

# Sustainable, constant-quality production: MATRASUR Composites takes up the challenge of "zero-emission" production



**H**ow to offer customers competitive products and high quality? How to modernize a company in the composite industry while meeting the new sustainable development requirements? MATRASUR Composites offers new industrial solutions by designing production workshops that provide sustained production that complies with environmental regulations while remaining competitive.

"Our knowledge of the composite industry enables us to advise our customers in France and worldwide on the process

of industrializing and robotizing production to optimize costs," says Claude Chouet, Sales Manager at MATRASUR Composites. Profitability is reached in less than three years. Reorganization of the production line provides direct economic benefits such as lower production costs and significantly reduced energy consumption for the ventilation and heating of the workshop surface. Energy costs can be divided by 4 or sometimes even 5. The combination of these factors allows companies to remain competitive or to regain competitiveness against their

competitors. Production robotization also brings consistent quality.

The production of a pool which initially required 35 to 40 hours of labour was reduced to less than 15 hours through the industrialization process implemented by MATRASUR Composites. "Industrialisation of the company's activity reduced manufacturing times, annual labour costs, raw-material consumption (-12%) and the surface area of the workshop itself, thereby reducing the heated and ventilated surface by 80%," says Claude Chouet. The energy balance is extremely good.

#### Relevant to all companies

The corporate culture is not naturally oriented towards industrialization. "Companies must feel ready to make such changes. Small businesses may prefer to proceed by stages to reach their goal and gradually assimilate these changes. We propose alternative production methods that are more or less defined over a short term," says Claude Chouet. "We base ourselves on the calculation of a part cost. We

assist the company in defining its objectives". All businesses are concerned, small or large, regardless of the application area and the country in which they are based. MATRASUR Composites has an application lab for the small-scale testing of technical choices, materials and processes available. A large area of the workshop is dedicated to system and robot simulation tests under real operating conditions.

#### Towards a "ZERO-EMISSION" unit: better working conditions for employees

Open-mould production generates significant VOC emissions in the composite industry. According to Claude Chouet, "Creating closed areas mainly using robotic machinery keeps employees away from risk areas and solves the problem of emission exposure. We offer our customers tailored solutions that make it possible to reduce the size of the workshop's production area by 75%." This enables companies to anticipate environmental regulations and ensure site compliance with standards over time.

## Bayer MaterialScience planning new world-scale TDI plant at Dormagen site

**B**ayer MaterialScience plans to invest roughly EUR 150 million in a new high-tech production plant for TDI (toluene diisocyanate) at Chempark Dormagen. TDI is a precursor for the production of polyurethane flexible foam. The new plant will have a capacity of 300,000 tons per year and will replace

the existing plants in Dormagen and Brunsbüttel. The background behind the project is the company's European-wide optimization of isocyanate production. "This investment is a clear commitment to North Rhine-Westphalia as an industrial location. It is intended to strengthen Dormagen as a global TDI tech-

nology center and to provide long-term security for the competitiveness of Chempark Dormagen and the jobs at the plant and in the region," declares Dr. Tony Van Osselaer, member of the Bayer MaterialScience Board of Management. The innovative and patented TDI process technology to be

used in the planned facility sets new standards worldwide for efficient and climate-friendly TDI production. "The expertise that flowed into our TDI process innovation originated in Dormagen, which is a source of great pride to us here," says Dieter Kuhne, Head of TDI Production in Dormagen. "Our process