

# Engineering solutions

Balancing performance, cost and sustainability

SERVICE OVERVIEW



There are many aspects to think about when creating your product's packaging, such as performance, sustainability and cost. Packaging should not only contain and protect the product but also attract the customer's attention. Sustainable packaging is important to customers and consumers, so it's essential to balance sustainability with cost and performance. Assessing and improving packaging costs can help boost your profit margins and give you an advantage over your competitors. It's important to carefully analyze and make informed choices. Our team of packaging engineers can help you achieve the right balance.



## Physical and visual performance

- Protect products during transportation
- Deliver positive and premium unboxing experiences
- Influence consumer behavior at the point-of-purchase



## Material and environmental sustainability

- Leverage more sustainable materials
- Optimize packaging size
- Reduce materials waste
- Limit physical footprint



## Material and operational costs

- Increase efficiency of packaging operations
- Optimize material costs
- Optimize dimensional weight
- Limit cost of damaged shipments



Smurfit Westrock Packaging Solutions has invested in experienced people who've built proven processes that leverage investments in tools, equipment and facilities. Our packaging engineers design custom solutions that meet your unique requirements by balancing form, function, aesthetics, sustainability and cost.

## Our core capabilities:

### Structural design

Our design experts used 3D CAD technology to find the right mix of both for your application.

- Weight and dimension
- Mixed materials
- Material neutrality
- 3D CAD
- Minimize material waste
- Load optimization and pallet patterns

### Graphic design

Our graphic designers marry shape and structure to brand and experience.

- Optimize artwork for packaging
- Applying brand to packaging
- 3D graphics mock-ups
- Primary and secondary packaging graphics
- Two-sided design and print
- Design for structure
- Design planning and layout

### Prototyping

We rapidly prototype your packaging design to reduce risk and accelerate time-to-market.

- Printed or unprinted
- Cutting tables
- Digital drawing
- Ready for testing
- Visualize size
- Test fit products
- Automation preparedness
- Time study readiness

### Testing

Our testing experts can perform standard tests and develop custom tests in our labs to prove concepts, speeding time to market and reducing risk.

- Drop test
- Rotary vibration testing
- Box compression testing
- Material testing
- Environmental condition testing
  - Humidity
  - Temperature / Cold chain
  - Dust

### Operational audit

Our experts examine your site, equipment, processes and materials to identify opportunities for cost savings and efficiency gains.

- Site audit
- Equipment audit
- Time surveys