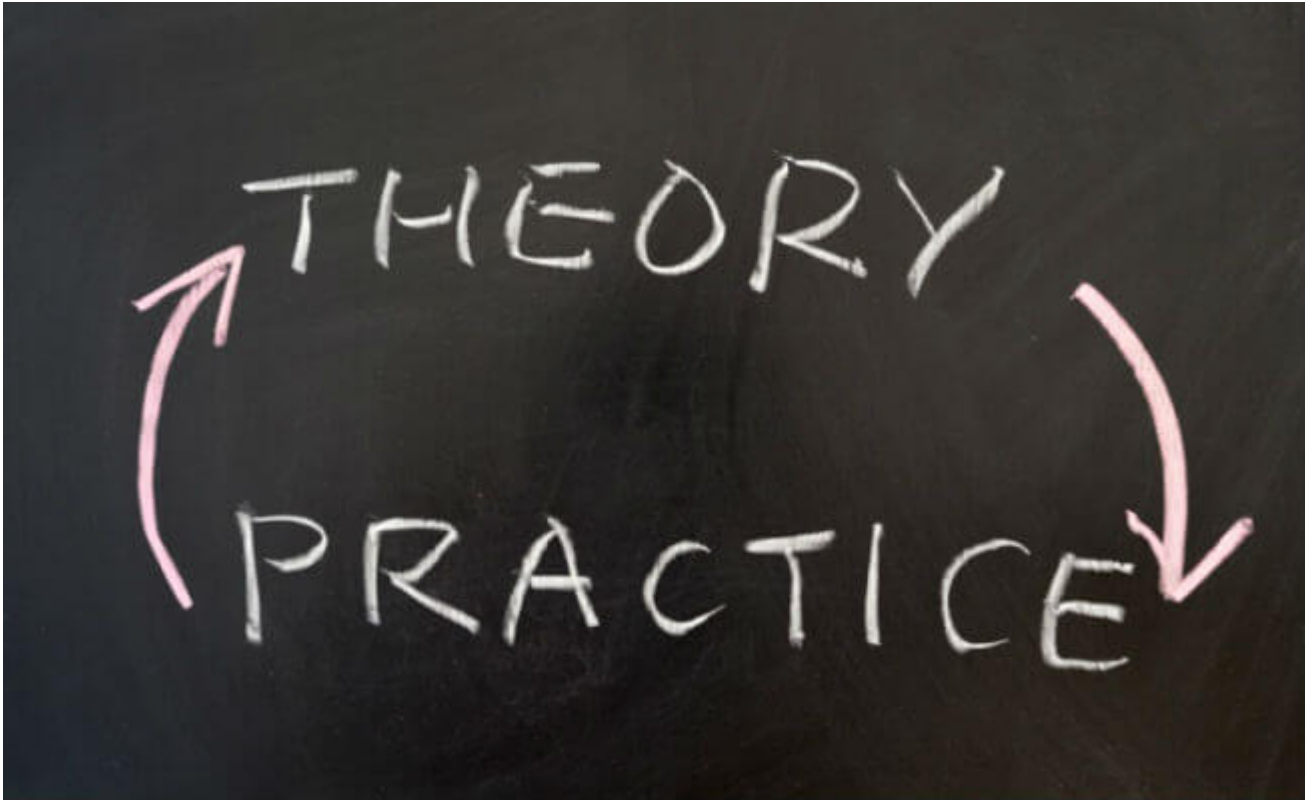


## **Adhesive process choices - "That worked in practice, I wonder if it works in theory?"**

Product data sheets (PDS) and specification documents are very useful when deciding what material or piece of equipment to consider for your new application. Without doubt, a survey of product datasheets for, say, an adhesive will allow you to narrow down the candidate list from many thousands to, hopefully, a handful. This selection can then be put forward to practical testing for your application.

What we would never recommend is the selection of a product based purely on the data sheet alone. For an adhesive or a coating, most of the data comes from testing done in the lab, from test procedures which are well understood, usually in the public domain, universal and repeatable. This information is great for characterising the material – how hard or soft, rigid or elastic, how much force will it take before it breaks, and how much will it stretch before it does so.

## Adhesive process choices - "That worked in practice, I wonder if it works in theory?"



In many cases, this data needs interpretation and extrapolation to fit with your circumstances – where simple statements rarely match complex reality.

- This adhesive bonds to ABS and PC – but will it bond to PMMA? To glass? Why does the PDS not say anything about this? Because it will not adhere, or because it was not measured?
- How does the published pot life relate to the working life I need for my process?
- How does programmable accuracy of that machine relate to actual repeatability and tolerance?

# Adhesive process choices - "That worked in practice, I wonder if it works in theory?"

And the manufactured tolerance of the parts I am using it on?

- The stated intensity of that UV curing lamp looks strong – but is it the correct wavelength for my material? How was it measured?
- How will the published cure time differ with mass? With temperature? With humidity?
- The performance of that adhesive looks like it will more than meet my needs – but how will my production manager fit it into our assembly process?

A good supplier will be able to add significant knowledge to the PDS facts. Years of experience and seeing many successful implementations will have given him insights which aren't published on the PDS. *Yes, that adhesive bonds well to glass, even though the PDS does not mention it. That UV curing lamp will cure that coating well, even though the PDS mentions another wavelength. That adhesive will be a better candidate for you, because it will not cause a bottleneck in your production.*

The question "That worked in practice, I wonder if it works in theory?" is rhetorical, of course, but it is this acumen and ability to look at your application holistically, from a different perspective, and *beyond the data sheet* is where we deliver a great deal of value. We have the pragmatic experience to be able to recommend materials and equipment for your evaluation, or to reinforce your choices. We look forward to talking to you.

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# **Adhesive process choices - "That worked in practice, I wonder if it works in theory?"**

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