

Non-standard Custom Coalbed Methane & Gas Drainage Dryer

Explosion-Proof Air Dryer





浑浊潮湿气体

纯净干燥蓝色气流









Product Description

As a professional manufacturer specializing in refrigerated air dryers and desiccant air dryers, Demargo (Shanghai) Energy-Saving Technology Co., Ltd is dedicated to providing high-quality, non-standard customized coalbed methane (CBM) & gas drainage dryer solutions that precisely meet your specific industrial needs. Our CBM & gas drainage dryers are specially designed to remove moisture, coal dust, impurities and harmful components (such as sulfur compounds, carbon dioxide) from coalbed methane and gas drainage, ensuring the purity, stability and safety of the gas during extraction, transportation, utilization and treatment, while fully complying with international standards such as CE, ISO 9001, ASME and relevant coal mine safety certifications.

Applicable Industries

Our non-standard custom coalbed methane & gas drainage dryers are widely used in industries related to coal mining, coalbed methane development and gas drainage treatment, including but not limited to:

- Coal Mining Industry: Suitable for gas drying in underground coal mine gas drainage, coalbed methane extraction, coal mine ventilation systems and gas recovery projects, preventing pipeline corrosion, ice blockage and gas explosion risks.

- Coalbed Methane (CBM) Industry: Used in CBM drying during extraction, purification and utilization, ensuring efficient combustion, power generation and safe transportation of coalbed methane.
- Oil & Gas Industry: Applied in gas drying for shale gas extraction, coalbed methane development and associated gas treatment, adapting to harsh on-site mining conditions.
- Power Generation Industry: For gas drying in coalbed methane-fired power plants and gas drainage power generation projects, ensuring stable operation of power generation equipment and reducing maintenance costs.
- Environmental Protection Industry: Used in gas drying for coal mine gas treatment, tail gas purification and emission reduction projects, contributing to green mining and environmental protection.
- Coal Chemical Industry: Suitable for gas drying in coal gasification, coke oven gas utilization and coalbed methane chemical synthesis projects, complying with strict industrial purity requirements.

Customization Process: What You Provide, We Customize

Adhering to a customer-oriented customization concept, you only need to provide us with the following key parameters. Our professional R&D and engineering team with rich experience in coal mine gas treatment equipment will design and configure the most suitable coalbed methane & gas drainage dryer for you, ensuring perfect integration with your mining and gas drainage system:

- Gas handling capacity (Nm³/min or CFM), inlet pressure and inlet temperature (adapt to low-temperature and high-humidity underground environment).
- Required pressure dew point (from 2°C to -50°C, or lower according to your special requirements, to avoid ice blockage in underground and low-temperature transportation pipelines).
- Gas composition (methane content, moisture content, coal dust content, sulfur compounds, carbon dioxide and other impurity content).
- Working environment conditions (underground/mine site ambient temperature, humidity, dust concentration, anti-vibration, explosion-proof requirements and installation space limitations).
- Special industry standards or certification requirements (such as CE, ASME, ATEX, IECEx, coal mine safety certification).
- Other special needs (such as cooling method, control system type, pipeline interface size, mobile/fixed installation mode, dust-proof and waterproof requirements).

Optional Materials & Accessories

To ensure the durability, corrosion resistance, explosion-proof performance and high efficiency of the equipment, we select high-quality materials and accessories that meet coal mine and gas industry standards, supporting you to choose flexibly according to your on-site mining conditions, industry characteristics and budget:

Optional Materials

- Body Material: Carbon steel with anti-corrosion and anti-dust coating (standard), 304/316L stainless steel (for high-sulfur and high-humidity gas environment), explosion-proof alloy steel (for underground explosive gas environment).
- Heat Exchanger Material: Stainless steel plate-fin (standard, corrosion-resistant, dust-proof and high heat exchange efficiency), copper tube with aluminum fins (suitable for general gas drying scenarios), corrosion-resistant alloy steel (for strong corrosive gas environment).
- Pipeline Material: Explosion-proof seamless steel pipe, 304/316L stainless steel pipe, anti-corrosion alloy steel pipe (according to gas pressure, corrosiveness and underground explosion-proof requirements).

Optional Accessories

- Compressor: Bitzer, Hitachi, Danfoss (international famous brands, explosion-proof grade compliant, high reliability, energy efficiency and stable performance, suitable for long-term continuous operation in underground harsh environments).
- Control System: Explosion-proof PLC control (Siemens, Mitsubishi), explosion-proof touch screen, remote monitoring, fault alarm and automatic shutdown function (optional), adapting to underground operation and easy maintenance.

- Refrigerant: Environmentally friendly refrigerant such as R134a, R407c, R410a (zero ozone depletion potential, non-flammable, non-toxic, complying with international environmental and coal mine safety standards).
- Auxiliary Accessories: Explosion-proof dew point analyzer, automatic non-clogging drain valve (anti-clogging by coal dust), coal dust filter, precision filter (to further improve gas purity), explosion-proof junction box.
- Cooling System: Air-cooled (standard, dust-proof structure, suitable for mine site), water-cooled (optional, suitable for high-humidity underground environment), underground special cooling system (anti-dust and anti-vibration).
- Safety Accessories: Explosion-proof pressure relief valve, gas leakage detector, flame arrester, over-temperature and over-pressure protection device, emergency shutdown system (comprehensively ensuring underground and on-site safety).

Our Advantages

With years of experience in R&D and production of compressed air treatment equipment and coal mine gas drying equipment, we have a professional technical team familiar with coalbed methane and gas drainage technology, as well as a strict quality control system. All customized CBM & gas drainage dryers undergo 48-hour full-load explosion-proof and performance testing before leaving the factory, ensuring stable performance, reliable operation and compliance with coal mine safety and international standards. We also provide 24-hour technical support, on-site installation guidance and after-sales service to solve your problems in a timely manner.

For more specific details about non-standard custom coalbed methane & gas drainage dryers, including customized solutions, technical parameters, explosion-proof certification, quotation and delivery time, please contact us directly. We will provide you with one-to-one professional consultation and customized services to meet your unique coalbed methane and gas drainage drying needs.

Refrigerated Air Dryer & Desiccant Air Dryer - Demargo

Demargo (Shanghai) Energy-Saving Technology Co., Ltd. is a national high-tech enterprise and a Shanghai "Specialized, Refined, Characteristic and Innovative" enterprise, devoting itself to the R&D, production, sales and after-sales service of compressed air purification equipment for 19 years. With a firm commitment to energy conservation, environmental protection and technological innovation, we have grown into a leading manufacturer in the air compression post-treatment industry, providing high-quality, customized solutions for global industrial customers.

Our core strength lies in strong technological research and development capabilities. Up to now, we have owned 24 authorized patents and 22 patents under application, covering key technologies of air drying and purification equipment, which effectively guarantees the stability and energy efficiency of our products. We have passed ISO9001 and QS certifications, and our products comply with international industrial standards, with dew point ranging from -23°C to -70°C, air treatment capacity of 1~500Nm³/min, and outlet oil content as low as 0.003PPM, reaching the industry-leading precision level.

We boast a comprehensive and diverse product portfolio, covering more than 60 product categories, including 21 standard products and a variety of non-standard customized products that lead the industry. Our main products include air compressors and their accessories, air receivers, refrigerated dryers (including plate heat exchanger type, high-temperature air-cooled type, DC inverter type, etc.), adsorption dryers, combined dryers, heat of compression adsorption dryers, filters, zero-air-consumption blower-heated dryers, self-cleaning air filters, compressed air pre-cooling units, low-temperature high-pressure nitrogen pre-cooling units, industrial chillers, oil-water separators, oil removers and aftercoolers, etc.. We support 12 types of product configurations such as air-cooled/water-cooled, fluorine-free/high-temperature, inverter/explosion-proof, and can provide intelligent solutions such as industrial computer and programmable control according to customer needs.

With excellent product quality and professional service, we have won wide recognition in the global market. Our customers are distributed in more than 20 countries and regions around the world, including Brazil, Australia, etc., and we have

established in-depth cooperation with more than 20 OEM manufacturers and 2299 brand agents. Our annual output reaches 9,682 sets, and the cumulative sales volume exceeds 100,000 sets, which fully demonstrates the market influence and customer trust in our brand.

Customer-centricity is our consistent service philosophy. We provide a full-cycle service system from pre-sales design, in-sales installation to after-sales maintenance: we promise 30-minute response, 24-hour online guidance and 48-hour on-site service, and ensure spare parts supply response within 24 hours, effectively solving the worries of customers in product use. We are committed to tailoring the most suitable compressed air purification solutions for customers in more than 30 industries such as power, aerospace, electronics, and chemical industry, helping enterprises reduce energy consumption, improve production efficiency and product quality.

Looking forward to the future, Demargo will continue to increase R&D investment, accelerate technological innovation, expand the global market layout, and strive to become a world-class provider of compressed air purification and energy-saving solutions. We sincerely look forward to cooperating with partners from all over the world to jointly promote the development of the global industrial energy-saving and environmental protection industry!

Demargo (Shanghai) Energy Saving Technology Co.,Ltd

Address: No.9, Lane 38, Caoli Road, Fengjing Town, Jinshan District, Shanghai, China

Address: No. 9, Lane 38, Caoli Road, Fengjing Town, Jinshan District, Shanghai

Tel: +8617316541891 / +8617321147609

Email: nora@compressor-airdryer.com / Jim@compressor-airdryer.com

WhatsApp: +8617316541891 / +8617321147609