

SOLUTION BRIEF

Manufacturing services across the product lifecycle

Helping companies enhance competitiveness and drive growth

KEY BENEFITS

- Align manufacturing strategies with each stage of the product lifecycle
- Enhance competitiveness during product introduction, growth, maturity, and decline
- Gain the agility to ramp up and down efficiently and cost-effectively as demand fluctuates
- Build innovative, high-quality products faster, at scale
- Recoup value from scrap, materials, parts, and finished goods as demand slows

The product lifecycle extends well before and beyond production. Aligning manufacturing strategies with each stage of the product lifecycle can enhance competitiveness and drive growth during product introduction, growth, maturity, and decline. The right outsourcing partner can help address the challenges and opportunities associated with these stages, providing flexible manufacturing solutions that give you the agility you need to ramp up efficiently, meet demand as it accelerates and levels off, and ramp down in anticipation of what's next.

Prepare strategically for production

Speed is of the essence when introducing new products, but it must be cost-effective. The decisions made prior to production can have a significant impact on cost. Prepare strategically for production with:



Design for manufacturing (DfM)

that supports the highest yield at the fastest time to market



Design for manufacturing and assembly (DfMA)

that lessens the need for extraneous materials and assembly steps



Design for testing (DfT)

that makes products easy to test, troubleshoot, and verify



Design for automation (DfA)

that lowers costs, increases efficiency, and improves quality and consistency



Design for reliability (DfR)

that ensures products perform as expected throughout their lifecycle

#1 Manufacturing and supply chains top the list of C-suite cost management initiatives¹



Create revenue streams, reach sustainability goals, avoid compliance risk, and bolster your brand with expert **circular economy services**

Scale operations to capitalize on rising demand

Anticipating demand requires forethought with agility in mind to increase production without bloating expenses. Manage escalating production volumes cost-effectively with:

- Design for scale (DfS) to meet demand without expensive design modifications or manufacturing delays
- Quality assurance processes that maintain consistent product quality at peak demand
- Supply chain solutions that seamlessly accommodate shifts in volume, location and parts/materials availability
- Strategic supplier relationships to provide options and mitigate the risk of potential disruptions

CASE STUDY

A smart meter company engaged Flex to help them ramp up production to meet market demand.

The results:

- 6x** improvement in product ramp schedule (time to market)
- 500%** increase in production volume
- 40%** reduction in product costs
- 6x** reduction in manufacturing defect rates demand

Focus on cost optimization and asset recovery

As demand plateaus, production becomes more predictable, and cost optimization dominates. Manufacturing can still be constrained by interruptions, however, making the following indispensable during the maturity phase:

- **Lean methodologies** that help eradicate bottlenecks long after production has commenced
- **Integration with critical suppliers** that can mitigate parts shortages and help maintain product quality
- **Kaizen practices** that emphasize continuous improvement during the manufacturing process
- **Asset recovery expertise** that enables companies to recoup value from scrap, materials, parts, and finished goods



ABOUT FLEX

Flex provides advanced manufacturing and end-to-end product lifecycle services that speed time to market for companies across industries.

Maintain operational efficiency as demand slows

- To ensure timeliness and quality as production ramps down, cost containment and efficiency are required. Proven techniques for managing last-time buys include:
- **Adjusting production schedules** to consolidate manufacturing runs based on demand
- **Moving to a just-in-time (JIT) model** in which new products are only produced as needed
- **Disciplined inventory management** using demand forecasting and lean inventory practices to align with actual orders
- **Flexible manufacturing systems (FMS)** to adapt quickly to changes in demand without significant downtime or retooling
- **Modular design** to enable seamless replacement or reconfiguration of robotics, control units, and material handling systems
- **Circular economy practices** to derive value out of investments and recoup costs associated with overproduction

The Flex Advantage

At Flex, we continually enhance our advanced manufacturing capabilities with innovative simulation, automation, robotics, digitization, and additive manufacturing technologies, among others, to ensure efficiency, quality, and optimal production with limited downtime. No matter how technologically sophisticated your product or how complex the manufacturing of it is, we will help you derive maximum value throughout the product lifecycle.

ENHANCE COMPETITIVENESS THROUGHOUT THE PRODUCT LIFECYCLE

Learn more

[Advanced manufacturing](#) | [Product lifecycle services](#)
[Circular economy services](#)

1. Outsourcing Today, BCG Study: What Leaders are Saying About Costs and Growth in 2024, M. Purice, April 4, 2024

For more information, visit flex.com/connect

Flex (Reg. No. 199002645H) is the manufacturing partner of choice that helps a diverse customer base design and build products that improve the world. Through the collective strength of a global workforce across 30 countries and responsible, sustainable operations, Flex delivers technology innovation, supply chain, and manufacturing solutions to various industries and end markets.

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