D-Terra Solutions Product Realization Process

PROJECT PLANNING

- Kick-off meeting
- Customer needs mapping
- Initial product spec development
- Develop Product Launch Plan
- Identify and assign resources and responsibilities

EXIT REVIEW

CONCEPT DEVELOPMENT

- Product Design
- Research
- Identify potential manufacturing supply partners
- Prepare supplier quote package (RFQ)
- True cost of ownership review (TCO)
- Supplier assessments and supply partners selected
- Design and Manufacturability reviews
- Initial DFMEA
- Branding / Visual Brand Language

EXIT REVIEW

ENGINEERING DEVELOPMENT

- Engineering / 3-D Modeling
- BOM and SKU development
- Design Manufacturability and cost reviews
- Manufacturing / Process Engineering
- Manufacturing Plans
- Quality Plans
- Prototypes builds and testing
- Build validation testing and DFMEA
- Finalize BOM and specifications
- Inventory and logistics strategy
- Finalize manufacturing contracts
- Packaging Development

EXIT REVIEW

MANUFACTURING READINESS

- Source production materials
- Tool design and build
- Procure factory equipment and fixtures
- Qualify components and subassemblies
- Set-up and debug equipment, tooling, build documentation, and fixtures
- Hire and train factory personnel
- Conduct tooled engineering builds
- Build validation testing, PFMEA, FAI
- Manufacturability and cost reviews
- Validate processes

EXIT REVIEW

PILOT RUN & PRODUCTION

- Verify factory is ready for pilot run with pre-pilot build
- Conduct pilot build
- Finalize PPAP and PVT studies and tests
- Ship pilot units to and verify out-of-box performance
- Achieve client approval to start production
- Update BOM and specifications
- Initiate production ramp up
- Freight carrier selection
- Shipping, Logistics, Warehousing and Distribution

EXIT REVIEW

POST LAUNCH MANAGEMENT

- Post launch management team
- Supplier performance management metrics in place
- Continuous improvement process initiated (cost, quality, delivery, service)
- Factory outgoing inspection
- Capacity management
- Logistics management
- Routine supplier audits

D-TERRA SOLUTIONS