### **SPECIAL REPORT**

# **Finding solutions**

During a visit to Geico's Pardis Innovation centre Nick Holt took the opportunity to interview Luigi Lazzari, president Geico Taikisha Europe, regarding the company's current projects

## MS: Could you provide some more details of the recent contract with Avtovaz for a new paintshop?

Luigi Lazzari: This will be both a brown field project, as, from a building environment perspective, we will reuse some of the existing structures and a green field project as the paintshop facilities and processes will be completely new. The new building will house a pre-treatment and e-coat line.

## AMS: What was the brief from Avtovaz for the new paint facility?

LL: One very important criterion is for the new paintshop to meet the highest environmental standards as the construction area was already at the upper limit for industrial pollutants. We also have to provide equipment and processes that will allow the coating of the latest models with the latest paint materials.

#### AMS: Was the ability to reduce the environmental impact of the new paintshop one of the primary reasons Geico won the contract with Avtovaz?

**LL:** Yes. We had previously installed a wet-scrub system for the company so they asked us for the latest development in this equipment for the new project.

## AMS: What constraints did you face when planning and installing the new facility at Avtovaz?

LL: In terms of building there were constraints relating to both the existing facilities and the new development. It is easy for people to believe that the green field site is like a blank sheet of paper and you have the freedom to build whatever you need, but on this project even the new area was constrained as it was already heavily developed, surrounded by roads, other buildings, etc. This required a lot of planning, as the area for building was very constrained. Also re-developing the existing facility proved to be a challenge as we were essentially creating a new paintshop inside an old building.

## AMS: Have you needed to adapt the new equipment to install it in this old structure?

**LL:** It wasn't so much adapting the equipment to fit but rather ensuring the whole installation complied with local health and safety regulations and addressing the access requirements for effective service and maintenance of the systems.

#### AMS: Have the developments produced at the Pardis Innovation centre helped when delivering challenging projects such as this?

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LL: When approaching any new installation it's important to develop a 360° view of the project requirements and constraints. For us the design tools, such as the 3D engineering lab are very useful. This immersive reality system helps us understand how the paint line systems will work within the structure of the facility. Any problems can be overcome before installation begins and this allows the client to see how the final installation will function. In brown field projects such as the one at Avtovaz this is a very important tool.

#### AMS: What equipment will you be installing at Avtovaz?

LL: That facility will have the Hydrospin Plus, the wet scrubber, which will be the core element of the installation.

#### AMS: The project with Fiat in Brazil is a true green field site. Can you share some details of this?

LL: You are right in saying this is a real open green field site, so we have had some degree of freedom. However, as always, there were cost constraints regarding the building of the facility. Geico was not responsible for the building of the structure, but working closely with the construction company we were able to deliver an innovative solution that allowed Fiat to reduce

#### AMS: What are the most common technical requirements for the projects you are undertaking?

LL: Increasing capacity and improving efficiency without disrupting production is a very common brief. This type of challenge requires a high level of planning and strong project management. Often we are installing a new system into an existing facility and it is expected that the new system will begin production with little or no disruption to production.

#### AMS: Has it become harder to identify where improvements to efficiencies can be made?

LL: It is always a challenge but when you analyse the different elements of a process in a paintshop, and identify the weakest points and the most critical points, it is possible to develop a solution. The equipment and systems we are developing at Pardis are a result of this very detailed analysis process. For example the Dryspin system was designed as easy to retrofit to an existing paint booth as well as a new, standalone system. This is important when upgrading an existing facility, as it will minimise any disruption to production.

#### AMS: We saw the prototype of the V-flex system at the



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building costs and this was a key factor in winning the contract.

This 'smart' solution not only reduced the size of the paintshop but also optimised the material flow. To achieve this we had done a very detailed study of the proposed plan.

#### AMS: So did you use the same 3D modelling process to develop the concept as on the Avtovaz project?

LL: Yes. This is something we now use on all projects, large or small. This gives us the advantage of being able to progress very quickly from concept to design and on to the finished installation, avoiding any problems along the way. This saves not only time but also money. This has been an on-going project to develop the simulation system.

#### innovation centre. Could you explain the concept for this?

LL: We have developed highly flexible body dip systems in terms of how they handle a number of different vehicle bodies. The V-flex is the latest generation of these and offers advantages in terms of ease of use and cost.

#### AMS: What has been the driver for this development? Has the market asked for this type of technology?

LL: When we develop a new product we are looking at the lifecycle cost per vehicle body processed and the initial investment cost. How ever good the lifecycle cost might be the vehicle makers are always looking to reduce their initial investment. \*