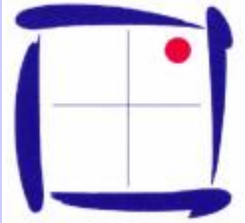


Case Study: Quoting for complex operations – costing one-off & batch jobs for aerospace and automotive products



The Challenge

Plasma and Thermal Coatings Ltd receive requests for quotations for many diverse coating applications within the aerospace and automotive industries. Typically these quotations are for one-off jobs, however these may subsequently become volume production orders which must be delivered at the quoted price.

- Ø Accuracy is of paramount importance as an unprofitable price may result in a high volume order whereas an overstated price would result in lost business;
- Ø Speed of response is of great importance to aerospace and automotive customers and hence time taken to create a quotation is very limited;
- Ø These problems were compounded by the ability of the company to produce the same coating via more than one process route.

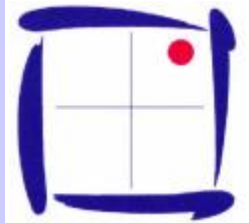
The challenge therefore was to provide a fast reliable quotation for one-off and volume orders that took into account the differing costs of the different process routes.

The Solution – an ABC Quotation Costing model

We proposed a costing model using standard software and incorporating a hybrid activity based costing methodology. The software for which the company had adequate in-house skills was Excel so this was chosen as the final “calculation engine”. Using Excel's formatting capabilities, it is also possible to produce acceptable output as part of the customer quotation package. The model needed to incorporate:

- Ø Material and labour costs, for which they had accurate data;
- Ø Costs associated with specially purchased materials;
- Ø Costs related to set-ups and batch, order and delivery quantities;
- Ø Costs associated with customer support including certification.





What we delivered

We assisted Plasma and Thermal Coatings in producing a quotation model incorporating such costs as procurement, design, set-up, stock holding and other overheads. Furthermore the model linked to their existing database of materials prices and characteristics.

We applied our expertise in Activity Based Costing (ABC) to interview staff to understand the cost drivers in the business. Using our own ABC software we translated staff activities into costs associated with the identified cost drivers to provide the data for inclusion in the Excel model.

We used our Excel skills to create a model that replicated the format and feel of their existing quotation documentation, yet contained the elements needed to utilise the more refined data.

We analysed the production spray booth characteristics including space occupied, power consumption, extraction, recycling and other relevant information. From this data we established further cost implications that were incorporated into the model.

We then tested the results from the model against their conventional costing and quotation methods to compare and contrast the results, in consultation with their experienced quotation staff.

Finally we handed over the model with clear descriptions of linkages and the data that requires periodic updating.

The Benefits

Plasma and Thermal Coatings Ltd now has the ability to produce accurate, faster quotations that reflect the realities of prototype and batch production. Prices can be differentiated between order sizes, number of delivery points and other factors that were hitherto difficult to cost.

Importantly, the company now has the ability to compare process routes for any given order and can thus optimise process routes and batch sizes to suit the current plant loading.

The whole project was delivered to a fixed price and in the agreed time.

Quotation input	
New Job?	<input type="text" value="Y"/>
No. of Quotes	<input type="text" value="4"/>
Sales Visits	<input type="text" value="4"/>
Tech Support Visits	<input type="text" value="0"/>
No. of parts	<input type="text" value="200"/>
Works Orders	<input type="text" value="15"/>
Supplier Invoices	<input type="text" value="10"/>



ValueAdding.com ABC software simplifies cost collection and analysis