



Smart lab data management Efficient quality control





The growing challenge of managing quality

Quality data is crucial for producing safe, sustainable and healthy feed and food. But as the amount of data to be processed increases each year, so quality data management becomes ever more important.

Yet many feed and food companies are still struggling to obtain quality data and put it to good use.

The process of collecting, integrating and using quality data can be time consuming and prone to error. Even companies relying on the quality management module of their ERP system are often disappointed. Standard ERP solutions are ill-equipped to cope with the specific needs of the feed and food industries and cannot keep up with the rapidly changing demands of a growing business.



Turning your quality data into real value

BESTMIX[®] LIMS is different. This open data-processing application lets you **collect comprehensive data** from your sample management processes with ease, **integrate it seamlessly** into your core applications and **evaluate and distribute the results** in a consistent and flexible way. BESTMIX[®] LIMS smart lab data management saves you time, reduces costs, increases the reliability of your products and improves your decision making:

- Save time and reduce costs—Import data effortlessly using certified connectors. Create internal reports and dashboards and generate Certificates of Analysis (CoA) easily.
- Increase reliability—Keep the nutrient content of your ingredient matrix up-to-date, ensuring your production is tuned to the actual situation. Schedule the sampling of raw material and end products to monitor specification conformity.
- Improve decision making—Evaluate and benchmark suppliers and raw material origins. Rate your suppliers according to the quality they deliver.





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At Coppens International, our motto says 'Dedicated to your performance'. Being a producer of a broad range of high quality fish feeds, we were in search of a comprehensive quality system. We selected BESTMIX[®] LIMS and enjoyed the ease of integration with our ERP and production software. We provide sound, quality-related information to the staff every week, enabling them to improve their processes. This was definitely a good choice.

Ben Lamberigts, QRN manager at Coppens International B.V. (The Netherlands and Germany)



BESTMIX[®] LIMS helps us achieve effective control over the quality of our raw materials. The software enables us to standardise our data collection and quality control processes. In particular, the interfaces with the BESTMIX[®] Formulation software and our NIR instruments are of great value to us.

Dr. Jiao Peng, Technology Dept. at Cofco (China)



At KIMS's chocolates, quality monitoring is embedded in our internal logistic flow, from intake to shipping. BESTMIX[®] LIMS helps us meet our quality targets.

Fons Maex, Chief Executive Officer at Kim's Chocolates N.V. (Belgium)

Reliable quality data throughout your company

The quality of your products depends largely on the quality of your ingredients. Therefore, it is essential that you have seamless access to your sample data and that you can distribute the resulting quality information easily throughout your business. BESTMIX® LIMS has all the connectors you need for providing reliable quality data to every department in your company.

Integrate your end product specifications

BESTMIX® LIMS automatically uploads the nutritional values applicable to the new versions of your end products created in BESTMIX® Formulation. These values are then used as a reference for evaluating quality control measurements.

Connect with your ERP

BESTMIX® LIMS connects with your ERP system seamlessly. It automatically generates samples from raw material intakes, product deliveries and shipping lots (including barcode printing for easy identification). You can define analysis schedules and assign analyses to be performed by internal or external laboratories, setting specific tolerances and reference values to be used for evaluating the results.



Import measurements and lab results easily

BESTMIX[®] LIMS provides connectors so you can import measurements from all common NIR instruments, including FOSS, Bruker and Perten. It also processes the results from analytical balances. In addition, certified connectors to external service laboratories let you automatically upload analysis requests and download analysis results.

Increase accuracy in formulation

BESTMIX® LIMS enables nutritionists to transform easily the analysis results of ingredient deliveries into nutrient values for formulation. Using an interactive workflow, the actual nutritional values of the ingredient matrix are compared and updated with the new, validated values.



BESTMIX[®] LIMS gave us a centralised and practical solution for the entire sample management. Data is available immediately thanks to automated analysis schedules, data import of external and internal (NIR) lab results, integrated result verification and Excel[®] reports. It allows us to make quality-related decisions faster and more effectively. The interface to BESTMIX[®] Formulation links the data to the recipes and to the raw material matrix. All in all, it is a comfort knowing that BESTMIX[®] LIMS supports us in achieving our quality targets.

Dr. Stefan Mandel, R&D and QM at Mera Tiernahrung GmbH (Petfood - Germany)



ABZ Diervoeding is a co-operative feed manufacturer that delivers the most convenient and efficient feed for the best price. BESTMIX[®] LIMS helps us monitor the quality of raw material and finished products and comply with quality standards. Most of our analytical testing is outsourced. Thanks to the electronic data exchange provided with the software, we have all the information available exactly when we need it, saving a lot of processing time and avoiding errors.

Nicolette van den Brand, KAM Co-ordinator at ABZ Diervoeding (The Netherlands)

Improve your quality and productivity

By harnessing the power of BESTMIX[®] LIMS, you can continuously fine tune your production, significantly improve your productivity and efficiently manage your reporting needs.

Fine tune your production and make it more reliable

BESTMIX® LIMS collects and processes raw material and semi-finished product data in multiple production stages with speed. This lets you undertake corrective actions based on the monitoring of critical production characteristics such as moisture or fat content, sieve fractions, granularity and pigmentation. In addition, you can analyse end product samples to check conformity against specifications and perform product delivery or shipping lot control to support tracing in the event of a complaint or calamity.



Automate your reporting and certification processes

BESTMIX® LIMS fully supports your certification and qualification processes:

- **Produce certificates**—Generate Certificates of Analysis (CoA) and deliver them to your customers on the fly.
- Support the auditing process Create automatically all reports and statistics requested by external auditors during the certification process.
- **Provide automated periodic reporting** Generate periodic reports to support your quality improvement processes and allow the benchmarking of suppliers, origins, plants, operators and more.
- Monitor undesirable substances—Submit routinely your undesirable substances analysis results to the GMP+ monitoring database.



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BESTMIX[®] LIMS has increased the productivity of our customer services, from sampling through remote processing by BLGG to ration calculation. FKRA has also improved its feed formulation by streamlining the process, turning data from raw material samples into new values for the ingredient matrix.

Keilih Nyback, Chief Nutritionist at Felleskjöpet Rogaland Agder FKRA (Norway)



Nutreco is a global player in the animal feed business, constantly striving to improve our customer services. Therefore, we need to be innovative and collaborate with leading technology suppliers. The strategic alliance with Adifo allows us to meet our objectives and realise our projects. BESTMIX[®] LIMS and BESTMIX[®] Formulation are critical components of our NutriOpt precision feeding approach.

Bert Van Gils, Manager Nutritional Technology, Nutreco (The Netherlands)



Adifo was very effective in helping us develop a comprehensive, tailor-made solution that meets our formulation, laboratory information management and database management requirements. They understood the fundamentals of nutrition and lab management like few other software companies could. We are pleased with the final product and it has helped us move to an easier functioning platform for the future.

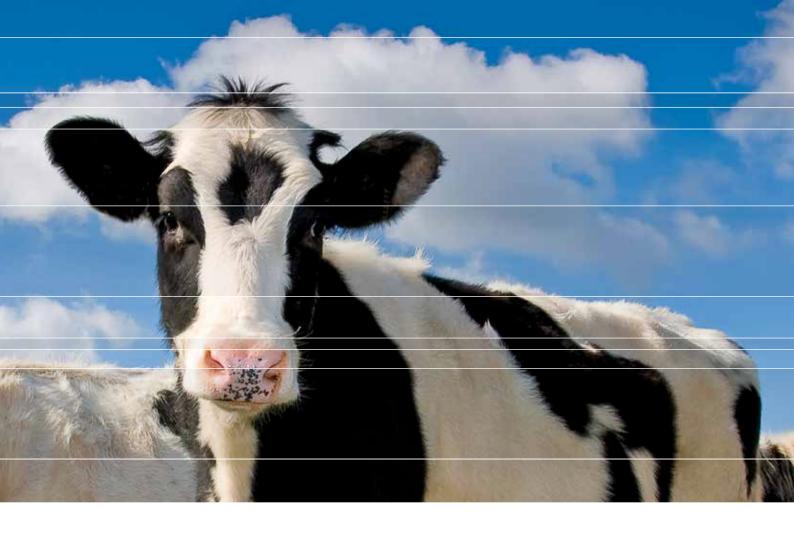
Rob Musser, PhD, Director of Technical Sales and Service at NutriQuest (Illuminate®) (United States)

Leading through innovation

BESTMIX[®] LIMS is an open software platform. This means your in-house developers can use it to build tailor-made innovative IT solutions. By integrating available processes and workflows, you can deliver state-of-the-art solutions in next to no time.

Examples of innovative solutions include:

- Integration of BESTMIX[®] LIMS as the frontend of the Sampling[®] remote service of BLGG, transforming NIR spectra of raw materials into nutritional values.
- Collaboration portal providing nutritional services, from precission nutrition to precision feeding (NutriOpt).
- Valorisation of industrial by-products for multiple species based on nutritional specifications and shadow prices (Illuminate®).



Offering valuable services to your customers

Are you a premix, compound feed or supplements manufacturer? BESTMIX® LIMS helps you to not only boost your own quality management but also optimise your customers' animal feed:

- Analyse the farmer's variable quality roughages, silages and cereals in either your own lab or a service lab.
- Add derived nutrient values for the samples (such as amino acid data and energy values) simply by running your existing formulas from your central BESTMIX® Formulation.
- Upload the sample results into your BEST/MIX[®] Ration Calculation system where they are stored as a customer-specific raw material.
- Compose perfectly balanced rations using BEST/MIX® Ration Calculation or BEST/MIX® Formulation as a Service.

Platform for quality data management

Manage your entire process flow by supplementing BESTMIX® LIMS with BESTMIX® and MILAS® products. Like all Adifo software, these integrate smoothly with common business applications, letting you import and export data with ease.

milas software Value-driven logistics & financials
Intakes
Production
Sales

Contract management

Production



Specialized ERP for your industry

Streamline your purchasing, warehousing, sales and invoicing processes with an Enterprise Resource Planning (ERP) system that is tailored to the feed and food industries.

MILAS[®] ERP is based on Microsoft Dynamics AX, industry-standard technology, ensuring you of a future-proof basis for your company's computerization. In addition, it has been developed with a focus on feed and food industries. Our consultants don't need much input from you to understand your business needs and they are perfectly familiar with your terminology. The seamless integration with BESTMIX[®] enables you to link automatically with recipes, labels, prices, contract and onhand stock positions.

bestmixsoftware Balanced ration calculation

Farmer-specific animal feeding advice

As an animal feed adviser you are improving the production output of your customers - the farmer – by translating top-notch knowledge into tailor-made client advice.

BEST/MIX[®] Ration Calculation determines the perfectly balanced ration at the lowest cost for each individual animal, based on the real nutritional requirements that correspond to the animal's production stage (weight gain at a certain body weight or milk production in a certain lactation period, etc.). You can choose between a growing number of models and modules for different animal types. The optimization algorithms combine external feedrelated information from your R&D department, nutrition companies, research institutes and laboratories with livestock data from the farmer. Users can also work with home-grown materials easily and effortlessly. Adifo now also offers this solution via a secure cloudbased solution; BESTMIX® Formulation as a Service (FaaS).

External laboratories

Lab equipment





Formulation and optimization software

BESTMIX® Formulation allows you to least-cost your products, taking into account all the quality requirements, factory specifications, health and safety requirements, and environmental and legal aspects of your business. The resulting optimum recipe is directly translated into a practical product and is synchronized with labelling data and safety data sheets when needed.

BESTMIX[®] Formulation enables you to easily manage nutritional values, production parameters, recipe constraints, available ingredient stocks, purchasing positions, material cost prices and other conditions. This means you can guarantee to deliver the best product for your customers, at the lowest cost, under any condition – and at any time.

bestmixsoftware

From idea to product specifications

BESTMIX® Recipe Management is an agile software package that supports you from first concept to final specifications. It allows you to fine-tune each phase in the process to quality requirements and company interests.

The single-user basic package and the centralised database (Microsoft SQL) means you can manage your data of ingredients, recipes and product specifications in a secure, structured way. The sector-specific modules enable you to expand gradually your capabilities to whatever your particular business requires.







Four reasons to choose Adifo

- We are familiar with your specific business processes and challenges.
- We arrive quickly at the most appropriate software solution, containing many sectorspecific functions
- We follow closely the latest developments, trends and legislation.
- We incorporate proactively all of this sector knowledge into our software.

So you're always one step ahead.



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