macs controlling

# Rainbow Chicken takes solid steps toward higher profits with macs Controlling

RAINBOW

## World-class poultry producer uses flexible costing software with multi-level disassembly analysis to focus on profitable products, streamline processes and create a profit-optimized sales plan.

In the poultry industry, determining accurate production costs is a key factor in developing a product mix that optimizes company profitability. To do this, producers need a precise method for analyzing costs associated with the complex processes of disassembly and assembly of poultry products.

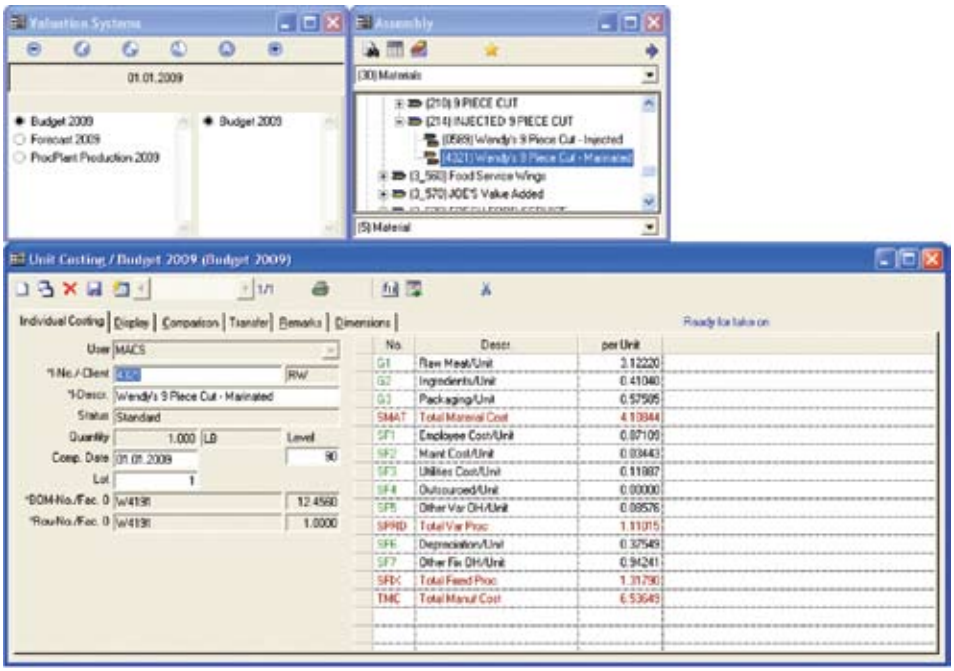
At Rainbow Chicken Ltd., South Africa's largest processor and marketer of chicken, the need to improve profits prompted the search for a detailed, yet flexible, costing system to help rationalize products and their production location. The fully integrated broiler producer slaughters more than 4.2 million chickens per week to create fresh and frozen chicken products at three primary production plants and one further processed food plant. With stock keeping units (SKUs) numbering in the hundreds at some plants, Rainbow sought a tool to help it focus on profitable products while eliminating costly ones.

After considering several applications, Rainbow chose macs Controlling software for the protein industry because it was the only system that could account for costs associated with the company's multiple levels of bird disassembly and assembly.

"Most businesses have a single-level disassembly costing model, but multiple level disassembly is quite unique and complex," says Paul McLaughlin, group commercial manager for Rainbow. "Not only does macs Controlling offer a detailed view of product costs, it also supports reverse demand planning so we can show sales the impacts of its forecast on our processing plants, raw materials requirements and overall profitability."

# Software drills into process details

Rainbow's three poultry processing plants are located in Hammarsdale, Rustenberg and Worcester, with the processed food plant situated near the Hammarsdale processing facility. The company operates in the local retail, wholesale and food service channels, with food service comprising 33% to 38% of business. It is the only supplier of the popular Cobb-Vantress chicken breed in the Southern Hemisphere.

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To provide South African customers with a wide range of poultry products, the processing plants make from 40 SKUs up to 300 SKUs. Within such a complex environment, Rainbow's 13-year old single-level costing model could not reflect costs in enough detail for confident use by sales or R&D. In comparison, the new macs Controlling system converts every bird bill of materials (BOM) into a multi-level disassembly structure that allows users to see the business process and costs in action, while also incorporating assembly processes.

"With our legacy system, we would cut the bird into pieces, using up to 13 cut codes, but macs Controlling allows us to keep disassembling each piece – removing skin, cubing, skewering, etc. – to reflect our actual production processes," McLaughlin describes. "Within the multiple disassembly levels, we may also introduce an assembly function like injecting or marinating. Macs Controlling lets users drill down into the costs at various levels with the click of a mouse."

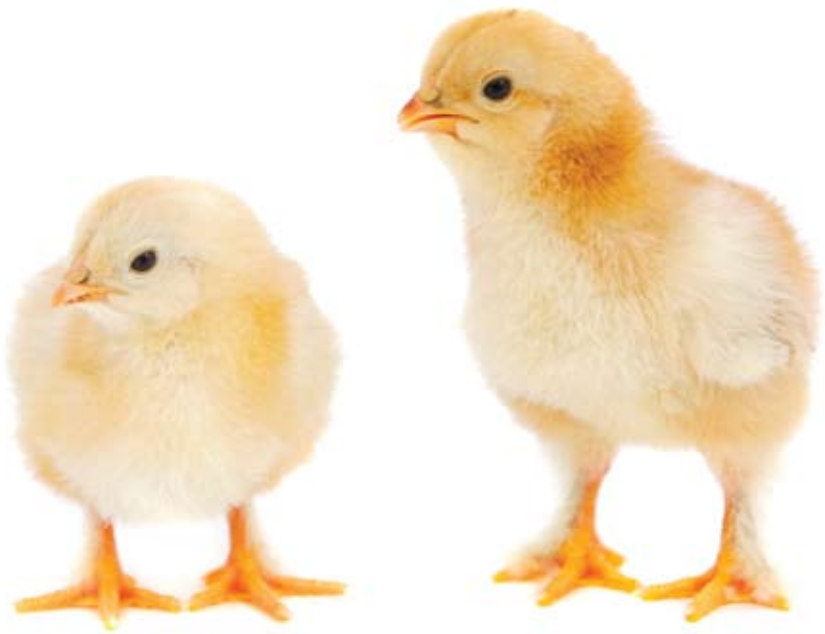
Macs Controlling creates cost centers representing the disassembly/assembly process and identifies cost drivers within each. Costs are planned against these cost drivers and split between fixed and variable values. Macs Controlling's quantity-based model and sophisticated allocation methodology also allows accurate inclusion of support department costs in the primary cost center's driver rate. A product (SKU) incurs costs based on the quantity of resources it consumes as it proceeds through the disassembly and assembly processes.

Also, when costing the BOM, macs Controlling adds further precision by crediting the product's cost with the market value of trimmings and other by-products based on quantity (weight) or on a pre-determined deeming percentage. If by quantity, the cost per pound of each disassembled portion is considered the same and the by-product value is distributed according to weight. Assigning a deeming percentage lets Rainbow distribute by-product value in relation to the price potential of each BOM item. For example, a primary product might have a factor of one, while secondary products might have factors of 0.9, 0.8, etc.

"We are able to show our sales staff how products attract costs at each of the stage of the process, which is a big, big plus," explains McLaughlin. "Sales can see the cost impacts of, for example, a 16% trim coming off the bird at a specific level of disassembly. Because the costing scenario is so visible, the data is not questioned and profitability analysis by customer or product is not questioned."

# Transparent data yields business process discipline

Rainbow began its migration to macs Controlling by implementing the application at the Hammarsdale processed food plant, which focuses on assembling poultry products from the processing plants into freezer to fryer coated, filleted and bone-in products. Macs Controlling has worked "very, very well," says McLaughlin, in helping Rainbow understand food plant costs – so much so that the software's return on investment (ROI) there will be achieved in 18 months.



Use of macs Controlling at the food plant has helped enforce better R&D discipline. More detailed cost research is now performed up front, not just for the raw meat but also for product packaging, to ensure a profitable product launch. Also, analysis of existing products made at the food plant helped in the discontinuation of 20 products within two months of implementing macs Controlling.

"Some of our fully cooked products had been over specified for the market, and macs Controlling put this in a report format showing how difficult it would be to make them profitable," McLaughlin describes. "Because macs Controlling allows such thorough analysis of product configurations, we can avoid over specification in the future by using the software to assess new products for commercial viability."

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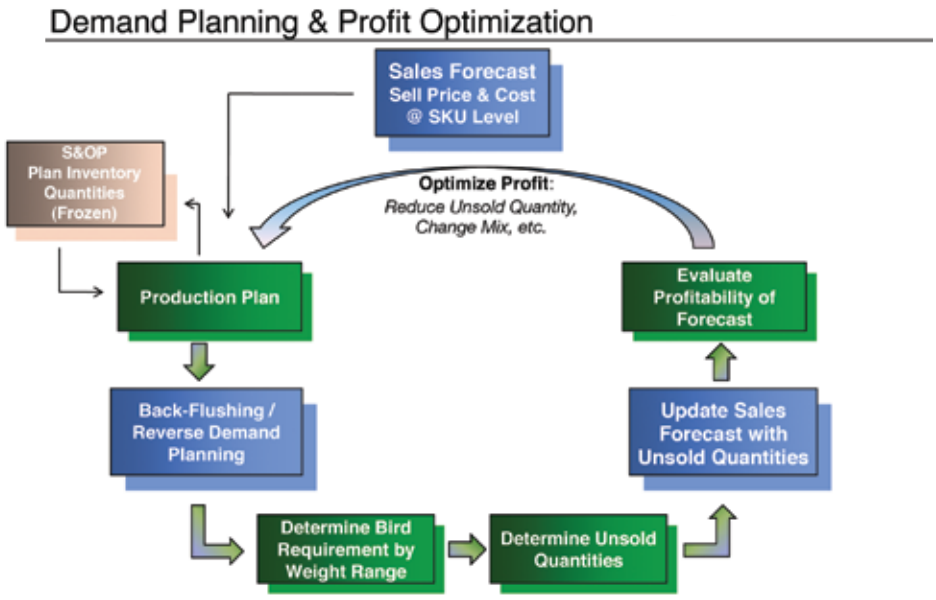
In addition, by adhering to the discipline macs Controlling requires in terms of routines and costs, Rainbow determined that less people were needed on its food plant production lines, resulting in labor savings from elimination of redundant positions.

# Reverse demand planning takes profits a step higher

Accurate costing is an important component of profit optimization for Rainbow, but the company anticipates even more success from leveraging macs Controlling in its processing plants. Rainbow will use the costing system to support a two-stage rationalization effort that starts with eliminating less profitable SKUs and moves into determining which plants can most efficiently make those profitable products.




Not only will macs Controlling help eliminate less profitable products by reflecting costs accurately, its reverse demand planning (RDP) functionality will help focus sales efforts and enable optimization of the entire supply chain. RDP is an iterative process within macs Controlling that lets Rainbow evaluate the profitability of particular sales forecasts by working back

through assembly and disassembly to establish bird weight requirements.

"We can take the forecast through the reverse of the BOMs, building it back up to a whole bird so we determine raw materials requirements," McLaughlin explains. "You immediately and clearly see whether sales has oversold certain portions, while underselling others.

"Our sales team can see that we have, say, only 20,000 birds, but it has sold the equivalent of 40,000 birds' worth of wings. They can then better negotiate pricing and sales efforts to create a forecast and inform a production plan that sells a whole bird at a higher price than its constituent elements."

Rainbow will also use RDP to improve productivity and profits at its processing plants. Macs Controlling can identify products with similar weight requirements to focus each facility on birds of a certain weight.

"Because Rainbow is heavily involved in food service, our products are weight sensitive, so we use birds of very specific weights," McLaughlin explains. "You can't have the whole bird bell curve in every plant, so we want to align the products accordingly to the bird sizes that route to those plants."

In addition to informing the most profitable production plan for each facility, macs Controlling will help Rainbow better manage its inventory of frozen poultry products by evaluating forecast impacts on production plans and inventory levels. The overall result of using macs Controlling, says McLaughlin, is higher profits, because sales, production, marketing and R&D are communicating more effectively about more accurate data.

For more information about macs Controlling products and services, call the macs Sales Information Center at +1(800) 946 3160 or visit **www.macscontrolling.com.**

More information about Rainbow Chicken and its products can be found at **www.rainbowchicken.co.za**.