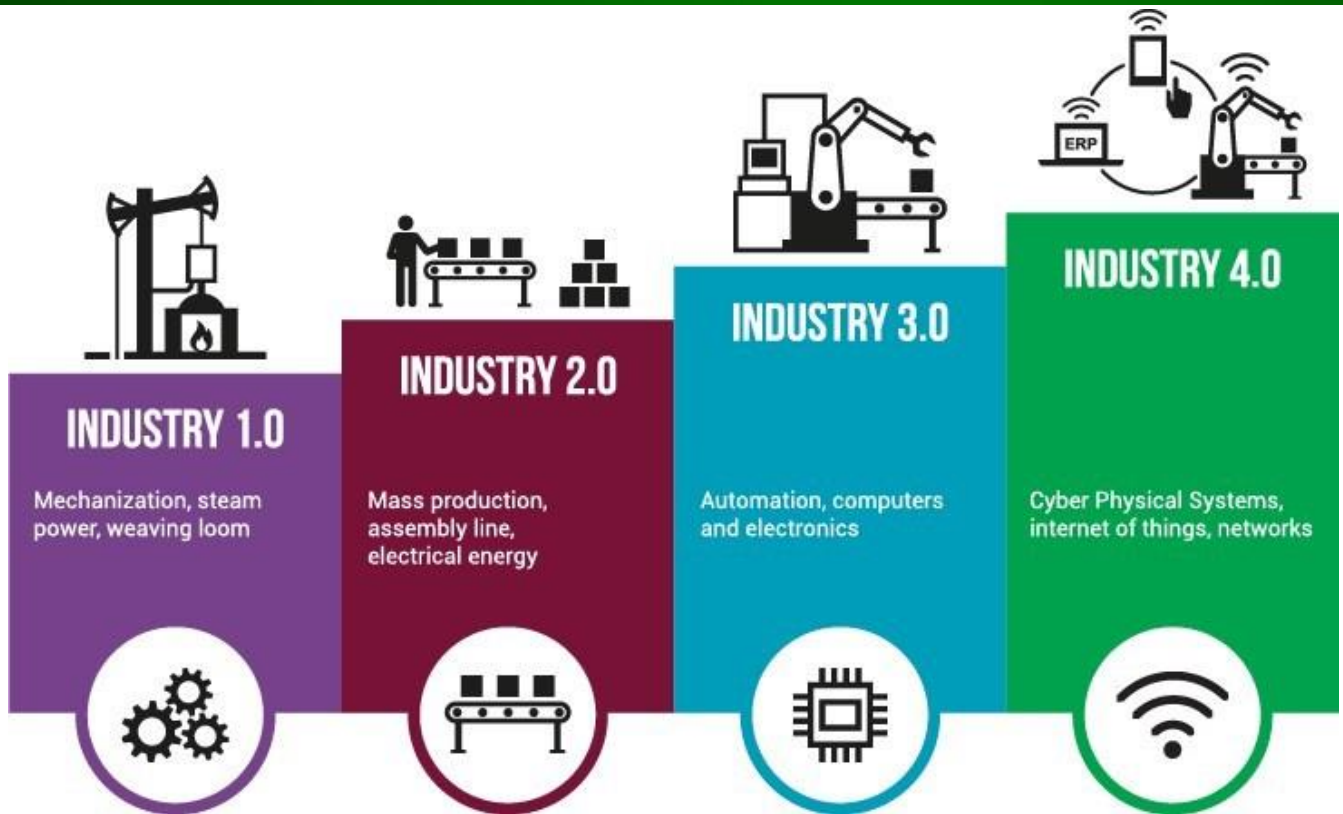maratek
Automate | Optimize | Scale

Building an equipment of the future

THE MARATEK ADVANTAGE
FUTURE READY EQUIPMENT

The Maratek OERS-C product line features a powerful and flexible control system that is designed from the ground up with Industry 4.0 in mind.

Industry 4.0 is the trend towards :
- Automation and data exchange in manufacturing technologies
- Processes which promote interoperability between work cells information transparency
- Sensor diagnostics
- Wireless control capability
- Flexible visualization
- Control reliable safety
- Full autonomy

Maratek equipment comes standard with the widely used mid-range Allen Bradley Compact Logix 5370 L33ER PLC.

For our European clients an optional Siemens based control solution is available with all of the same capabilities. In effect the Maratek control system can be utilized anywhere in the world leveraging pro hardware from a vast network of suppliers recognized by engineers, tradespeople and procurement professionals.

The communication backbone of a Maratek control system is Ethernet-IP, built on the same ultra reliable protocol that supports the world wide web.

This architecture facilitates reliable and seamless communication with smart sensors, VFDs, analytical and measuring instrumentation, operator interfaces, etc., building in high reliability, and flexibility to customise machines to customers needs. Using an Ethernet backbone also facilitates integration and data sharing with a wide range of controllers and plant systems across the globe, like allowing a remote control room to directly access a faulted drive on a Maratek machine for diagnostics. This protocol also supports "hooks" into higher level MRP and ERP systems. Our cutting edge, modular Ethernet control approach decreases costs and build time, while increasing reliability, diagnostics, and wiring simplicity. Optional sophisticated software linked with smart analytical instrumentation enables precise measurement of oil extractant mass flow, energy consumption rates and recovered solvent, thereby enabling a truly unprecedented level of productivity measurement.

Maratek equipment is equipped with a 15" high resolution touchscreen which makes it intuitive to operate. Our custom interfaces are clean and easy to understand, featuring layered complexity through a hierarchy of operator selectable screens. This enables the operator to select relevant screens for specific tasks and allows engineers and technicians to access underlying controller and sensor diagnostics by engineering and maintenance staff, as needed. Standard control systems feature control reliable safety shutdowns, optional wireless control capability, support for mobile tablet and phone mirroring, and seamless remote connection. An optional cellular modem access feature enables our engineers and maintenance staff to provide free, real-time, machine support.

Our equipment is built to certified Class I Division 1 standards, using intrinsically safe instrumentation (HART/Ethernet I/P based) with a remotely located main control panel. An optional integrated panel can be supplied using certified purging technology. Optional Class I Division 2 and Class I Zone 2 systems can be supplied.

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Automate | Optimize | Scale

OERS-SC & OERS-C
Automatic Ethanol Recovery and Decarboxylation

TAWS
Turnkey Automatic Winterization Systems

F-SERIES
Fractional Distillation and Dewatering Systems

TURNKEY FACILITIES
Turnkey Extraction Facilities and Engineering

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