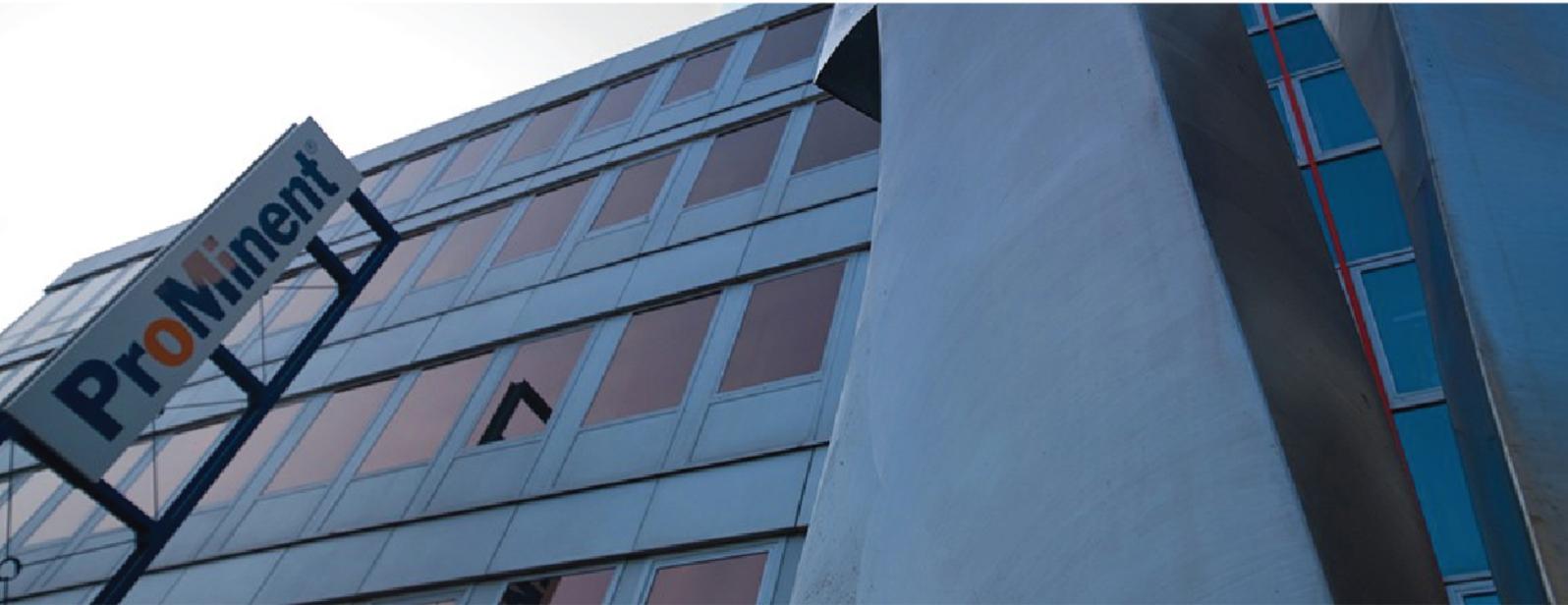


Product overview

Experts in Chemical Feed and Water Treatment Solutions



 **Smart
Disinfection**
Low Impact | Low Cost | High Efficiency



Our foundation

The foundation of ProMinent's global success story is high-quality products based on decades of engineering expertise, an in-depth understanding of applications and continuous innovation. The group of companies is therefore continuing to invest in research and development.

ProMinent also has a high degree of vertical integration at its 12 production sites worldwide, including Heidelberg, guaranteeing outstanding levels of quality for our customers and ensuring our independence from fluctuations in supplier markets.

Our aim

The modular ProMinent range, integrated in carefully designed solutions, enables our customers in a wide range of industries to achieve maximum safety and efficiency in their production processes, at all times and in any location.

For us, customer proximity means working with the customer to find the right solution for individual needs. Personal, practical advice and smooth project handling are as much a part of our offering as our worldwide customer service.

Our commitment

We are passionately committed to environmentally sound, sustainable and cost-effective solutions for metering technology and water treatment.

In more than 100 countries, around 2,400 employees in our own sales, production and service companies work hard to

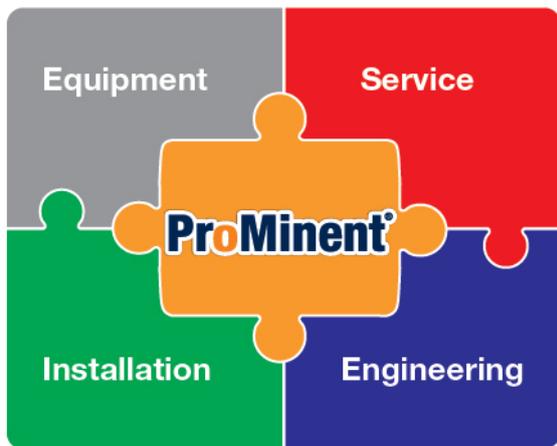
deliver fast and reliable service for every product, day in, day out. Because the ProMinent group's position as a global market leader means a continuous commitment to excellent products and services and an obligation to think and act responsibly.



ProMinent is grouped into four business units.

| | | | |
|--|---|--|--|
| <p>Business Unit 1</p> <p>Chemical Feed</p>  | <p>Business Unit 2</p> <p>Process Technology</p>  | <p>Business Unit 3</p> <p>Measurement & Control Technology</p>  | <p>Business Unit 4</p> <p>Water Treatment Solutions</p>  |
|--|---|--|--|

ProMinent is the one-stop solutions partner for chemical handling and water treatment systems.



- One provider for all products
- The products are compatible to fit to one another
- The products are complementing one another
- One contact for all enquiries

We provide reliability to our customers through product and service quality and availability.

RELIABILITY

Product Quality

- Durable
- Accurate
- Safe

Service Quality

- Friendly
- Informative
- Prompt

Availability

- Fast
- Anytime
- Global



Chemical Feed - Safe, Precise and Cost-Effective Dosing

ProMinent has developed a comprehensive range of product to meet demands of different industrial sectors with metering pumps ranging from 0.1 ml/h to 100,000 l/h, and pressures of up to 4,000 Bar.

Two drives are available: the **ProMinent®** solenoid metering pumps are universally applicable, especially with optimized use of microprocessor controllers, while the **ProMinent®** motor-driven metering pumps are distinguished by their high performance rates. Both are designed to be robust in action while maintaining precise feed rates. The comprehensive range of accessories allows these pumps to be integrated into practically any process design.



Dosing: Wide range for **reliability** and **precision**

Solenoid-driven diaphragm metering pumps

Solenoid driven metering pumps are available in capacities ranging from 0.74 to 75 l/h at a back pressure of 25 to 2 bar. ProMinent uses a very extensive range of materials to be able to meter almost any liquid chemicals.



Beta® b

The all-rounder

Capacity range
0.74 – 32 l/h
25 – 2 bar



Concept® Plus CNPB

**Simple and cost
effective.
Standard PVDF
pump head**

Capacity range
0.74 – 22 l/h
16 – 1.5 bar



gamma/ X

Diverse applications

Capacity range
2.3 – 45 l/h
25 – 2 bar



delta®

Perfect dosing output

Capacity range
7.5 – 75 l/h
25 – 2 bar

Typical Industries and Applications :

- General: Chemical Metering up to 75l/h
- Potable Water Treatment: Metering of Disinfectants
- Cooling Circuits: Metering of corrosion inhibitors and biocides
- Waste Water Treatment: Metering of Flocculants
- Paper Industry: Metering of Additives
- Plastics Production: Metering of Additives

Motor-driven diaphragm metering pumps

Motor driven metering pumps need to be robust, reliable and able to run on their own without supervision. Metering pumps with mechanically actuated diaphragms can be used almost universally in low pressure ranges. And what about servicing? Minimal. Precision? Uncompromising. Value for money? The best.



Vario C

Precise and reliable

Capacity range
8 – 64 l/h
10 – 4 bar



Plasma

Reliable & Cost Effective

Capacity range
50 – 400 l/h
5 bar



Meta

Durable and high performance

Capacity range
40 – 790 l/h
10 – 3 bar

Sigma Basic and Control Type

Safety is standard



Sigma Control Type

Sigma/ 1

Capacity range
17 – 120 l/h
12 – 4 bar

Sigma/ 2

Capacity range
50 – 350 l/h
16 – 4 bar

Sigma/ 3

Capacity range
146 – 1,030 l/h
12 – 4 bar



Makro TZ

Robust and sets the standard for metering safety

Capacity range
260 – 2,100 l/h
12 – 4 bar

Typical Industries and Applications:

- General: Chemical Metering up to 1,000 l/h
- Potable Water Treatment: Metering of Disinfectants
- Cooling Circuits: Metering of Disinfectants
- Waste Water Treatment: Metering of Flocculants
- Paper Industry: Metering of Additives
- Plastics Production: Metering of Additives
- Boiler Feed Water Treatment: Metering of Chemicals
- Chemical Industry: Metering of reactants & catalysts

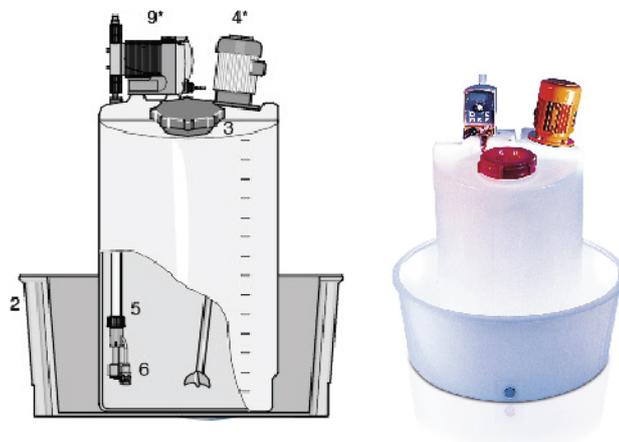
Transfer Pumps and Storage Tanks : Delivering and Completing the Dosing Process

Transfer and Peristaltic pumps

| | | | |
|---|--|--|---|
|  | <p>Eccentric Screw Pump Spectra</p> <p>Perfect for Viscous media</p> <p>Capacity range 2.4 – 12,000 l/h 12 – 3 bar</p> |  | <p>Centrifugal Pump von Taine</p> <p>Safe and Reliable</p> <p>Capacity range up to 22,500 l/h Discharge lift up to 23.5 mWC</p> |
|  | <p>Air- Operated Diaphragm Pump Duodos</p> <p>Run-dry safe and self-priming/ Simple to operate</p> <p>Capacity range up to 6,700 l/h Discharge lift up to 70 mWC</p> |  | <p>Barrel Pump DULCO® Trans</p> <p>Portable with different types of tube materials</p> <p>Capacity range 900 – 4,800 l/h</p> |
|  | <p>Rotary Lobe pump Rotados</p> <p>Compact with good pump capacity</p> <p>Capacity range 25 -100 m³/h 10 – 4 bar</p> |  | <p>Peristaltic Hose Pump</p> <p>For gaseous/ abrasive media - various hose materials available</p> <p>Capacity range 0.4 -15,000 l/h 2 – 15 bar</p> |

Dosing Tanks/ Collection Tanks

High Quality and Cost Effective: PE Tanks available from 35 - 1,500l with mounting for Stirrer/ Prominent Pumps



Measurement & Control Technology – Heart of Optimum Solutions



COMPLEXITY

ProMinent offers precise cycles of control with perfect interplay of DULCOMETER® measurement and control technology, DULCOTEST® sensor technology and ProMinent® metering pump. The wide product range provides single sourced solutions at every stage from simple control loop to complex high technology control. Our strength lies in the decades of experience, individual consultations and full range of products and services.

| | | | |
|--|---|--|---|
| | <p>DULCOMETER DCCA</p> <p>Simple measuring task</p> | | <p>DULCOMETER D1Cb/D1Cc</p> <p>Versatile and easy to operate</p> |
| | <p>DULCOMETER Dialog</p> <p>Dual Channel with more functions</p> | | <p>DULCOMARIN II</p> <p>Up to 16 measuring channels for even the most demanding tasks.</p> |

Complete Tailor made Solutions: Measuring Systems/Stations



“Plug & Play” Measuring Stations

Our compact “Plug & Play” stations offer complete online process measuring and control. These pre-assembled systems offer quick and easy installation and provides maximum productivity at minimum cost. drinking water, food & beverage, cooling tower and waste water.

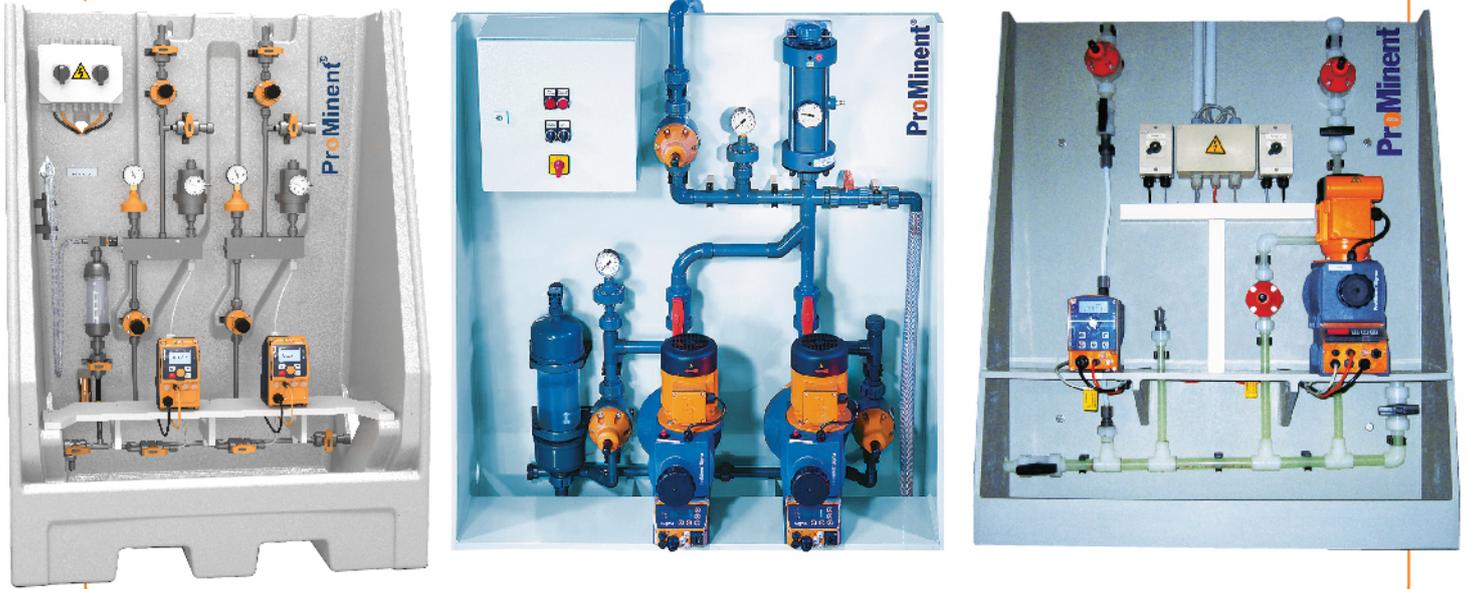
Typical Industries and Applications:

- Swimming Pool Industry
- Potable Water Treatment
- Food & Beverage Industry
- Cooling Tower Industry
- Wastewater Treatment

Complete Tailor made Solutions: Chemical Dosing

Plug & Play Chemical Dosing Skids

Complete solutions from ProMinent for ready to use "Plug and Play" factory tested dosing skids - with your choice of pumps, sensors, controllers, valves, tanks, etc are available at attractive prices with short delivery period. They are fully assembled and tested for quick and trouble free installation



Your benefits include:

- Tailor made Solutions
- Components are Perfectly matched to each other
- Quick and trouble free Installation

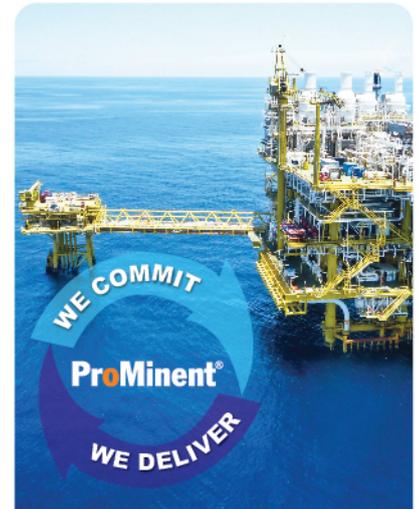
Process Technology - For the most demanding applications like Oil & Gas, Power and Process Industries

Experience and the highly flexible approach of our experts - all help to provide our customers with optimized solutions for each specific chemical dosing system for the process industry. ProMinent ORLITA® is designed in accordance with current worldwide specifications:

In the oil and gas, petro-chem, power plants and other process industries, product performance and reliability is top priority. ProMinent ORLITA®'s advanced, robust technology represents the top brand name for quality, outstanding performance and maximum reliability.

- API 674/ 675 for onshore and offshore applications ASME,
- EN, DIN, PED, etc.
- ATEX (explosion proof)
- Certified to Gosgortekhnadzor

ProMinent ORLITA® is indeed the dependable and competent partner when it comes to chemical dosing duties in the heavy duty process industries.



Hydraulic Diaphragm Motor Driven Pumps



Hydro 2/3/4

Safe and Robust

Capacity range
3 – 1,450 l/h
100 – 7 bar



Orlita Evolution 1/2/3/4

Highest safety requirements and extremely robust

Capacity range
3 – 7,400 l/h
400 – 7 bar



Makro/ 5

Outstanding process reliability

Capacity range
450 – 6,600 l/h
25 – 6 bar



TriPower MF

Cost effective and small footprint

Capacity range
4 – 38m³/h
415 – 50 bar

Process Technology - Engineered Chemical Dosing Stations



Chemical Injection Skid for Power Stations



Diesel Injection Skid for Off shore Application

From land base power plant to offshore oil rig, our technical team is available to provide precise and reliable engineered chemical dosing stations for different applications and standards such as EN, ASME and API. These include:

- Ammonia/Oxygen Scavenger Stations
- Phosphate Dosing Stations
- Hypochlorite Dosing Stations
- Sulfuric Acid Dosing Stations
- Scale Inhibitor Dosing Stations
- Flocculants Dosing Stations
- Dewatering Polymers Dosing Stations
- Dispersion Polymers Dosing Stations
- Demulsifier Dosing Stations
- Container/Enclosed Type Dosing Stations

Our Lloyd's certified Welding Procedure Specifications (WPS) and qualified welders provide the added measure of safety and quality in preparing our Chemical Dosing Stations.



Containerized Dosing Stations



Chemical Injection Skid for Petrochemical Plants

Water Treatment Solutions – Every Drop Counts

Clean and safe water is the essential requirement for our general health and well being. In ProMinent, our water treatment solutions cater to many different industries such food and beverage, medical, pharmaceutical, hotels and resorts, municipal water and wastewater, etc.

In general, we provide the optimum solution to ensure that the desirable water and waste water quality of each process is met. ProMinent is one of the few suppliers worldwide to offer a complete range of water treatment solutions from filtration to desalination and all disinfection processes, and hence we can provide complete solutions with the latest technologies for each specified customer requirements.

| | | | |
|--|---|---|---|
|  | <p>Ultraviolet Disinfection System</p> <p>Gentle on people and the environment</p> |  | <p>Ozone Generation System</p> <p>Powerful and Effective</p> |
|  | <p>Chlorine Dioxide Generation System</p> <p>Cost Effective and ultra simple process integration</p> |  | <p>Salt Electrolysis System & Safe</p> <p>Chemical Free Disinfection and economically sensible</p> |

Typical Industries and Applications:

- Swimming Pool Industry
- Potable Water Treatment
- Bottling Industry
- Aqua - culture Industry
- Process Water

Overview : Polymer Preparation Unit



Polymer batching station Ultramat® ULFa (continuous flow system): This metering system can be used to batch flocculation aids for the preparation of a ready-to-use polymer solution. The system was designed for the fully automatic batching of polymer solutions.

- Extraction rate up to 8,000 l/h



The metering system PolyRex is a double-decker batching station for the processing of liquid and powdered polymers. It consists of the feed and mixer unit and the two stainless steel double-decker tanks. The polymers used are ideally utilised.

- Capacity range: up to 3,820 l/h



The metering system Ultramat® ULDa from ProMinent is an automatic polyelectrolyte preparation system. It is useful wherever synthetic polymers need to be automatically prepared as polymer solutions to act as flocculation aids.

- Extraction rate up to 2,000 l/h



The metering system POLYMORE is the inline batching station in which the liquid polymer is introduced into the pressure-encapsulated multi-zone mixing equipment through a peristaltic pump. The result is a prepared and homogeneous polymer solution.

- Capacity range: up to 18,000 l/h

Service & Maintenance - Speed and Quality

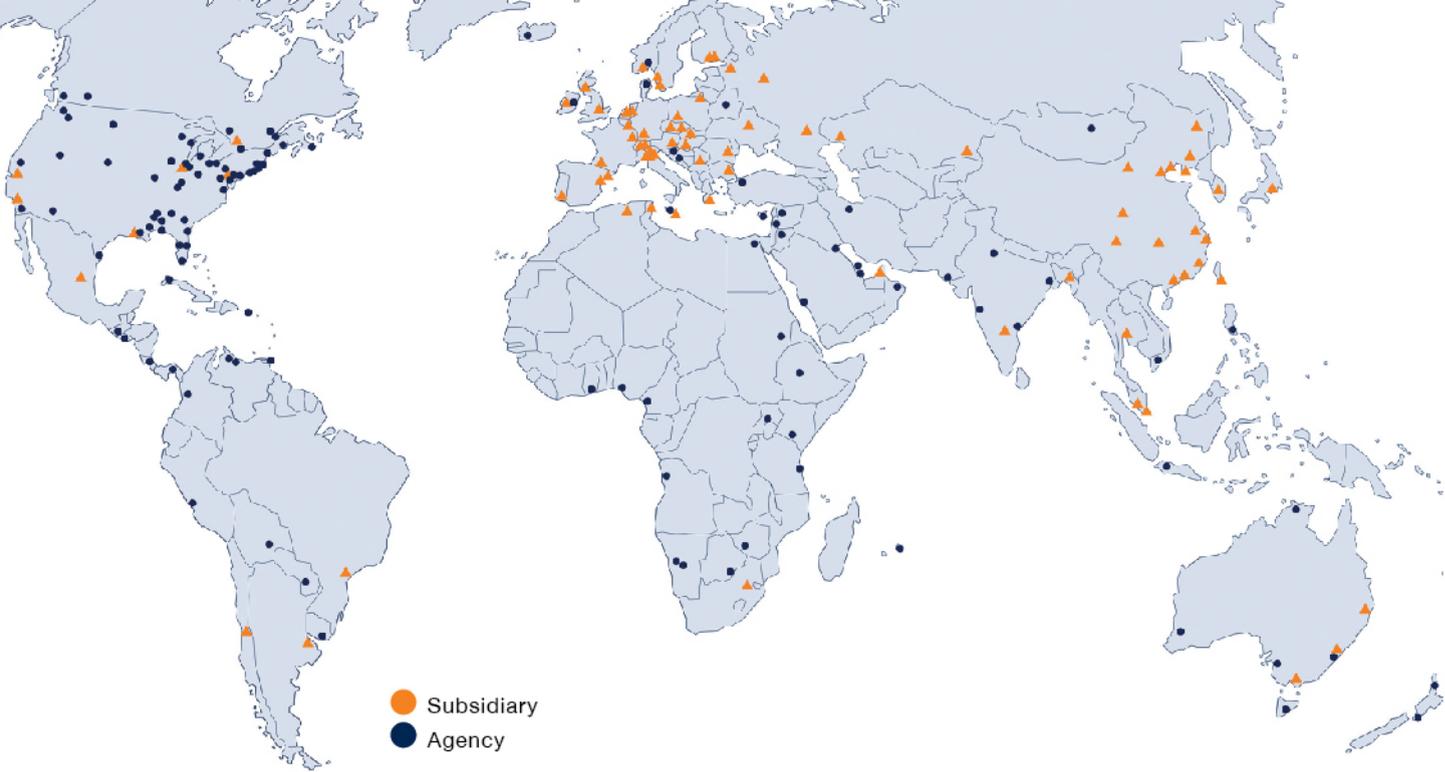
We are mindful that our customers expect from ProMinent - excellent after sales services.

In this regard, we have set clear Quality Objectives, to measure and continually improve our service performance. A key focus is to provide SQ (Speed and Quality) service, which includes:

- Keeping a sufficient inventory of spare parts and monitoring its relevance to ensure that our customers are served promptly
- Responding to a service request within the next working day
- Enhancing the skills of our Service personnel through continuous training both locally and overseas
- Ensuring that proper tools and devices are available for our Service personnel to perform their duties safely, effectively and efficiently

We also provide preventive maintenance contract as part of our after sales services.





● Subsidiary
● Agency



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ISO 9001 : 2008

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