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ASTER GROUP

ELECTRIC&AUTOMATIONSOLUTIONSWITHASTER



ASTER was established to provide innovative solutions in the industrial automation sector in the early 2000's in Istanbul.

By increasing experience and knowledge of our young and dynamic team, ASTER has ranked among the leading engineering, electrical, automation and Instrumentation companies within Turkey.

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ASTER Group of Companies

Continiue to Grow...

ASTER CONSTRUCTION

ASTER E+M

ASTER ENERGY

ASTER RECYCLING



ALL TYPES OF CONSTRUCTION ENGINEERING & CIVIL WORKS

Aster Construction has specialized in the residential, commercial, industrial and civil construction projects.

Since our founding in 1997, we have completed a range of projects including the construction of shopping centers, offices, hotels, high-rise buildings, heavy industrial facilities (cement plants, etc.), energy facilities, and residential buildings. Intaya Construction has also extensive experience in the field of heavy reinforced concrete and steel structures.

From project conception to completion, Aster Construction delivers quality, customer-focused, flexible and cost-effective solutions to the clients. We have the project management experience and the network of trusted suppliers and contractors to make our clients' vision a reality. In the past, we have completed a range of commercial, industrial and residential projects in Istanbul and beyond, and continue to develop our broad portfolio. Our team carefully plans for every project keeping safety, time, cost, and quality as a project's top priorities.



SOLAR POWER PLANT EPC SOLUTIONS

ASTER Solar has entered the renewable energy sector and has rapidly implemented various projects. Its core business is pro-viding EPC solutions for solar power plants. Being part of the ASTER Group, ASTER Solar benefits from direct access to special-ist engineering capabilities from other associated subsidiary companies to provide clients with innovative engineering solutions and resources as well as a wide spectrum and in-tegrated range of services. As an engineering company, ASTER Solar delivers all phases of project including electrical, me-chanical and architectural designs, procurement, logistics, field installations, project management.

ASTER Solar only works with the top quality equipment suppli-ers for each and every product, seeking to deliver its custom-ers with the highest performance and reliability.

Large range and volume of operations in the Solar and other Renewable Energy Sectors provides ASTER Solar with considerable advantages in terms of experienced technical personnel and supply chain management, resulting in high quality projects completed on time even on the tightest of the deadlines.

ASTER Solar delivers Turnkey EPC Solutions to all Solar Projects varying from Roof Mounted, Building Integrated Systems to Ground Mounted Large Scale Power Plants. In addition to the SCADA systems required per Turkish Grid Code, ASTER Solar delivers its customers with a custom designed Power Plant Central Monitoring Software for plant monitoring.



ELECTRICAL & AUTOMATION EPC SOLUTIONS IN EUROPE

EFFECTIVE is a branch of ASTER established in Rotterdam for the purpose of expanding ASTER's services and solutions to in-dustrial sectors in Holland and other EU countries. We offer tailor-made solutions for both new and existing plants – from small scale compact units to large scale facilities in the major utility sectors. As a branch office of ASTER, our services include Power & Sub Distribution Panels, MCC and PCC Panels, Relay Control Panels, AC/DC Panels, PLC Panels,

Instrumentation Panels, Mimic Panels, Network Cabinets, Drives, Motors, Control Software [PLC, SCADA, DCS, RTU, HMI], assembly, commissioning and preventive maintenance.

As a system integrator and general contractor, we plan and realise complex automation projects and offer planning, software development, project realisation and maintenance as a one-stop shop. Our corporate goal is to provide added value to customers, to improve continuously product and service quality, to increase customer satisfaction, to maintain social responsibility, to become your preferred partner first coming into mind with expert staff and customer oriented service approach.





- TURKEY
- ROMANIA
- HOLLAND
- IRAN
- GEORGIA
- CHINA

International Offices

ASTER is strategically focused on growth and positions itself as a turnkey solutions provider for industrial plants. We continue to expand our international presence, strengthen our international partnerships and broaden our focus on a global level.

Full Integrated Concept
Single Source Solutions

ASTER's full integrated Automation, Electrification, Instrumentation concept provides a complete plant management solution with standardised modules, switchgears transformers and control systems which can be tuned to the customers or utility requirements. All Electrificaiton and automation systems are developed with complete integration, and have clear and easy user inter-faces providing a uniform interface and logic for the operators. ASTER is setting a goal to provide the end to end solutions for industrial plant pro-jects and being one the mst powerful engineering, electrical and automation contractors.

- **Quality management**
- **Supply management**
- **Project management**
  - **Project start** > **Tendering** > **Engineering** > **Procurement** > **Instal||ation** > **Commissioning** > **Service**

Fostering Automation to Improve Plant Performance

Digitization and advanced automation is signifi-cantly changed the production processes. Today, in all fields of engineering, industrial production which is economical and at the same time goes easy on resources and environment is not possible without a high degree of automation.

Process control systems used for the automation of power stations must meet particularly high re-quirements for increased availability, large func-tional range and decentralized architecture.



4 Steps to Quantify Customer Value

ASTER is dedicated to satisfaction of clients, and to maintaining dynamic growth in providing quality services in: Options ranging from individual services to EPC services in different geographical locations with a worldwide procurement capability,

Established original equipment manufacturer relationships, proven engineering know-how, efficient use of project control & inhouse en-gineering.

Can we increase customer's revenue?	Can we decrease customer's total cost of ownership?	Can we minimize customer's capital requirements?	Can we reduce customer's risks?
			

AREAS OF OPERATIONS

- Power Distribution & Transmission
- Power Plants: Solar, Wind, Geothermal, Hydroelectric, Thermal, Biofuel
- Oil & Gas
- Water
- Cement & Mining
- Transportation
- Food & Beverage, Chemical, Pharmacy

OPERATIONS

- Engineering
- Electrification Solutions
- Process & Energy Automation Solutions
- Instrumentation Solutions
- Mechanical Works
- Civil Works
- Project Management
- Operation & Maintenance
- Services & Support

ASTER is a Leading Engineering Contractor for Major Industries

OUR STRENGTHS

- Engineering Expertise
- Strong International Project Capacity
- Highly Qualified Personnel
- Capacity & Flexibility
- Reliable Partner
- Single Source Industrial Solutions

OUR VALUES

- Safety First
- Integrity
- Customer Satisfaction
- Business Ethics
- Transparency
- Sustainability



POWER TRANSMISSION & DISTRIBUTION

Manage Your Power

Our total integrated solutions come with highly experienced in-house competence for the entire scope of electrical balance of plant, plant wide automation and optimization as well as lifecycle management.

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ELECTRICITY NETWORK DESIGN & COORDINATION

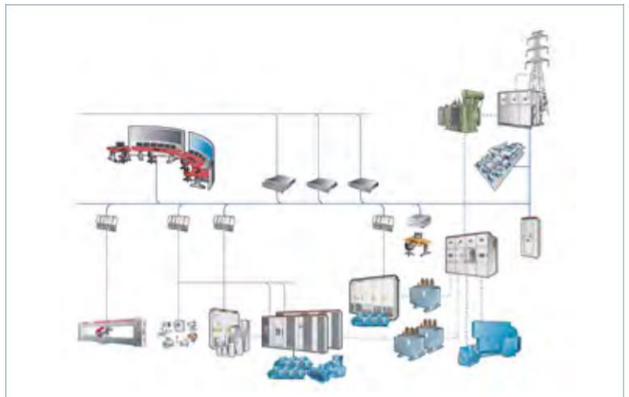
- Overhead Lines Design& Engineering
- Underground Network Design & Engineering
- Damage Assessment & Overhaul Planning
- Capacity Upgrade
- System Improvement
- Plant Removal-Reconstruction/Public Buildings Improvement
- Coordination with Other Utilities
- Protection & Control System Design & Engineering
- License Procedure Services

SUBSTATION DESIGN

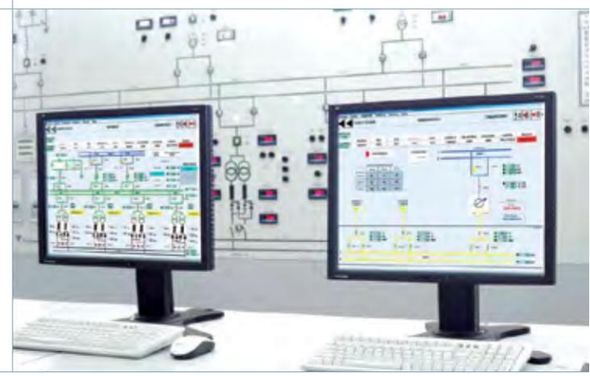
- Electrical, Civil, Steel Structural Design
- Safety & Standards Analysis and Application
- Site Development
- Grounding Design
- Bus Configuration Analysis & Design
- AC & DC Ancillary Systems Design

PLANT POWER SYSTEMS DESIGN & ENGINEERING

- Low & Medium Voltage Power Distribution Design
- Site Plant Electrical Installations Design
- Hazardous Area Classification Plans
- Underground Conduit & Cable Tray Design
- Motor & Drive Specification Design
- Power System Automation Engineering & Design
- Grounding Systems Design
- Standby/Emergency Power Systems







POWER GENERATION

Turnkey EPC & E-BOP Solutions

- Wind Power Plants
- Geothermal Power Plants
- Biogas / Biomass Power Plants
- Thermal Power Plants
- Hydroelectric Power Plants

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ENGINEERING & DESIGN

- Preliminary and Detailed Electrical Design
- Process Automation / DCS
- Geotechnical Design
- Preparation of technical speci cation
- Product Selection

ELECTRIC SUBSTATION DESIGN

- HV Substation • MV Substation
- Transformer
- LV Panels
- Cable and Connecting Equipments
- Monitoring and SCADA Systems

CONSTRUCTION

- Transmission Line Installation
- HV/MV Substation Civil Installations
- LV Systems
- Cable and Connecting Equipments
- Instruments
- Low Current Systems
- Process Automation / DCS
- HV/MV Substation Electrical Installation
- Communcation Network Installation
- Test and Commissioning





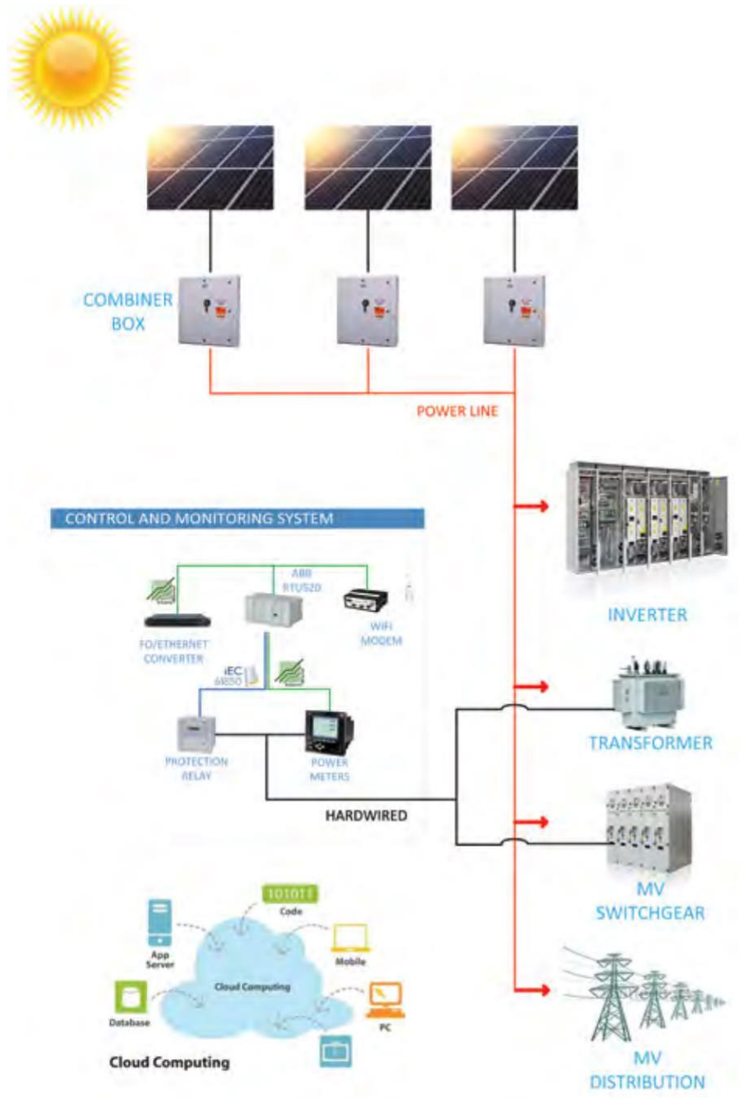
SOLAR POWER PLANTS

Solar Power Plant EPC Solutions

ASTER Solar delivers Turnkey EPC Solutions to all Solar Projects var- ying from Roof Mounted, Build- ing Integrated Systems to Ground Mounted Large Scale Power Plants. In addition to the SCADA systems required per Turkish Grid Code, ASTER Solar delivers its customers with a custom designed software for plant monitoring.

ENGINEERING & SERVICES

- Surveying, Feasibilty Study & Site Selection
- Permitting Procurement
- Geotechnical Investigation
- Power Systems Analysis & Grid Integration Studies
- Procurement from tier 1 class suppliers
- Civil / Mechanical / Electrical Design
- Solar PV Design
- Commissioning, Tests & Start-up



MECHANICAL WORKS

- Piling Test
- Static Calculation and Approvals
- Fixed &Tracking Construction
- Rooftop & Unique Construction
- Construction Installation
- PV Panel Installation

CIVIL WORKS

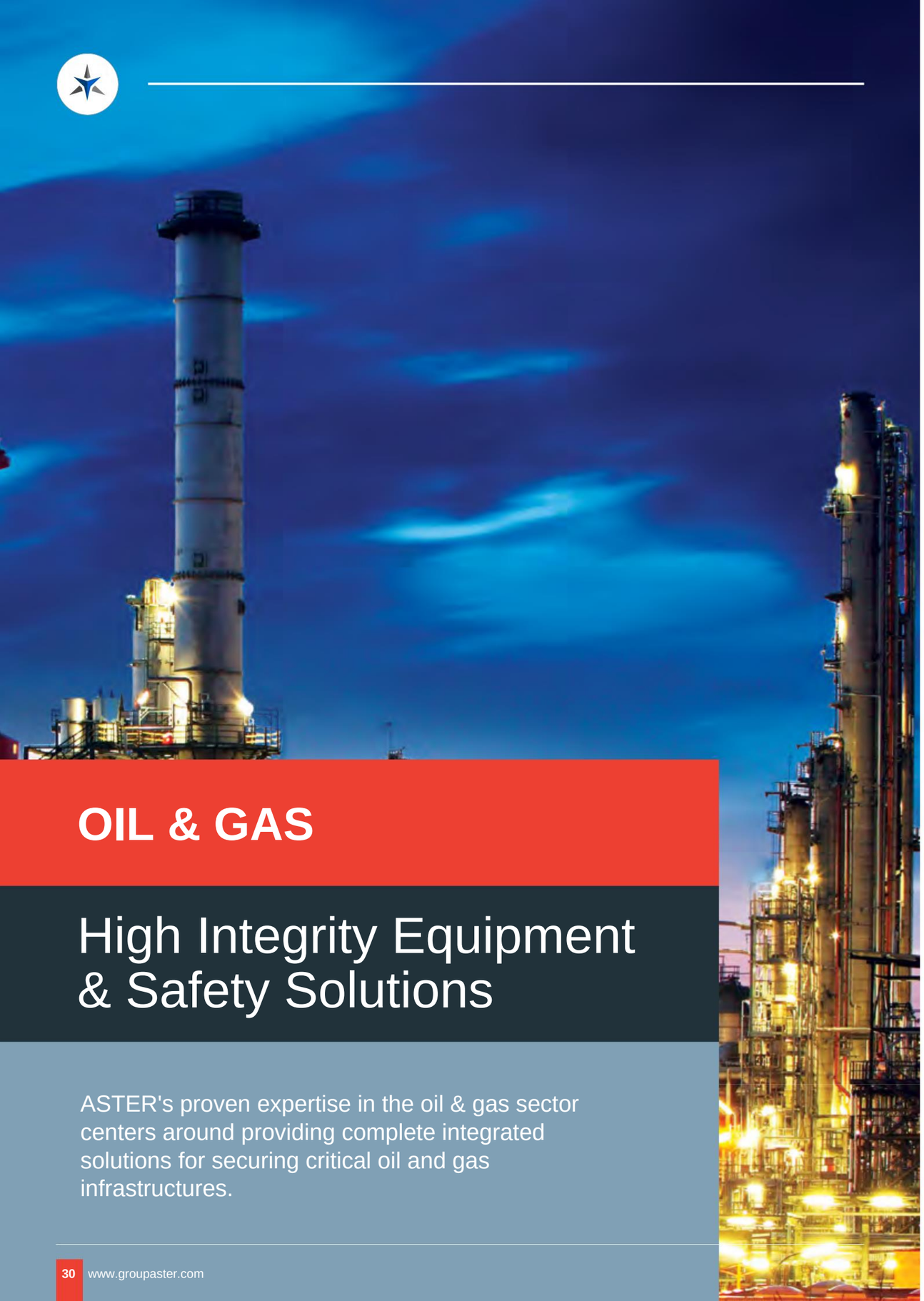
- Route Survey
- Access Roads & Platforms
- Foundations
- Substations & Control Buildings
- Cable Trenches

ELETRICAL WORKS

- Substations
- Inverters (Central &String)
- MV/LV Power Network
- Communication Networks
- SCADA & Protection Systems
- Central Power Plant Monitoring System
- Test and Commissioning
- Grid Connection

Power Plant Central Monitoring Software





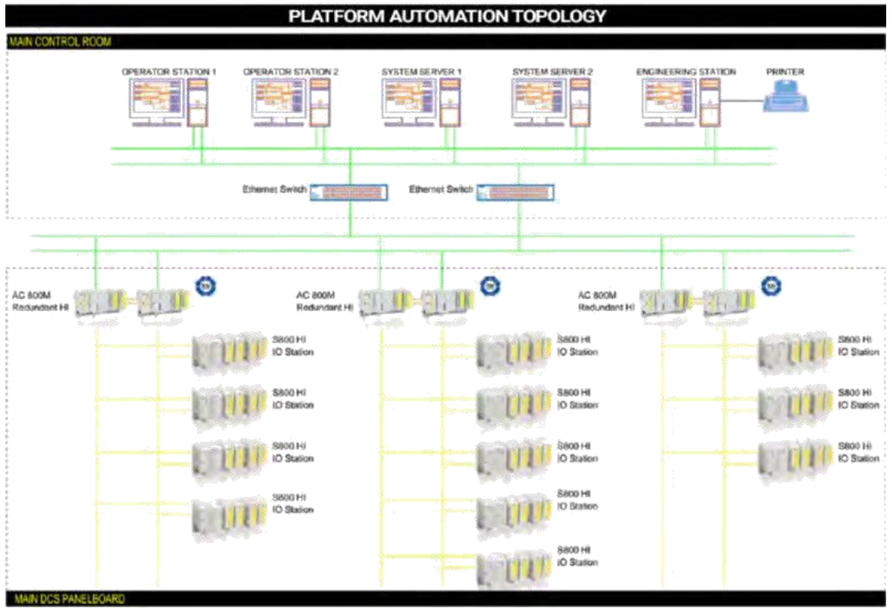
OIL & GAS

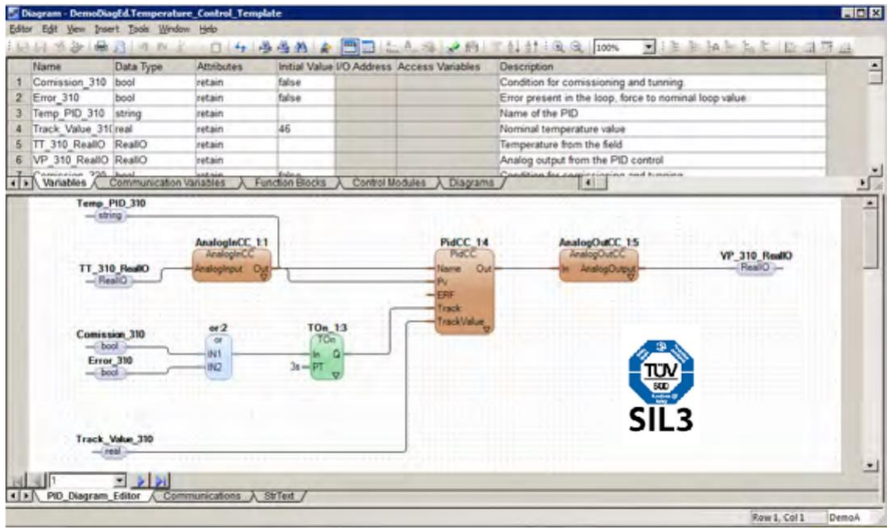
High Integrity Equipment & Safety Solutions

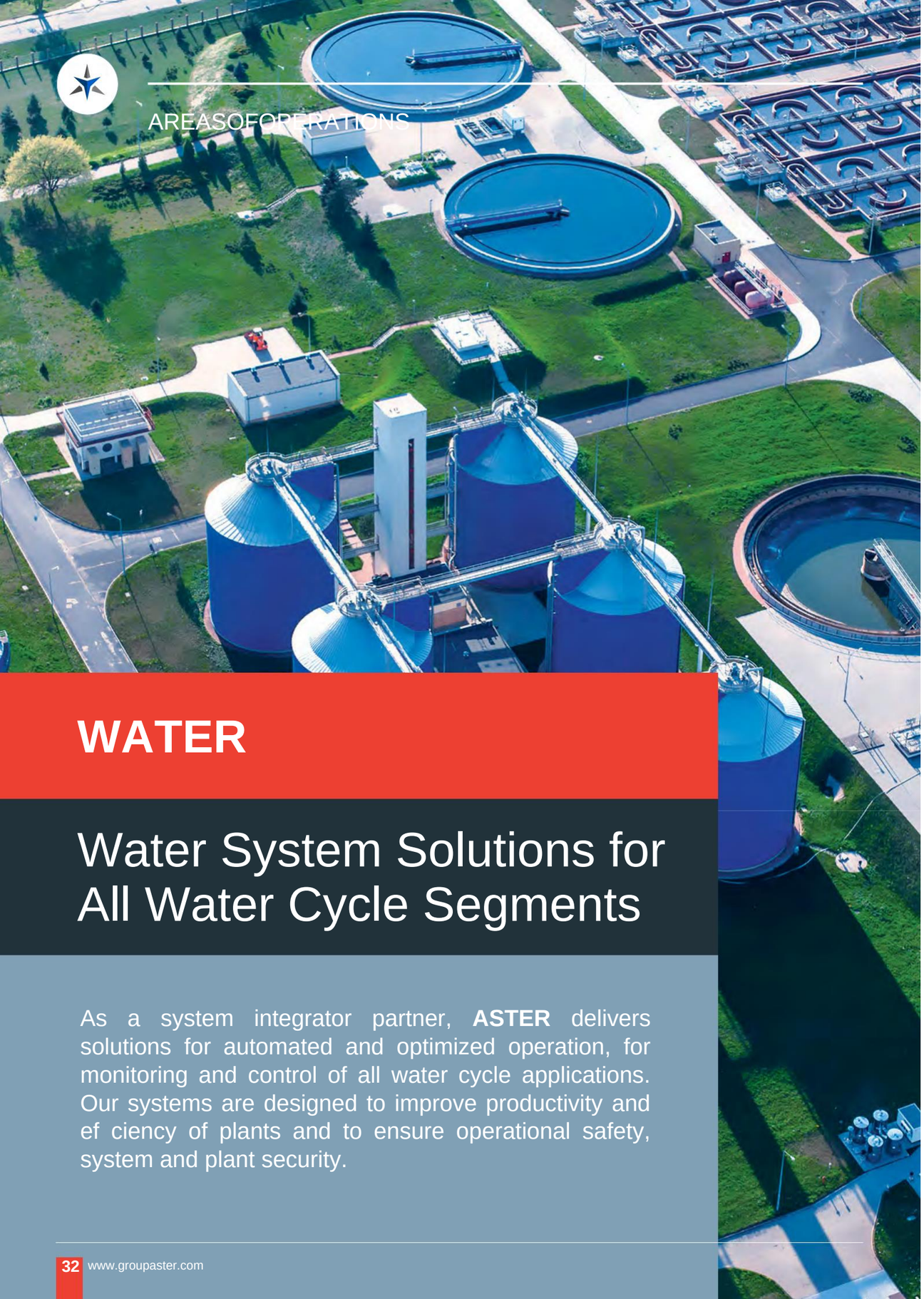
ASTER's proven expertise in the oil & gas sector centers around providing complete integrated solutions for securing critical oil and gas infrastructures.

HIGH QUALITY AND RELIABILITY IN PRODUCTION

- High Integrity Equipment
- Safety Solutions
- Process Electrical & Automation Solutions
- Fire & Gas Sys. Automation Applications
- Power Generation & Distrubution
- Lifescyle Services for Gas and Liquid Pipelines
- Compression and Pumping Applications
- Industial IT Solutions







WATER

Water System Solutions for All Water Cycle Segments

As a system integrator partner, **ASTER** delivers solutions for automated and optimized operation, for monitoring and control of all water cycle applications. Our systems are designed to improve productivity and ef ciency of plants and to ensure operational safety, system and plant security.

ELECTRICAL

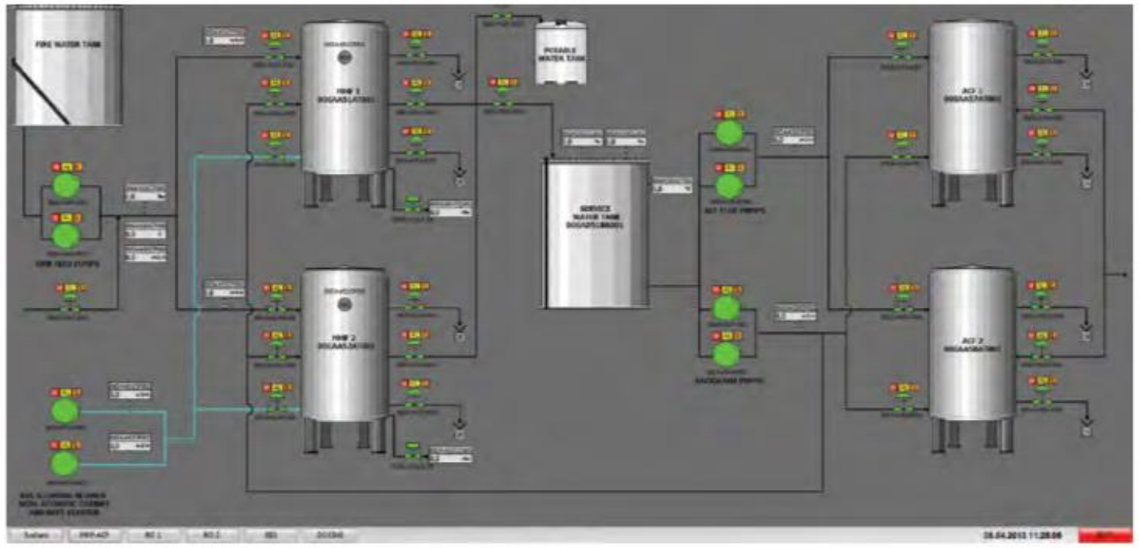
- Substations
- MV Switchgears
- Transformers
- LV Switchgears, MCC Panels
- Emergency Power Generators
- Uninterruptable Power Supply
- Earthing&Lightining Protection
- Lighting Systems
- Cabling & Cable Tray
- Data, Communication, CCTV, Fire Alarm

AUTOMATION

- DCS Systems
- PLC Systems
- SCADA Systems
- Telemetry & Communication System
- Advance Function (simulation, optimization)
- Process Flowchart Applications

INSTRUMENTATION

- Field Instrumentation
- Analytical Devices

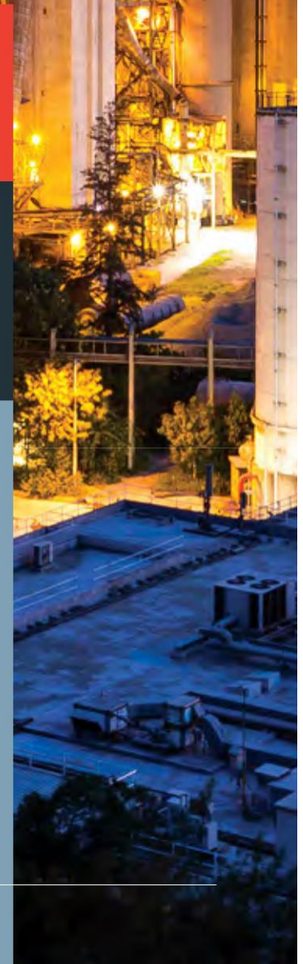




CEMENT & MINING

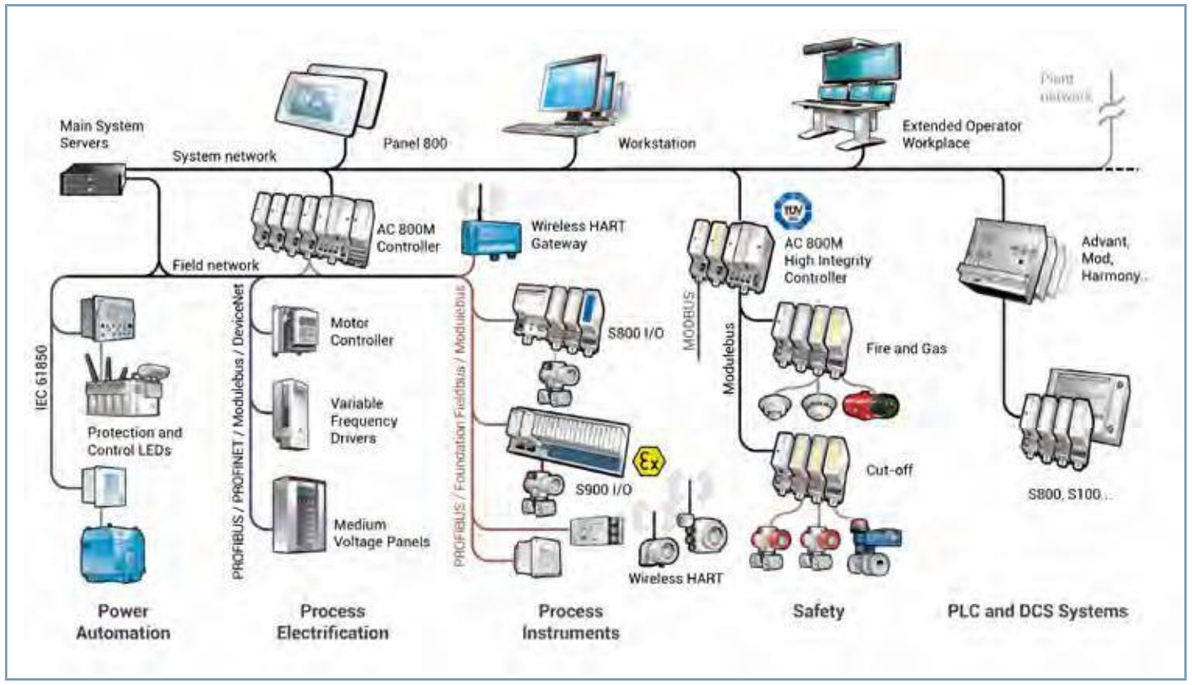
Individual Requirements & Optimal Solutions

According to the individual requirement of our customer, we specify the optimal production process, including the crushing, blending, storage, homogenizing, grinding and analysis technology. Thanks to the modern process applications, we protect resources and environment, at the same time guarantee plant owners maximum productivity and economy of operation.



HIGH QUALITY AND RELIABILITY IN PRODUCTION

- Turnkey EPC Solutions
- Engineering
- Electrification & Automation
- Instrumentation
- Drive Applications
- HV Substation ,Transmission
- DCS, PLC, SCADA Applications
- E-Balance of Plant
- Safety Systems
- Integrated Process





TRANSPORTATION

Technology Speeding Up Our Lives

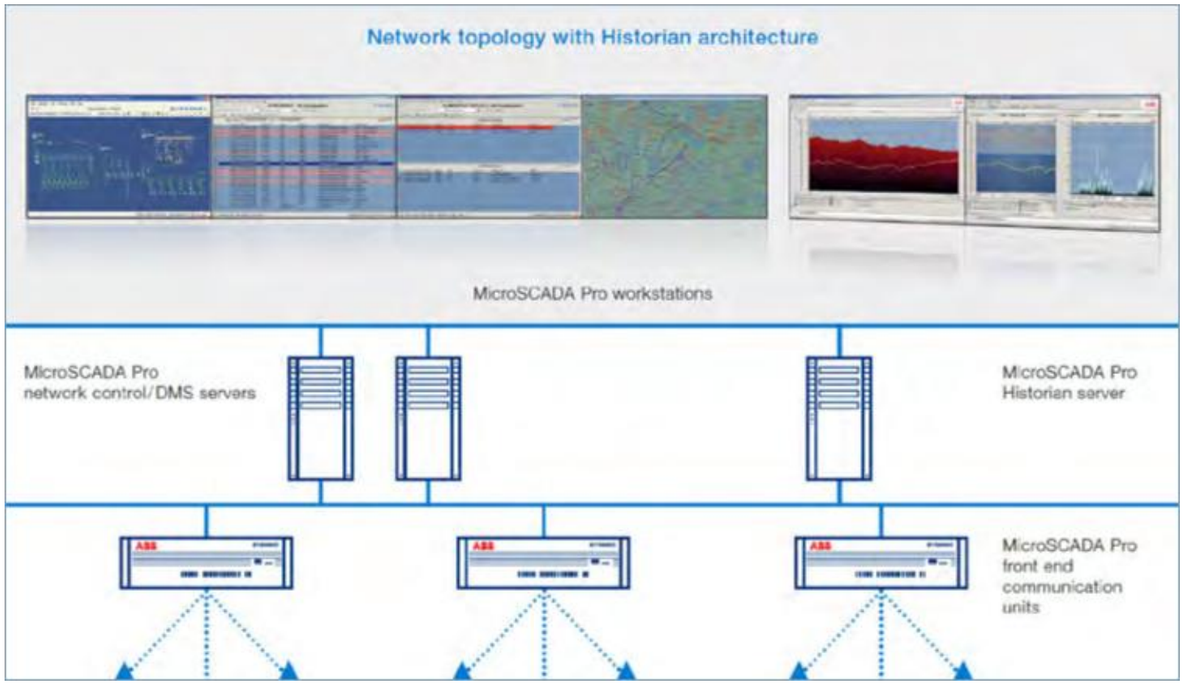
ASTER is capable of integrating all rail systems: Tramway, metro, railway and high speed trains. Our full portfolio of capabilities and technologies allows us to develop the turnkey solution that best meets the needs of each individual project.

RAIL FULL AUTOMATION

- Signaling
- IT Communications
- Electronic Interlocking
- Automatic Train Control System
- Automatic Train Protection System
- Operations control systems

RAIL FULL ELECTRIFICATION

- Protection
- Converter
- Transformers
- High-voltage Switchgear
- DC Switchgears and Components
- Medium-voltage Switchgears
- Network Control (SCADA systems, PLC)
- Contact Lines for Railways
- Intelligent Energy Management System
- System Design / Configuration



FOOD & BEVERAGE, CHEMICALS, PHARMACY

Efficient Production Begins with Integration

ASTER's comprehensive industrial solutions improve productivity, reduce production costs and increase energy ef ciency across a huge range of applications. We carry out the realization of the automation system functions with modern methods meeting the high demands of the technological process and the scientic technical progress.

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HIGH QUALITY AND RELIABILITY IN PRODUCTION

- Electrification
- Equipment Optimization
- Energy Management

- Electrical Control System
- Production and Quality Management
- High Integrity Safety System

- DCS Controllers, I/Os, HMI and Operator Panels
- PLC Controllers, I/Os and Operator Panels
- Panel-mount Process Controllers and Indicators

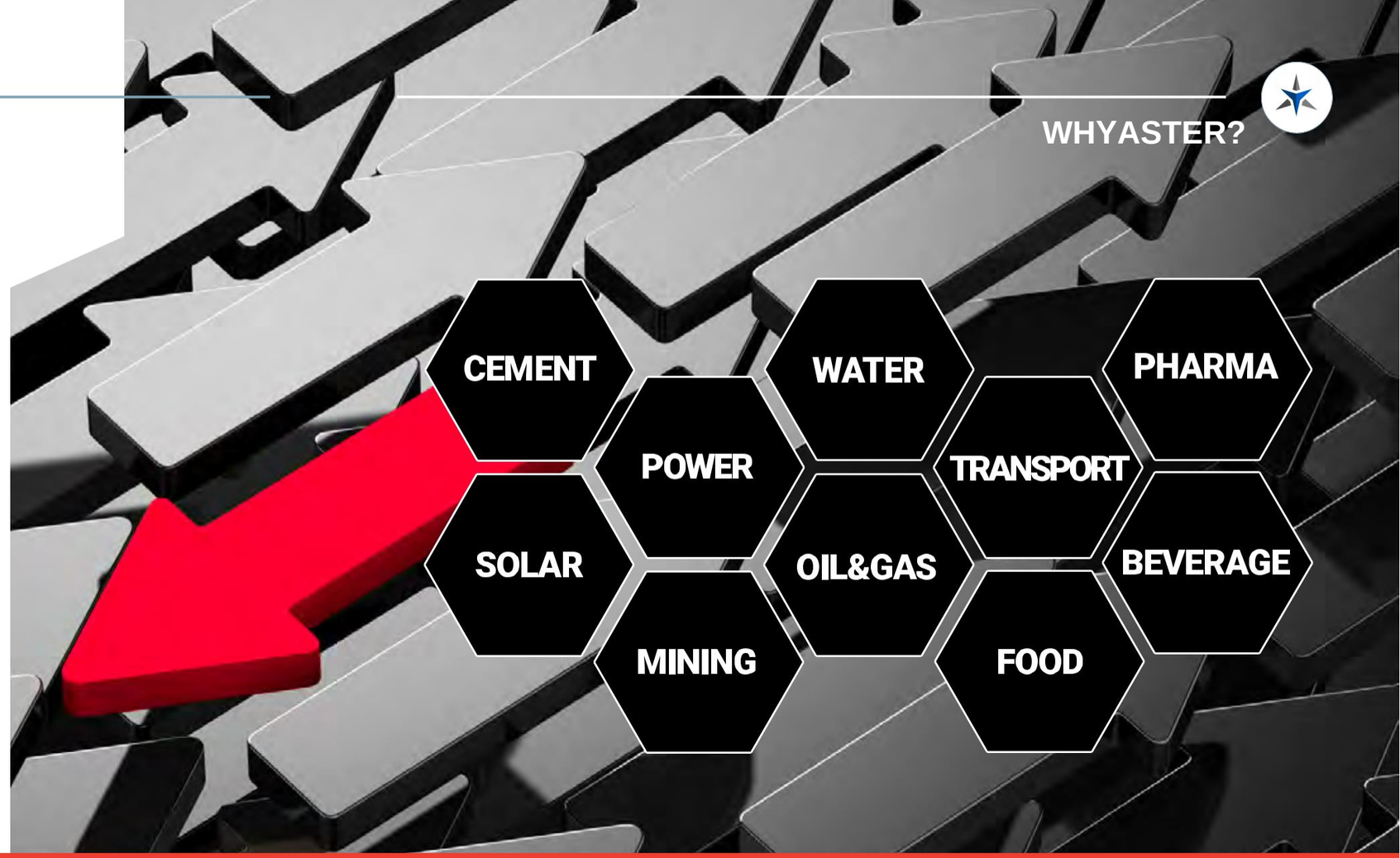
- Paperless and Circular Chart Recorders
- Measurement: Temperature, Flow,
- Level, Pressure, Valve Positioners, Signal converters



WHATMAKEUSDIFFERENT?

ASTER offers a unique combination of management capabilities with operational excellence in EPC projects. Managing the EPC contracts are usually complicated and require special expertise and knowledge. We have developed our operational excellence over many years, gaining the knowledge edge and expertise to manage large-scale projects.

Our operational experience in engineering combined with continual research and development make it possible to deliver a variety of innovative, efficient and high quality processes and plants. Customer satisfaction is our priority along-side environmental and social awareness. Our flexibility and fast decision-making bring each project to a punctual conclusion, safely and within budget.



As a customer, you select a single construction contractor for the engineering, procurement, and construction of a facility. This is the perfect arrangement if you prefer a "one-stop" engineering, procurement and construction contract.

- Maximum efficiency
- Operational experience
- High reliability offers long-term benefits
- On time and ahead of schedule delivery
- Complete range of life cycle services
- Sustainable approach
- Team Approach

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think.

Aster believes in carefully and methodically thinking about every aspect of a project. Taking the time to think about the individual requirements and dynamics of each element of a project ensures that Aster can focus on surpassing the goals of our clients.

design.

Ensuring the design process is managed effectively is the most crucial aspect of creating a successful outcome for any project. Aster ensures the requirements of all the stakeholders are realised through the design process while creating an efficient, and functional design.

build.

The build phase is the culmination of the think and design processes, physically realising the vision behind the project while delivering the wishes of all the stakeholders. Aster approaches the build phase of all our projects with an unyielding desire to create exceptional quality.

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