

# FORMULATION DESIGN DEVELOPMENT AND SCALEUP

Do you need help to design more robust tablet formulations?  
Want to know how to improve your formulation blends during scale-up?

We can help you design more robust tablet formulations by:

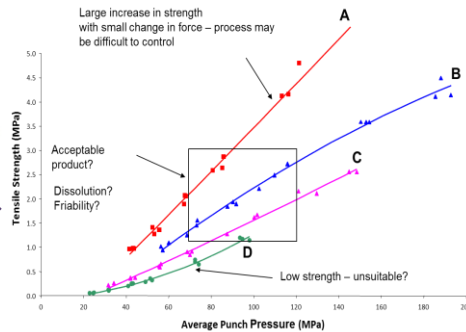
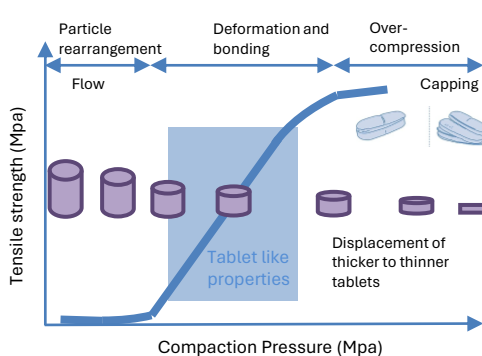
- Using as little as 20 g of powder blend to assess scale up suitability of early prototype formulations.
- Screen DoE batches to provide tableability data for statistical analysis. Get the most out of small batch sizes.
- Assess the key functional properties of your blends.
- Discover if the formulation is suitable for commercial production and act early if its not.

How do we do it?

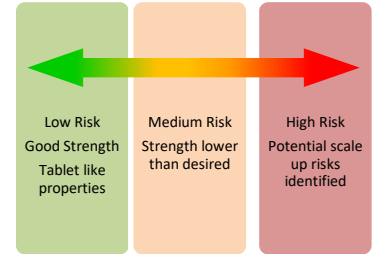


Compactability and Tableability Tests:

- Our Compaction Simulator is used to produce compacts across a range of compression forces. We can compare different variables and assess the impact e.g. formulation changes, process changes, environmental effects.
- Tensile strength is measured to assess the bonding within the compact. If the compact is of a low strength it will impact on key quality attributes and reduce the chances of a successful scale up.



Data will produce 'finger-prints' for each batch tested. This information can be processed to yield values for compression to understand the product.



Identify formulation risks to aid development.

## Example Case Study

- A formulation screening on 3 lead formulations showed that two had the potential to compress at production speeds.
  - We concentrated efforts on lead formulation and one back-up.
  - The compaction predictions reduced number of scale-up batches required and associated analytical costs.
  - By choosing scalable formulation removed need for reformulation at Phase II and bioequivalence study.
- ✓ This Project saved our Client development time and cost saving of 3 Months!

If you are experiencing formulation design or scale-up issues and would like advice on how to overcome them, please contact us for further information.

## Contact Us

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