

Case study:

WDG agro-chemicals

Application:

Herbicides, pesticides and fungicides are found in the market in powder and liquid form. These traditional forms have both advantages and disadvantages. The powder forms show in general poor wettability, in addition to dust problems.

Liquid forms have limitations such as higher costs for transportation and show difficulties in shipment & handling with toxic and hazardous mixture.

The concept of a water dispersible granule (WDG) combines the benefits of fine powder forms with the benefits of the liquid form.



Requirements

Producing good dispersible granulated fungicides with main components such as copper based compounds, filler as clay and binding & dispersing agents as ligno-sulfate with the following properties:

- Rapid & uniform dispersion in water
- Stable suspension
- Dust free & Free flowing granules
- Storage stability



Solution

For producing a high qualified WDG fungicide, Hosokawa offers a perfect solution which combines a Flexomix, a Bextruder with a Fluid bed dryer and a sieving machine enabling the production of products with:

- High bulk density
- Particle size of the granulate of \varnothing 0,7 mm

The toxic and explosive characteristics of the fungicides require save and reliable systems with fully automatic controls for the various formulations.

Conclusion

The Hosokawa system is a proven technology for producing high qualified agro-chemicals.

A large number of these systems are in operation at various locations.

Total process simulation and testing can be performed in our test facilities both for optimisation of existing processes and for creation of new formulations.

