Ansaldo Sistemi Industriali - your tangible intangible asset

Know-how and experience are often considered competitive intangible assets. These assets play an important role in determining success – directly impacting effectiveness, productivity, wastage and opportunity costs within an organization. This in turn impacts issues close to your heart: costs, revenues, product quality, customer satisfaction, market value and share price. With over 150 years of experience, we are one of the most reliable suppliers of electrical and automation systems world-wide. Whether assisting you with a Greenfield turn-key project or revamping your existing plant, Ansaldo Sistemi Industriali provides tangible value you can measure.

Ansaldo Sistemi Industriali has installed more than 800 automation and control systems worldwide
Providing you with the flexibility to innovate

Today’s market leaders are changing the way the Metals industry does business by actively participating in their Customer’s Design Process to produce innovative new products that are taking raw materials to new edges of the technological spectrum. Since the day it was founded, Ansaldo Sistemi Industriali has always used this approach with its customers. It is a fundamental part of our corporate DNA. Not only can we help you design the process to manufacture these new products, we can also provide valuable assistance to you in working with your customers.

Our in-house design software, RTStudio, part of our ARTICS software suite, allows us to configure plants rapidly, allowing you to create models of the production sequence that provide reliable feedback on conceptual design ideas.

More on our process simulation tools

Ansaldo Sistemi Industriali can provide a wide range of simulation services. Our family of simulators was conceived as a standard tool for software testing, commissioning and training of personnel. These powerful tools not only aid in the design process, they help reduce start-up time and allow the customer to become familiar with the production process before it is actually in place. ARTICS is particularly suitable for online upgrades and revamping, which can be implemented during a normal shutdown period. Plus, the “monitor mode” allows new system to be tested before retiring the old one.

Hot Rolling Mills for Flat Products
- Hot Strip Mills
- Plate Mills
- Steckel Mills

Hot Rolling Mills for Long Products
- Bar & Wire Rod Mills
- Section Mills
- Rail Mills

Seamless Pipe Mills
- Piecer/Mandrel/Sizing Mill

Continuos and Coil-two-Coil Cold Rolling Mills
- Single/Two Stand reversing Mills
- Temper Mills
- Tandem Mills
- Cluster mills

Processing Lines
- Annealing Lines
- Pickling Lines
- Galvanizing Lines
- Tinning Lines
- Coating Lines
- Painting Lines
- Cutting & Slitting Lines
- Inspection Lines

Iron & Steel Making
- Blast Furnaces
- BOF/LD Meltshops
- Electric Arc Furnaces
- Slab/Bloom/Billet Continuous Casters
- Thin Slab Casters
- Strip Casters

Non-Ferrous Mills
- Strip Casting Machines
- Aluminium Mills
- Copper and Brass Mills

Continuous and Coil-two-Coil Cold Rolling Mills
- Single/Two Stand reversing Mills
- Temper Mills
- Tandem Mills
- Cluster mills

Processing Lines
- Annealing Lines
- Pickling Lines
- Galvanizing Lines
- Tinning Lines
- Coating Lines
- Painting Lines
- Cutting & Slitting Lines
- Inspection Lines

Iron & Steel Making
- Blast Furnaces
- BOF/LD Meltshops
- Electric Arc Furnaces
- Slab/Bloom/Billet Continuous Casters
- Thin Slab Casters
- Strip Casters

Non-Ferrous Mills
- Strip Casting Machines
- Aluminium Mills
- Copper and Brass Mills
Ansaldo Real Time Integrated Control System (ARTICS) is our automation solution for process control and real-time data collection.

The ARTICS platform integrates and simplifies several steps in the automation architecture to help mechanical and electrical equipment control and to improve the production process.

ARTICS is designed to exceed even the most stringent real-time requirements, developed for real time control of fast processes with cycle times in the milliseconds. Anyone who has purchased a computer program recently knows that it may not be compatible with the hardware and software at home. This issue has always been a concern with customers. The ARTICS software platform was developed with this issue in mind.

As an open and standard platform ARTICS can be used with off-the-shelf hardware and allows integration with the most popular programmable logic controllers (PLCs) and common standard software tools and, if new products come to market, there’s no problem integrating them into the system. In other words, ARTICS provides you with the flexibility to innovate and change to meet tomorrow’s market challenges.

ARTICS proves its reliability and versatility every day in hundreds of installations worldwide.

ARTICS seamlessly interfaces with third party components such as PLCs or local/remote input/output devices which means you don’t have to make costly changes your existing system’s architecture.

An easy graphic interface is your gateway to ARTICS powerful process management tools.

ARTICS gives you detailed diagnostics on drives - just point and click on a selected drive and ARTICS displays load, back up, status and download information.

ARTICS allows you to define a common software and data architecture with your existing system based on your plant’s global database. This means you only define the data used by each level of automation once and there is no need to create complicated interfaces for information exchange within the system.

Ansaldo Sistemi Industriali’s Real Time Integrated Control System

ARTICS was designed and developed to help solve hardware and software integration problems.

Ansaldo Sistemi Industriali guarantees product compatibility on all product upgrades for the life of your system.
**1 Power Quality**
Ansaldo Sistemi Industriali has significant experience in the design and manufacture of Static Var Compensation and HVDC systems. We can design solutions to guarantee maximum reliability in terms of power quality to the network.

**2 Drives**
Our full range of low and medium voltage drives offers versatility, reliability and convenience. Along with maximum flexibility, our high-performance AC and DC drive designs also provide superior power factor and harmonic control capabilities.

**3 Automation System**
Our automation platform is based on the ARTICS architecture, a flexible, powerful open software platform. Our extensive library of algorithms and our advanced application software tools manage basic automation and process control functions, ensuring enhanced process automation and quality. Designed with flexibility in mind, our system can manage numerous communication interfaces at the same time and integrate different typologies in the same unit. There can be both slave (for an higher network integration) and master (for remote I/O connection) interfaces. This reduces the complexity and the cost of wiring and makes it possible to work with pre-existent communication architectures providing seamless system integration effortlessly.

**4 Motors & Generators**
Ansaldo Sistemi Industriali manufactures a wide range of AC and DC motors and generators. Our rotating machines are based on proven designs that give you the best in advanced drive technology. Known for their robust design and reliability in heavy-duty applications, these machines provide superior quality, maximum efficiency and low maintenance costs. They also play an important role in guaranteeing maximum plant availability.

Another ASI advantage: a complete, fully integrated electrical package based on our state-of-the-art drive systems and components
Automation Functions

HOT ROLLING MILLS FOR LONG PRODUCTS

Level 0 System
• Complete system supply, management and supervision of:
  - Power distribution
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

Level 1 System
• Basic Functions
  - Field sensor and instrumentation
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

Level 2 System
• Complete system supply, management and supervision of:
  - Power distribution
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

Level 3 System
• Level 3 interface

HOT ROLLING MILLS FOR FLAT PRODUCTS

Level 0 System
• Complete system supply, management and supervision of:
  - Production line setup and scheduling
  - Rolling schedule calculation
  - Yield evaluation (including AVD setup)
  - Finished mill (including down coilers)
  - Level 1 System

Level 1 System
• Basic Functions
  - Piece tracking and bill of materials
  - Piece management
  - Milling programs, PDI ...
  - Auxiliary systems

Level 2 System
• Complete system supply, management and supervision of:
  - Power distribution
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

Level 3 System
• Level 3 interface

COLD MILLS

PROCESSING LINES

Level 0 System
• Complete system supply, management and supervision of:
  - Power distribution
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

Level 1 System
• Basic Functions
  - Field sensor and instrumentation
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

Level 2 System
• Complete system supply, management and supervision of:
  - Power distribution
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

Level 3 System
• Level 3 interface

SEAMLESS PIPE MILLS

NON FERROUS MILLS (ALUMINUM, COPPER & BRASS)

CONTINUOUS CASTERS

LEVEL 1 SYSTEM
• Basic Functions
  - Field sensor and instrumentation
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

LEVEL 2 SYSTEM
• Complete system supply, management and supervision of:
  - Power distribution
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

LEVEL 3 SYSTEM
• Level 3 interface

IRON & STEEL MAKING

Level 0 System
• Complete system supply, management and supervision of:
  - Top temperature control
  - Top pressure control
  - Horizontal probe management
  - Copper pressure control
  - Top gas management
  - Hood management
  - Scrap management
  - Slag and furnace gas management
  - Steel and furnace gas management
  - Chemical measurement
  - Audits and data management
  - Maintenance and energy management

Level 1 System
• Complete system supply, management and supervision of:
  - Production systems
  - Data collection, reporting system
  - Quality management system
  - Production reliability care
  - On-line backup, ...
  - Level 3 interface

Level 2 System
• Complete system supply, management and supervision of:
  - Power distribution
  - Motor and drive systems
  - Field sensor and instrumentation
  - Technological measuring instruments
  - Auxiliary systems

Level 3 System
• Level 3 interface
Project management

Our experience in managing the development of Greenfield plants allows us to provide you with a highly skilled project management team. Our team of professionals prides itself in meeting or beating our customer’s expectations in terms of project deadlines and overall quality. From basic engineering to final commissioning, our Project Managers are fully accountable and dedicated to providing you with the support you need.

Customer Service & Support

Our commitment doesn’t end with final commissioning and plant start up. Ansaldo Sistemi Industriali is dedicated to life-cycle assistance and provides the following Services and Support for the life of your plant:

- Call Center Support Service 24 hours a day, 7 days a week
- Remote diagnostics and on-line technical assistance & troubleshooting
- Global preventive and predictive maintenance contracts
- Original equipment manufacturer’s renewal parts
- System upgrades and refurbishments
- Extensive, modular training programs on maintenance and operation
- Effective repairs to guarantee quality
- Plant optimization evaluation

Centers of Excellence

- MILAN - Power Electronics
- MONFALCONE - Electric Motors & Generators
- GENOA - Flat Products, Steel Making, Tube Mills
- MONTEBELLO - Metals Long Products
Our own personal commitment towards Sustainable Development

Ansaldo Sistemi Industriali’s manufacturing units are ISO 14001 certified.

Our Engineering team is dedicated to finding solutions that help customers minimize their plant’s impact on the environment. Reducing footprints, energy efficiency, power quality and the study of new more environmentally friendly components and technologies are a basic part of our Research and Development activities.

A valid partner in your efforts towards Sustainable Development

By designing your electrical system to meet your process requirements, Ansaldo Sistemi Industriali can provide a significant contribution towards your efforts in sustainable development. By optimizing power quality and energy efficiency we help you make better use of valuable energy resources.

Our automation systems also help optimize the use of raw materials. Our real time control makes adjustments to your manufacturing process in milliseconds, taking you closer to your goal of zero tolerances. It’s a small contribution to material savings but, when considered over the life of your plant, it can add up to several tons.
For information on the sales office
or sales representative nearest you
contact us at: info@asiansaldo.com