

Services for the Metals Processing industry Expertise beyond gas production and delivery

Air Products expertise goes far beyond gas production and delivery. As a leading global supplier of technical gases to the metals industry we have developed a range of services, systems and solutions designed specifically to help you improve product consistency, reduce capital investment and significantly lower maintenance requirements.

Experience, understanding and solutions

With over 50 years's technical knowledge and experience, we understand current and future industry needs and the challenges you may face. Our experienced team of application engineers and research and design specialists can work closely with you to develop and implement comprehensive, cost-effective solutions to optimise your production process. And, with planned maintenance schedules and a safer working environment you're guaranteed complete peace of mind.

Our range of services for the metals processing industry includes:

- Safety training
- Process audit and optimisation
- Technical facilities
- Installation and enabling equipment.

Safety training

At Air Products nothing is more important than safety. We pride

ourselves on our commitment to safety and are dedicated to improving not only our own safety performance, but our customers' too.

We like to ensure that you have the knowledge and ability to maintain a safe operations and have developed a range of safety programmes, tailored to fit your needs. Some of the most popular areas include:

- Management of bulk gas installations
- Handling of cyllinders
- Properties of industrial gases
- Risks in confined spaces
- Risks of flammable and toxic gases
- General regulations associated with the use of flammable and toxic atmospheres.

Process audits and optimisation

Audits are essential to helping customers realise all the benefits of industrial gases in their operations. Your Air Products team is professionally equipped to handle on-site process reviews and comprehensive environmental compliance audits. We can also help you develop preventive and emergency maintenance programmes.



Process audits

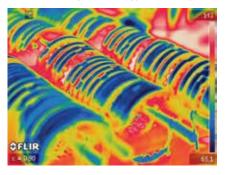
In addition to ensuring your gas supply is tailored to your needs we can help ensure you achieve optimal efficiency and energy consumption in your production process.

Our comprehensive audits cover the key areas in your processes including:

- Understanding atmosphere distribution within a furnace and the effect on product quality
- Measurement and analysis of heat treatment atmospheres
- Evaluation of thermodynamics of furnace atmospheres
- Economic evaluation of atmosphere modes of supply
- Microstructure and chemical analysis
- Confirmation of atmosphere composition including documentation.

Energy audits

Air Products energy audits can help you uncover areas where you can make savings by identifying the opportunities to reduce your costs and improve your energy efficiency.



Metallurgical lab facilities

At Air Products we continually invest in our research and development capabilities. In addition to our experts visiting your production site we also have the capabilities to carry out extensive testing and analysis at our own facilities in Europe and US.

Our broad range of metals focused services includes:

- Microstructure analysis
- Hardness/Micro-hardness testing
- Material identification and characterisation
- Elemental analysis
- · Failure analysis
- Corrosion testing
- Optical profilometry
- Surface analysis.

Customer benefits

- Improved quality
- Optimised atmosphere flow rates or compositions
- Reduced rejects
- Reduced operating costs
- Safety advice

Installation and enabling equipment

With a full portfolio of services we ensure that our systems and your equipment is designed and installed to meet relevant legislation and performs as efficiently as possible, through:

- Maintanance contracts
- Manuals (including O&M)
- Functionality tests
- EH&S consultancy (risk assessment, ORI, PED, ATEX, LVD)



- Staff training on hazards and fundamental requirements
- Project management for new investments or modifications.

tell me more

For more information on any of our service offerings, or to speak with one of our experts, contact your local Air Products office.

United Kingdom

Air Products PLC T +44 0800 389 0202 F +44 01932 258 652 apukinfo@airproducts.com www.airproducts.co.uk

Belgium

Air Products NV T +32 02 255 28 95 beinfo@airproducts.com www.airproducts.be

Air Products SA T +32 02 255 28 95 beinfo@airproducts.com www.airproducts.be/fr

Czech Republic

AIR PRODUCTS spol. s r.o. T +420 800 100 700 infocz@airproducts.com www.airproducts.cz

Germany

Air Products GmbH T +49 0 234 6105 6300 F +49 0234 6105 6371 apginfo@airproducts.com www.airproducts.de

Spain

Carburos Metálicos S.A. T +34 902 13 02 02 F +34 93 290 26 09 oferta@carburos.com www.carburos.com

France

Air Products SAS T +33 0800 480 030 F +33 01 44 92 51 21 frinfo@airproducts.com www.airproducts.fr

Netherlands

Air Products Nederland BV T +31 020-435 3535 F +31 020-435 4035 nlinfo@airproducts.com www.airproducts.nl

Italy

Sapio Produzione Idrogeno Ossigeno S.r.l. T +39 039 8398286 F +39 039 836068 gtm@sapio.it www.grupposapio.it

Poland

Air Products Sp. z o.o. T +48 0801 081 122 infopl@airproducts.com www.airproducts.com.pl

Portugal

GASIN – Grupo Air Products T +351 229 998 300 F +351 229 998 301 proposta@gasin.com www.gasin.com

Slovakia

Air Products Slovakia, s.r.o. T +421 0800 100 700 infosk@airproducts.com www.airproducts.sk

airproducts.com/metals