

## Schaeffler Global Technology Solutions

### Chemical and oil

#### Pequiven, Venezuela

### Schaeffler Integral Solution improves Performance of petrochemical Plant

Pequiven is a state-owned company which was founded 30 years ago. It produces and markets petrochemical products, mainly for the domestic market.

The customer specializes in the production of fertilizers and chemical products as well as olefins and other synthetic resins.

#### Challenge for Schaeffler

At its phosphoric acid plant, Pequiven wanted to improve the running time of a conveyor belt that separates the solids from the phosphoric acid mixture. The bearings in the conveyor belt were regularly failing after only fifteen days, and the supplier was not listening to the customer's complaints rather kept trying to change the existing solution for a different one. As the customer was planning to increase its production capacity, they needed a partner which was able to provide integral solutions to the bearing problem including maintenance products and services.

#### Schaeffler Solution

Schaeffler Venezuela recommended to use a coating material like Corrotect® to improve the quality of the housing material. Also it was noticed that manual grease lubrication in the excessive corrosive environment was seldom done properly. So the experts gave a recommendation to use an automatic lubrication system for controlled relubrication. This ensures that a sufficient quantity of fresh grease is constantly supplied to the contact points inside the rolling bearings. With this arrangement, the bearings lasted more than twice the time but still not long enough. So the latest recommendation was to provide a thermoplastic housing with a stainless steel bearing.



**Pequiven**

Petroquímica de Venezuela S.A.

#### Technical Information about the Plant

##### Foundation:

1977 (modernization in 1990)

##### Capacity:

250 tons/day of  $P_2O_5$





INA plummer block housing



Service expert explains automatic lubrication system



INA plummer block housing with automatic lubrication system

## Customer Benefit

Thanks to the automatic lubrication system and the new housing solution, the customer has been able to reduce both its maintenance times and its maintenance cost significantly. What's more, in Schaeffler, the customer has found a full service provider who does not only supply innovative products but also takes overall responsibility for the machines. The Schaeffler experts have developed a customized maintenance scheme with individualized solutions which enable the customer to increase its production efficiency even further.

## What's special

Up to this time the use of coatings on bearings was practically unknown in the Venezuelan industry. The solution developed in this case can be applied to all other machines that are subject to a very high level of corrosion and which are suitable for the use of stainless steel and coatings like Corrotect®.

### Technical Information about the Solution

#### First:

INA plummer block housing:  
RASE40-N-FA125

#### Lubrication system:

ARCALUB.LC250-MULITITOP-KIT

#### Later:

INA plummer block housing: RASEY40-TV-VA  
Stainless steel bearing: GYE40-KRR-B-VA

#### Automatic lubrication system:

FAG Motion Guard CHAMPION