Innovative design for limited space

The development of milk of lime installations is a speciality for RIJKERS Process Technology. Companies in the dairy industry know this as well. We developed a sophisticated system meeting the highest safety standards on behalf of a global player in this industry. The limited space in the factory added extra challenges.

In the dairy industry, (food) safety has a top priority. This means our client chooses suppliers very carefully and often works on the basis of long-term relationships. For the development of the new milk of lime installation, the company immediately thought of RIJKERS. Together we considered the problem, the solutions and all the criteria that played a role.

Our client was of the opinion that a very accurate metering installation was a very important requirement. Due to limited space and height, the original design - a dispenser on top of the production tank - was not an option. A completely new solution was required. RIJKERS put in a considerable amount of thought during the design process, which was tailored to the local situation: a milk of lime installation with a large tank that performs the function of both production tank and storage tank.
No compromise in quality and safety

Production and storage tank

Using a pneumatic transport system for the lime metering, the tank, hopper and storage bag were installed in spite of the limited space. Metering is carried out in the production tank, based on small quantities of product volume. The product then reaches this tank where it is mixed to the correct composition by use of an agitator. From here, the substance enters the loop. The substance can be then metered into the further processes from the ring loop. The milk of lime installation is suitable for two substances: slaked lime and magnesium.

From advice to installation

RIJKERS produced the project from beginning to end: from thinking about what could be done and the constraints during the preliminary phase, to the mechanical installation and commissioning. We also developed the functional description using flowcharts, 3D drawings and a Piping & Instrumentation Diagram (P&ID). Sister company, RVS NON FERRO, which has extensive experience with the strict standards required by the dairy industry, manufactured and assembled all the components. From tanks and hoppers to the piping work.

Safety first

Safety and hygiene run right through our client’s organisation. The standards of the company surpass even the standards currently required by the dairy industry. Therefore, RIJKERS observed the strictest requirements and for the installation, made no concessions in this area. A complete H&S plan was written beforehand and submitted to the client for approval. The installation went smoothly. The designated inspection body used an endoscope to check the quality of the welds in the pipe work, and only three minimal deviations from the hundred welds studied was found. Furthermore, these deviations were very easily recovered. This underlines RIJKERS’ high quality standards.
The facts

- Milk of lime installation
- For a global player in the dairy industry
- From consultation, design and construction to mechanical commissioning
- Suitable for slaked lime and magnesium
- Welding in accordance with EN 3834-2
- Functional description with flowcharts included
- Including 3D drawings and Piping & Instrumentation Diagram (P&ID)
- Including H&S plan under SCC**
- Including full CIP cleaning system
- According to the strictest dairy industry standards: HACCP, hygienic design and EHEDG

Proven solutions

The production and metering of milk of lime requires a well thought-out procedure. RIJKERS is the preferred partner for the implementation of highly reliable milk of lime installations that meet all requirements. Whether it be roasted or slaked lime, our solutions are based on proven concepts and techniques, through which problems such as accumulation, clogging of pipes and settling of the milk of lime suspension are not possible.

Assurance and continuity

Thorough process knowledge, and more than 25 years of experience in the development of milk of lime installations, makes RIJKERS an authority in this field. Expertise that we combine with attention to your specific application requirements. Therefore, you can be assured of a solution that perfectly suits your situation, both technically and economically. With minimal operating costs as a result. It is no surprise that companies from all over the world come to us for the development, adaptation, extension and optimisation of reliable slaked lime and milk of lime production installations. From consulting and engineering to installation and service.