AUTUMN 2019

NewsSheet

The latest news and views from Potters, fine limit sheet metal manufacturer and finisher

Check out Potters' new website: www.llpotters.co.uk

Lipstick, Powder or Paint?

Largely the answer to this is a personal choice, unless specified by your customer or by regulations associated with the end use of your components. Should the choice be open to you we explore below some comparisons to provide some insights for you to consider.

ENVIRONMENTAL

Powder Coatings have been developed to be less harmful to the environment than wet paints.

EFFICIENCY

The transfer efficiencies of powder coatings are better than wet paint. Due to the electrostatic application of powder coating, the coating is attracted to the surface of the metal leading to less wastage than the traditional directional spraying of wet paint applications.

Powder coating is normally a one coat process that can be applied without the need for a primer to suitably prepared substrates such as with Iron Phosphate on steel and zintec or a Chromate Conversion Coating such as Surtec or Iridite on aluminium.

FILM THICKNESSES

Powder provides much thicker overall coatings which are usually more durable as a result. A typical powder system for commercial applications may give film thicknesses of 80 to 120 microns whereas a wet paint system somewhere in the region of 25 to 35 microns.

So, when you're designing sheet metal parts that are going to be assembled after finishing be sure to allow sufficient clearances.

SURFACE EFFECTS

The most common effects in use within powder coatings are Smooth, Texture and Leatherette. Each of these can be produced in a range of gloss levels, as indeed can wet paints, although an equivalent to leatherette is not really available in wet paint.

Should the surface need silk screening afterwards then obviously smoother surfaces are easier, avoid silkscreening onto textures such as leatherettes, silkscreening on these types of surfaces can still be achieved but please do not make the print too fine in these cases.

SMOOTH

A smooth wet paint will always give a smoother outcome than powder coating because of the differences in application and film thickness. Typically a smooth powder coating will actually show signs of a slight rippling effect, commonly referred to as 'orange peel'. The flow of powder coating is being improved by the manufacturers and some improved flow products can be sourced but at a premium to cost at present.

With wet paint, getting a beautifully smooth surface can also have its difficulties. Filling fastener heads if required to be witness free will increase labour, as will inter-coat preparation of the surface.

COST OF MATERIALS

Powder coatings are more cost effective than wet paints to purchase and have longer shelf lives, leading to less likelihood of wastage on parts that are not regularly produced. Where a desired colour is not necessarily specified it is worth considering asking us for any colour matches we have in stock, again to avoid unnecessary costs.

COST OF PREPARATION

The costs of finishing your metal components are not always solely affected by the paint or powder being applied.

POTTERS
INNOVATORS IN SHEET METAL COMPONENTS

If the component is welded, then the dressing of the welds afterwards is critical to the final cosmetics of the finished component. Dressings of welds is far more labour intensive in preparation for smooth finishes, especially the higher the gloss. So, for the most cost effective parts, minimise welding where possible and use a texture or leatherette powder to reduce labour intensive preparation processes.

- Smooth - Highest Range Cost
- Texture - Mid Range Cost
- Leatherette - Lowest Range Cost

We hope that this gives you some pointers as to the best design for manufacture that you can achieve. Of course, we welcome the opportunity to discuss your own requirements in more depth and to show you examples of different options. Seeing the differences first hand can often be the best guide!

As for the Lipstick, well that's entirely your choice!

IN THE NEXT ISSUE...

- ★ New investments in manufacturing technology.
- ★ Tapping technology, what's best for you?
- ★ What's in the box- a look inside the new unit.

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POTTERS

Potters are getting hotter

LL Potter & Sons (Taplow) Ltd acquire Thermo Products Ltd

Thermo Products Ltd was founded in 1948 and has been manufacturing heaters in the U.K ever since. Thermo Products are the country's leading supplier of Thermo tube heaters, and is the ideal solution to providing low cost background heat in either 110v or 240v supply.

Potters have had a long standing relationship with Thermo, which has been very beneficial for both companies over the years. Potters have been manufacturing specially designed heater guards that cover the heating tubes for over twenty years.

Due to managerial changes in the Thermo Products business structure, a joint venture between Thermo and Potters seemed a logical way forward. These ongoing discussions culminated in Thermo Products coming under control of Potters late in 2018. Manufacturing, administration and sales have been rationalised over the last year, securing Potters with its ongoing business on the guard business, and Thermo keeping its manufacturing base in the U.K helping secure the "Thermo" brand credentials.

Thermo tubes are ideal for providing background heat for warehouse, store rooms, garages, greenhouses etc. Check out their website on **www.wearetubularheaters.co.uk** or **www.thermoproducts.biz**

New Investment in Powder coating plant

Here at Potters we pride ourselves on being able to offer our customers the facility of a one stop shop for all its sheetmetal fabrication requirements.

Part of that process is to be able to supply on site, the cost effective finishing process that powder coating offers. Potters have been powder coat finishing for over 20 years, and has gained a level of expertise in this area which has become a trusted part of the service we provide. Keeping this process in house at Potters helps to reduce external costs that would need to be passed on to customers and importantly keeps quality control under our own supervision.

The very process of powder coating although fairly straight forward, in order to be cost effective needs to be productionised. Using an automated conveyor line to hang components from and reciprocating powder application guns, provides these efficiencies, which can be passed on to our customers. The system at Potters boasts an automated line of over 500 feet.

Due to the very nature of the processes involved, the machinery used in an automated powder coating plant are continuously being exposed to a barrage of cleaning and constantly changing temperatures as the components pass through a triple stage Iron phosphate washing process, drying oven, powder application and then finally a high temperature stoving oven on an ever continuous loop. This wear and tear needs regular planned maintenance and over time will obviously require upgrading.

Late in 2018 Potters took the decision to upgrade its entire conveyor unit, including motors, track and housing. Albeit once finished it really didn't look too different to before, but at a cost of £45,000 was by far the biggest investment of 2018.

I'm sure this new investment will see us good for another twenty years at least.

'8000' reasons to choose Potters

Due to natural business development and the ever changing face of our customers requirements, additional demands were being placed on the infrastructure at Potters.

During the last few years it was becoming clear the current layout of the factory needed updating and the workflow process reviewed in order to satisfy our customers requirements. Several plans were reviewed and investigated in order for Potters to provide the services and facilities being required by our customers.

By far the obvious choice was to increase our floorspace to provide the flexibility to provide better manufacturing efficiencies and to offer the additional workspace to service the extra work being offered to us by our customers.

Since the end of 2018 the factory units neighbouring our existing site has been undergoing a complete refurbishment, and we are proud to confirm that in the summer of 2019 we finally took hold of the keys and started to move in. The new building is 8000 sq ft, this takes Potters total floorspace up to 33,000 sq ft.

There are some grand plans for the expansion process. These will need to be undertaken in a controlled process and planned meticulously. This is already underway and the benefits are already being felt. There will be more details on this and our new investments in our next newsletter in early 2020.

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