Martex Universal Mileage Calculator.

"How many square metres can I get from a kilo of powder? To my surprise, there are no web sites I could find to calculate this easily. There are some calculating tools but I felt that a tool for this purpose should offer more than mileage, why not incorporate the ability to advise the cost of coating a specific area and the amount of powder required to do this?

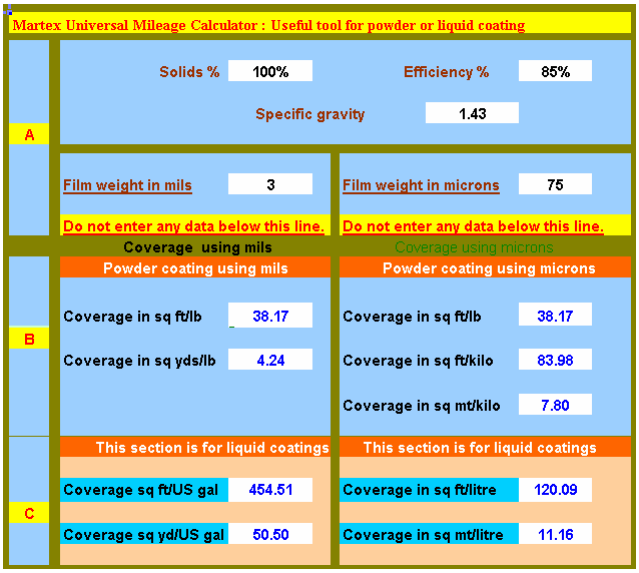
Using a spreadsheet to carry out the calculations the Martex Universal Mileage Calculator aptly named "POWCAL" came into being in 2002. As it has been found to be a great asset to our own customers I thought that other powder applicators might find it a useful free tool for their business.

Powcal is a great additional tool for those who perform powder coating. It can be used in several ways:

1) **To calculate the amount and cost of powder required for a specific area.**
2) **As an on going cost performance check. Input of current film weights being obtained can be compared to the original costing.**
3) **As a tool to compare costs at different film weights.**
4) **Comparison of two powders with different specific gravities.**
5) **To check if there is a cost saving by changing to a powder with lower specific gravity but higher cost.**

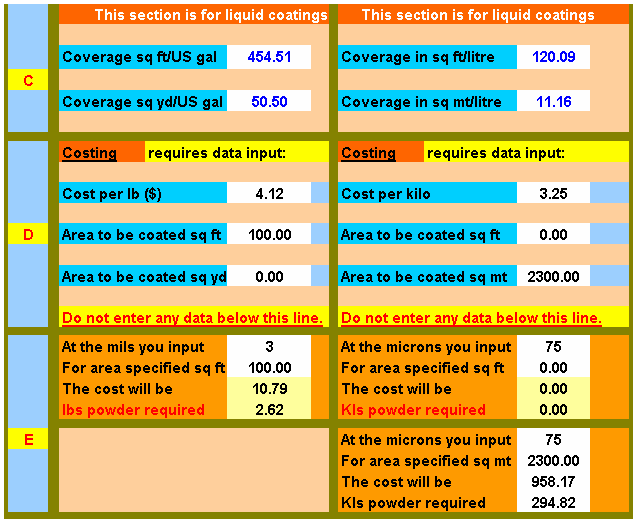
Operation: The Martex Universal Mileage Calculator requires some basic data to be entered by the operator i.e. specific gravity of the powder (obtainable from your supplier), efficiency of the application plant (approx 85% for automatics and 50% spraying to waste), solids content (powder 100%). The operator then has the choice of choosing to work in mils or microns when a choice has been made the calculations proceeds automatically to give the square footage or metres that will be obtained per kilo or pound weight of powder used.

{Photo 1}



The next step is to add the cost of the coating material which can be sterling, dollars, euros or any local denomination you wish to work with. Moving to the section requiring the area that is to be coated, input a figure into one of the two spaces provided (it would be helpful if a zero was placed in the one space not being used). There is no more information required. The mileage chart will automatically calculate the cost and amount of powder required for the area and film weight specified.

{Photo 2}



Example: A customer informs you that he requires a quotation for powder coating 2300 sq mt of panelling. The powder supplier information is the cost of the powder will be £3.25 per kilo. He also states that the S.G. for this powder is 1.43. From previous experience, we know that the efficiency of the powder plant is about 85% and that we aim to apply a film weight of 75 microns. Inputting this data into the Martex Universal Mileage Calculator, results in the answer that we will coat 7.8 sq mt of surface from one kilo of powder.

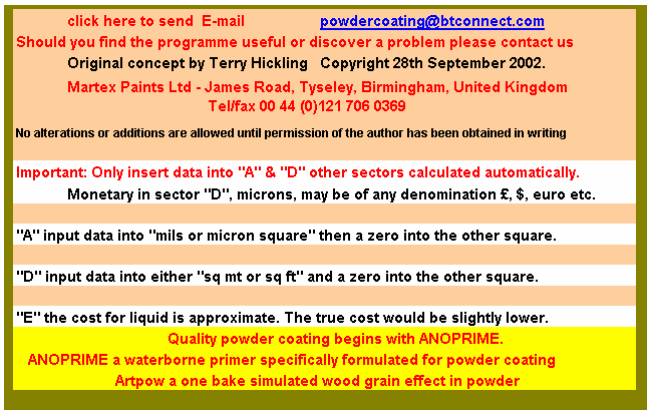
The calculator also advises that to coat 2300 sq mt at 75 microns will require 294 kilos of powder and the powder costs will be £958. Incorporating this into the additional costs of powder coating, electric/gas, transport, labours etc. we can now work out a more realistic quote.

The quote is accepted and two weeks into operation, our shop floor manager informs us that the powder is being applied at 85 microns instead of the specified 75 microns. What is the extra on-cost? From the original spreadsheet calculations we alter the film weight from 75 to 85, and find that the powder requirements have risen from 294 kilos to 334 kilos and costs have risen by 12% costing us an extra £127. If we had checked film weights twice a day and use the information in conjunction with the Martex Universal Mileage Calculator business may possibly prove to be more profitable.

For individuals who require the same information for liquid applications (see section C), "POWCAL" advises the anticipated coverage per litre of liquid. The input will be different i.e. solids content could be as low as 20%, specific gravity would also be lower. Do not forget to obtain a specific dry film weight, up to five times applied weight in liquid may be required. The data obtained is approximate, but sufficient for most purposes.

The last section of "POWCAL" deals with how to use, copyright and contact information.

{Photo 3}



To obtain your copy, download Powcal.xls from the internet. http://home.btconnect.com/powdercoating/powcal.htm. Note there is no www. and it ends in .htm.

The Martex Universal Mileage Calculator is offered free of charge as a tool that may prove to be helpful in your business. We offer no warranties or guarantees as to the accuracy of the item and therefore cannot accept any responsibility for any problems or losses arising from its use. We would be grateful if you find any problems or miscalculations or if you can improve the presentation of the calculator (possibly another language) or have any suggestions that may add to its overall use we again would be pleased to hear from you.

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