HxGN Additive Manufacturing

Metal additive manufacturing solution for build preparation, process optimization, and workflow automation

HxGN
Additive Manufacturing

Welcome to a high-performance 3D Printing software solution that is machine independent and CAD agnostic, empowering operational excellence in manufacturing prototype or production parts across industries ranging from medical to aerospace and beyond.

Key capabilities

- CAD for manufacturing and design reviews
- Powder bed fusion build preparation
- Process simulation and optimization
- CAM for post-build CNC finishing of additive parts
- Automation and collaboration Powered by Nexus

DESIGNER

CAD for manufacturing and design reviews

Streamline your production processes, enhance collaboration, ensure manufacturability and compliance, and embed quality into the design and preparation phase of manufacturing.

Capabilities

- Design review
- Geometry and PMI verification
- Part and stock preparation
- Workholding definition
- Reverse engineering

AM STUDIO

Intuitive solution for powder bed fusion additive manufacturing that optimizes build preparation to support the entire manufacturing process

Translate product design into reality with easy-to-use software tools that guide you step-by-step through the 3D printing process, resulting in optimised resources, reduced training, and higher return on investment

Capabilities

- Part orientation
- Support structure creation
- Positioning and nesting
- Build process parameters
- Mechanical strain simulation
- Slicing and hatching
- Build file generation

Simufact Additive

Powerful and scalable process simulation for first-time-right metal additive manufacturing

Replace time-consuming tests with simulation, enable tryouts of more variants, improve machine productivity, reduce material and energy costs, and shorten time to market

Capabilities

- Optimized build orientation
- Cost estimation
- Fast and reliable meshing
- Distortion prediction and compensation
- Identify manufacturing issues, i.e. recoater blade crash, cracks, shrink line prediction
- Support structure optimization
- Optimize printing strategies
- Workflow considerations
- Automatic nesting

ESPRIT EDGE

CAM for CNC machine tool programming, post-build CNC finishing of additive parts
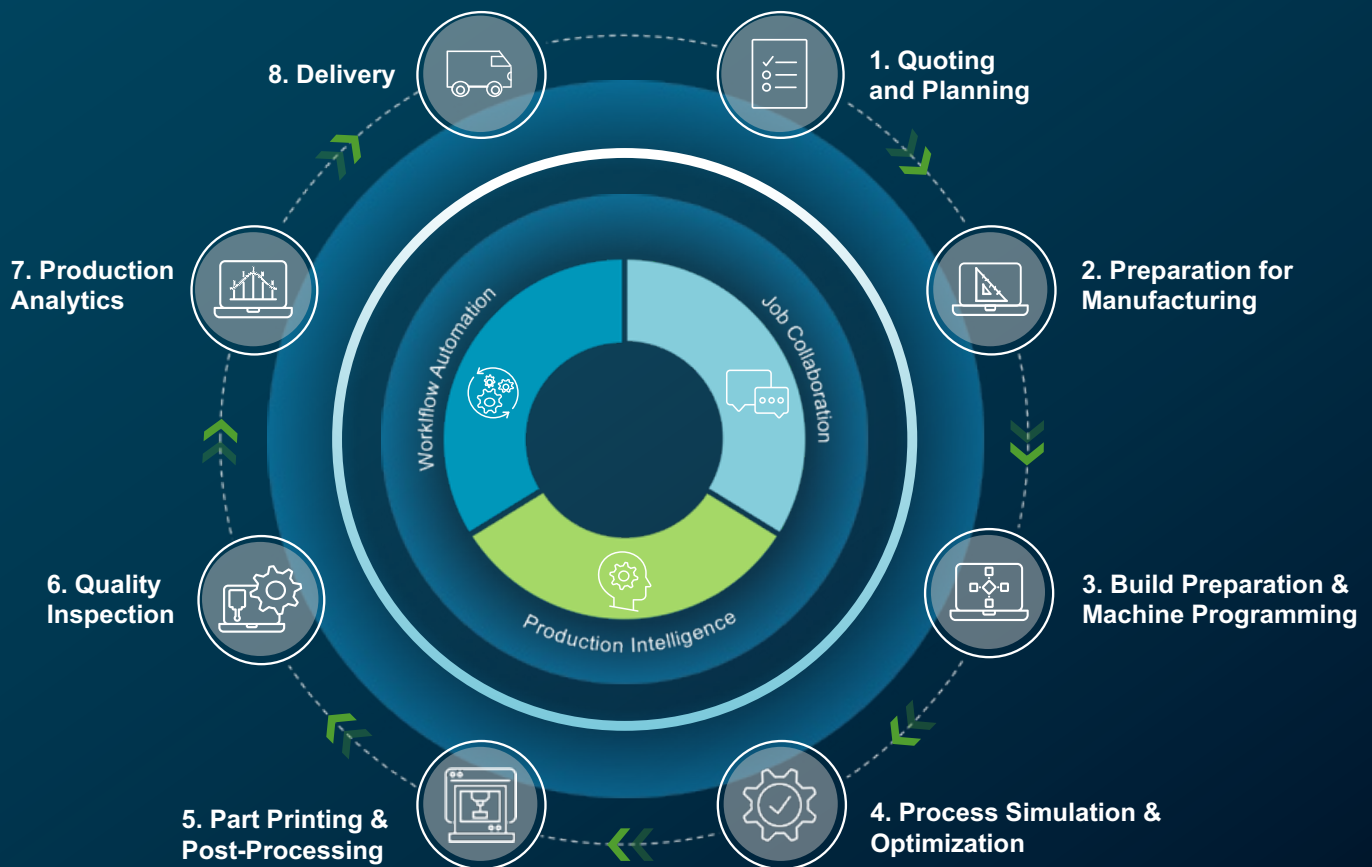
Revolutionize your manufacturing operations with true digital twin technology, artificial intelligence, next generation automation tools, and robust CAM programming to safely and efficiently drive all of your CNC machinery

Capabilities

- Milling 3- to 5-Axis
- Turning and millturn
- Wire EDM
- High-speed machining
- On-machine inspection
- Virtual machine setup
- Turn-key post processing

Solving your biggest challenges at every stage of part production

The HxGN Additive Manufacturing suite offers an integrated workflow from quote to delivery for part production and quality assurance. Your best practices are captured and consistently applied with significant automation and with a highly efficient utilization of materials and equipment, helping you achieve the drive towards autonomy.

8. Delivery

1. Quoting and Planning

7. Production Analytics

2. Preparation for Manufacturing

6. Quality Inspection

3. Build Preparation & Machine Programming

5. Part Printing & Post-Processing

4. Process Simulation & Optimization

Workflow Automation

Job Collaboration

Production Intelligence

HEXAGON

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that use data from design and engineering, production and metrology to make manufacturing smarter.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us @HexagonAB.