# AUTOMATION MADE EASY







To our customers, AMTECH means one stop, single window solution provider for all industrial automation needs.

Amtech, a leading automation solution provider, is one of the most dynamic industrial automation technology companies. From being the leading variable frequency drive manufacturer, we have made spectacular achievements in automation industry since our establishment in 1987. We provide remarkable engineering & automation solutions to diverse industries with our wide product basket.

'Automation Made Easy' is our core philosophy to simplify the growing complexities of modern production systems with innovative technology platforms based on Industry 4.0 / IIoT. The work culture, committed services and quality standards that we abide by help us to stay ahead in our field.

Our in-depth experience in the field of Machine, Line, Plant & Networking Automation, has helped us evolve as a system hub for our customers.

### Our Automation Edge

- Over 35 years of experience in executing critical process and complex logics requirements.
- Integration of effective information flow, high productivity and cost reduction in every process
- Thorough understanding of customers' needs
- Expert team designs the most cost effective solutions
- Fast commissioning and early performance benefits
  Proven capabilities to build and maintain large complex systems
- Assimilation and exploitation of new technologies to optimise solutions
- State-of-the-art development facilities
- Value added professional services
- Global presence
- Carefully and strategically selected alliances to offer best possible solutions for all industrial automation needs
- Any unforeseen or outstanding issues are well managed between Amtech and customers

### Why Amtech?

- An independent process control and automation system integrator and solution provider
- Holds extensive experience across industries & processes
- Integrates and works with all major control technologies
- A one-stop arrangement for all industrial automation requirements
- Regular evaluation, specifications and implementation of new technologies which improves flexibility and reliability
- Competitive pricing & timely deliveries
- High degree of flexibility & unparalleled services
- Solution oriented approach, international standards and ethical business practices
- Reliable systems with proven concepts
- High ROI

## Product offering

#### Controlling

We offer Controllers in a wide range of price and performance categories with identical handling and programming. They come with easy to use engineering and programming software. We efficiently select the controllers based on the application requirement and we ensure that controllers embed all major facilities like IOs, Ports etc to design the cost effective and configurable control system.

#### **Driving**

Our driving solutions come with integrated drive systems having powerful commands. They cater for all conventional drive types and performance classes. Compact servo motors, stepper motors and AC variable frequency drives are part of our driving solutions. We select the driving solutions which ensure required speed response and accuracy. It also supports networking to integrate them with control system.

#### **Operating**

The whole world of operation and monitoring- ranging from a plain-text display to an industrial PC. The operating solutions provide various types of human machine interfaces with monochrome and colour, keypad and touch screen with various sizes suitable to operation requirements. The solutions also provide the SCADA integrating Mimic, Trend, Alarm, Reports etc and are designed to provide various communication facilities with control system.

#### Networking

Modular systems comprise of a wide variety of compact communication & networking peripheral modules which include all widely used networking solutions like Ethernet, Profibus, Controlnet, Devicenet, Modbus, Android, Fiber, GSM/GPRS, Wireless, Industry 4.0 etc. The networking solutions are carefully designed to meet flexible communication with control system with suitable cables and connectors.









### Professional Services

- 1. Planning & Conceptual Design
- 2. Design & Detailed Engineering Services
- 3. Procurement Assistance
- 4. Manufacturing
  - DCS / PLC based Cabinets
  - VFD Cabinets
  - Electrical & Control Cabinets
  - Power Control Centers (P.C.C.)
  - Motor Control Centers (M.C.C.)
  - Air Circuit Breaker Cabinets
  - Automatic Power Factor Improvement Systems
  - Power Distribution Cabinets
  - Relay & Metering Cabinets
  - Instrumentation Cabinets
  - Control Desks & Remote Stations

- 5. PLC, DCS & SCADA Applications Software Development
- 6. PC based Data Acquisition Systems
- 7. Testing
- 8. Cabling and Earthing
- 9. Start-Up
- 10. Maintenance
- 11. System Service & Spare Support
- 12. Annual Maintenance Contracts
- 13. As-built Project Drawings / Documentation
- 14. Turnkey Solution, Erection & Commissioning Activities
- 15. Customized Training Programs
- 16. System Integration Services
- 17. Retrofitting, Upgradation & Modernization of Control Systems for Existing / Old Machinery & Plants
- 18. Return On Investment Calculations



# Machine Automation

Our Machine Automation solutions fulfill the massive need of a platform with both flexibility and stability.

Our solutions integrate machine process with

- PLC based control
- Human machine interface (HMI)
- Motion control VFD & Servo
- Instrumentation
- IIoT based solutions

#### **Our Solutions**

Our solutions ensure repetitive operation with same accuracy and consistent quality. If they enhance the machine operation with extended interlock to avoid human errors. It also integrates production data and maintenance planning with the use of user friendly HMI.

As machine innovations are taking place to meet low cost production with higher quality, our solutions take care of all these criterias. We design our system which fits in compact space of machine while maintaining all safety standards for users.

#### **Amtech Machine Automation solutions provide:**

- Increased production gain
- Improved & consistent quality
- Improved safety
- Increased process control makes efficient use of materials, resulting in less scrap
- The fast pinpointing of error sources minimises downtimes and increases productivity
- Control system is very easy to operate and requires only a short time and low cost of personnel introduction

#### **Applications:**

- Centrifuges
- Compressor
- Packaging
- Cutter
- Winder-Rewinder
- Capsule Machine
- EOT Grabbing Crane
- Injection Moulding
- Ring Frame



With AMTECH, Create Machine of Your Imagination



# **Automation**

Amtech's Line Automation creates innovative custom designed systems that provide facility of wide automation in various environments by merging the following sub-systems into a seamless tool:

Our solutions integrate machine process with

- PLC based control
- Human machine interface (HMI)
- Centralized Controlling & Monitoring
- SCADA
- Data acquisition
- Instrumentation
- IIoT based solutions

#### **Our Solutions**

Our sub systems comprise of synchronised control of the line with less scan time. User friendly operator control and monitoring enables smooth operations. Customized automation for line system ensure increase in production and quality, safety and diagnostics.

As manufacturing environments become more complex, automation projects dictate more complex inputs, outputs and human interfaces.

#### **Amtech Line Automation helps:**

- · Reduce labor costs
- · Increase production gain
- Reduce work-in-process
- Achieve specialization of operations
- Achieve integration of operations
- High efficiency & high user-friendliness with state-of-the-art touch-panel

#### **Applications:**

- Sectional Paper
- Hot/Cold Rolling Mill
- Feeder Table
- Conveyor
- Wire Drawing
- Tape Line
- Bottling Line
- Chip Conveying
- Rubber Batching System



With AMTECH, Optimize Your Operations



# **Automation**

Amtech utilises state-of-the-art software, hardware and facilities to support plant design automation projects. We are closely associated with all major software and hardware vendors in the industry.

For Process & Plant Automation, we have domain expertise to use:

- PLC/DCS based control
- Human machine interface (HMI)
- Supervisory control & data acquisition (SCADA)
- Centralized Controlling & Monitoring
- Motor control system
- Instrumentation
- Telemetry
- Industry 4.0 based solutions
- Energy Management System



On one hand process engineers are frequently challenged with tight regulations, data security issues and aging plant infrastructures, on the other hand, plant operators are increasingly insisting on easier access to plant-floor operations, control systems and production data. To meet these demands, end users need to get the most out of centralised Process & Plant Automation.

Our reliable & robust solutions fulfill the need for technology that reduce design, construction, and overhead costs and optimizes the efficiency of workflow processes.

#### **Our Plant Automation advantages:**

- Automatic operations optimize process sequences, allowing for a significant increase in plant capacity and ensuring a consistently high level of product quality
- Production planning, diagnostics and quality assurance can be carried out with process control system, which simplifies planning and administration considerably
- Plant Automation reduces the need for personnel, thus lowering production costs
- Low downtime
- Maintenance management–reduces costs, increases dependability
- Ownership cost during product life
- High performance data distribution the right information anytime, anywhere
- Seamless and flexible integration thanks to modular concept

#### **Applications:**

- · Pulp & Paper
- Chemical Process
- Ware House
- Power Plant
- Boiler Control
- Water & Waste Water Treatment
- Refrigeration
- Hydro Flow Control
- Furnace

With AMTECH, Make Your Plant Efficient



# Networking Automation

Our data management provides tools and methods to enable integration and workflow across disparate systems, as well as storage of master data, event, process and production information.

We have domain expertise & proven solutions with,

- Industry 4.0 Solution
- Gateways
- Protocol converters
- Telemetry (Wireless, GSM/GPRS)
- Various communications like, Modbus,

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Profibus, Profinet, Ethernet, Ethercat etc.

- Network cables and connectors
- Diagnostic tools
- Data loggers
- Energy Management System (EMS)



Our domain expertise creates a foundation for contextual information by organising, synchronising, archiving and aggregating data collected by automated or manual systems.

As part of data management, control system seamlessly connects via the most up-to-date communication technology. In this way, it enables smooth and coordinated integration of larger IT environment in the production plant.

#### **Amtech Networking Automation assists in:**

- Event, process or master data collection and storage
- Integration and workflow across disparate systems
- Organising, synchronising, archiving and aggregating data
- Automated and manual data collection
- Innovative and secure data management
- · Third party device integration
- EMS gets plant energy data to evaluate energy consumption and saving scope
- Industry 4.0 based solutions

#### **Applications:**

- Ethernet & Fiber Network
- Telemetry
- Organising, Synchronising, Archiving and Aggregating Data
- Energy Management System
- Third Party Device Integration
- Machine Monitoring and Controlling
- Power Plant Monitoring
- Report Generation
- MIS/MES
- Data Logging

### **Our Network:**



#### **INNOVATIVE**

**Products** 

People

Solutions

**Services** 

#### For the Industry

With over 35 years of field experience, our team of technical experts can help design custom solutions that will make your equipment more efficient, reliable and cost effective. And that's the bottom-line!

**AN ISO 9001: 2015 COMPANY** 



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