Industrial Automation Taxonomy Example

3D Printing

3D Printing Techniques
- Digital Light Processing (DLP)
- Electron Beam Melting (EBM)
- Fused deposition
- Hybrid (additive and subtractive)
- Laser melting
- Laser sintering
- Stereolithography

3D Printing materials
Cleaning of 3D Printing nozzles
Soware and Scanning
- 3D Scanning
- Modelling soware

Control Systems and connectivity

Asset Tracking/Inventory
Control Systems
Cybersecurity
Predictive Maintenance
Time Sensitive Networking
Visualisations and analytics

Digital Factory

AI/ML
Augmented Reality
Digital Twin
Digital Yard
Virtual Manufacturing
Warehouse management system

Motors and Drives

Bearings
- Anti-friction bearings
- Plain Bearings

Drives
- Belt and chain drives
- Electrical Drives
- Frequency Converters
- Variable Speed Drives

Gears and Transmission
- Clutches and couplings
- Geared Motors
- Gears and components

Motors
- Brake Motors
- DC Motors
- Linear Motor
- Permanent magnet motor
- Servomotors
- Spindle Motors
- Three Phase (AC)
- Traction

Robotics

Collaborative Robotics
Controllers

For more information on available technologies contact info@cipher.ai

Industrial Automation Taxonomy Example (cont.)

End of arm tooling (EOAT)
Human Machine Interface (HMI)
ML/Learning Robots
Mobil robotics
Production systems
Robot Arms
Robot Drives
Robotic Navigation
Sensor Fusion
Swarming

Sensor Technology

Acoustic
Chemical and biological
Climatic
Electrical
Flow
Geometrical
Lidar
Mechanical
Motion and Position
Optical
Photoelectric
Radar
Thermal