

FORAGE PROCESSING PLANT

Reduce fuel consumption
while improving Alfalfa
dehydration process control
with the NIR On Board system
by Dinamica Generale



AGROQUIVIR is founded in 2001. After more than 25 years of experience in the agriculture sector, 4 cooperatives from the Valley of the Guadalquivir in Seville, Spain, joined together to create **AGROQUIVIR**.

AGROQUIVIR mixes professional approach, experience, quality and technological innovation.

From the beginning, **AGROQUIVIR** decided to focus on a new crop alternative: the dehydration of fresh forage, with the creation of a unique yet innovative dehydration plant.

Over the years, **AGROQUIVIR** has become a leading company in its sector, with a wide range of high-quality products.

AGROQUIVIR is specialized in the manufacture and commercialization of **DEHYDRATION OF FORAGE FOR GRAZING LIVESTOCK** as well as additional products derived from agriculture.

Production figures:

- More than 40.000 tons of dehydrated forage per year
- More 200 international customers of 20 different countries
- 850 regional partners and suppliers
- More than 15 million euros turnover in the last financial year

Material processed:

- Dry alfa alfa for national sales
- Dry corn silage for export (Korea, Japan, China)



ANTONIO SÁNCHEZ-NORIEGA, Production Manager & National sales sais

“Agroquivir currently own two fields cultivated with alfalfa, more than 2600 hectares in total. Thanks to our equipment we are capable of harvesting alfalfa at the right time, with a minimum level of flowering (<10%) and a maximum level of proteins”

“Since we process about 500 tons per day. We have to carefully control the manufacturing process as well as the quality of the crop, to get the best possible product ever”.

We had the necessity to know precisely the quality of the incoming row materials for two main reasons:

1. dividing row material between higher DM content for bales production and lower DM content for pellet production
2. set the right temperature of the rotary drum to save fuel on the basis of DM content of the incoming material

We integrated the NIR On Board solution by Dinamica Generale in the production line in 2017 and we are going to introduce a portable NIR analyzer soon.

The NIR ON Board is a flexible solution that has been integrated aftermarket in the plant with the aim of measuring the average DM value for each batch.

That way enables our customers to buy our bales knowing the average value of nutrients contained in each bales. The system gave us the control of the performance achieved in real time. The installation of a remote display let plant operators aware of the value of DM and nutrients during bale processing.

The next integrations:

- The measured DM value will be integrated into the PLC of the plant to set heat control of the rotary drum automatically.
- Introducing a system that weigh each bale at the end of the production line and tags them with nutrients values.

