

Future of Virginia Metal Manufacturing: Trends, Technologies & Tactics



Artificial Intelligence (AI) Machine Learning (ML)

AI and ML are vital for precision and informed decisions via big datasets. 86% of manufacturing execs view smart factories crucial for competitiveness.

Robots and “Cobots” (Collaborative Robots)

Robots and “cobots” revolutionize metalworking, enhancing precision, speed, safety, and teamwork while integrating machine learning for proactive maintenance.



Digital Twins

Digital twins transform small metal parts manufacturing, enabling virtual testing and optimization for enhanced productivity and innovation.

Interconnected Manufacturing

Virginia's metal manufacturing embraces digitization and automation via digital CNC machining, IoT sensors, and generative AI.

