PRODUCTION READINESS & APPROVAL CHECKLIST

> ⚠️ **CRITICAL APPROVAL RULE**
>
> **Never approve production from a visual PDF alone.** Proper manufacturing standards dictate that all designs must pass physical dimensional checks, fold consistency, glue integrity, and real-world load testing before mass production.

1. Structural & Dimensional Integrity

- [ ] **Gusset Depth & Efficiency Optimization**

  Confirm side gussets are kept within standard operational limits (ideally **≤ 120mm**). Over-deep gussets waste material, create slack bags, and push machinery limits.

  Risk: Pushing past 120mm drops fold consistency and increases waste by 12%.

- [ ] **Tri-Point Stress Area Reinforcement**

  Verify the strength at the exact intersection where side folds, bottom folds, and glue joints meet. Avoid pairing deep gussets (e.g., 150mm) with thin paper (e.g., 100gsm) to prevent instant tearing.

  Fix: Insert rigid bottom cards, upgrade paper stock, or adjust machine tension.

- [ ] **Bottom Style & Handle Anchor Strength**

  Ensure the chosen bottom folding style and handle glue/anchor points are structurally sufficient to support the specified post-packing weight limit.

2. Material, Load & Machinery Alignment

- [ ] **Material-to-Load Validation**

  Check that the paper basis weight (GSM) has been explicitly matched to both the volume of the bag and the intended post-packing weight of the product.

- [ ] **Loading Method Compatibility**

  Confirm the bag structure accommodates the client's assembly line loading method (e.g., manual insertion vs. high-speed automated packing).

- [ ] **Manufacturing Line Tolerance Check**

  Ensure design specs match the actual destination machinery. (Note: Automated lines handle different physical tolerances compared to flexible/manual setups).

3. Artwork & Premium Finishes

- [ ] **Coating & Crease Protection**

  Verify proper scoring is applied to all hard creases on heavy laminations. Premium finishes can whiten or crack under stress without proper prep.

- [ ] **Artwork Safe Zones & Distortion Check**

  Confirm critical artwork, logos, and text remain strictly inside designated safe zones. Expanding side folds can cause severe logo distortion if placed incorrectly.