on asset management.

– To stay competitive with ageing assets, chemical companies need to get more economic value from their existing plants. This can be done through uptime improvement, cost reduction, higher safety levels and/or lifetime extension, writer of the book "Value Driven Maintenance & Asset Management (VDMXL)", Haarman, highlights.

Evolution of Assets

So what does the challenge of ageing assets mean in practice for a chemicals plant manager? Ultimately it brings out the need for a broader view on assets operated by chemical companies.

– Maintenance managers need to change their business model. This requires another way of working, applying new best practices like asset portfolio management, brown field project management and predictive maintenance with big data. These best practices are incorporated in our VDMXL –model.

TO SURVIVE IN THE GLOBALIZING INDUSTRY, WE MUST INCREASE THE COMPETITIVE STRENGTH OF OUR AGING ASSETS.

Due to ageing assets the maintenance market in western countries is estimated to grow by as much as 20 percent in the coming years. This despite the swift increase of robotics and plant automatization, Industrial Internet of Things and digitalisation i.e. factors that have been viewed as potential threats to many industrial professions in the future.

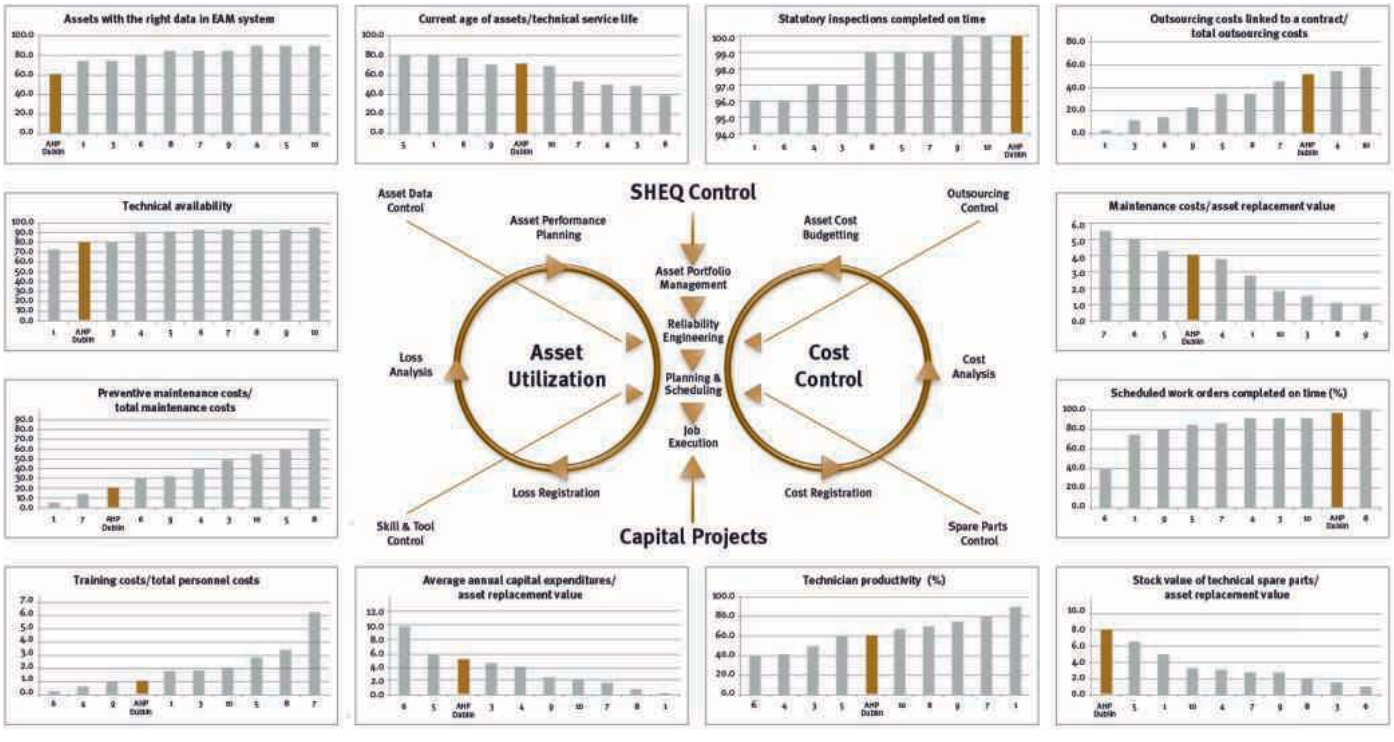
Haarman also specifies that the challenges related to ageing assets in industry are not only tied to technical aging but the commercial aging of plants as well.

– Is the plant still producing a product that is in demand or does the company have to modernise the plant to be able to produce products that customers want to buy? The maintenance manager of tomorrow not only needs to look at technical ageing but also commercial and economic ageing.

So what should the chemicals industry do to succeed better? Haarman notes that the first thing that chemical companies should start doing in to start measuring the performance of their Maintenance & Asset Management organisation. For this to be possible, Mainnovation is building on its already extensive database, which includes over 1,000 industrial companies of which some 150 are chemical companies.

– We have developed a VDMXL benchmarking platform with 12 Key Performance Indicators with which chemical companies can compare themselves with industry peers. By benchmarking the KPIs one sees directly how competitive the Maintenance & Asset Management organization is.

Via the company's new platform chemicals companies can obtain various data related to Maintenance & Asset Management. This includes information on technical availability, maintenance budgets, capital expenditures and planning compliances. ■



VDMXL Competence Model