

Onsite Nitrogen Generation



What is e4... Our Service Excellence means to you:

- efficient** - effective without wasting time, effort or expense
- effective** - producing an intended result to ensure your plant is ready for operation
- economical** - using the minimum of time or resources necessary at a cost effective price
- equitable** - fair to all parties as determined by reason and conscience



iatt.co.uk

Independent Air Treatment Technology

IATT are a truly Independent Air Treatment Technology company. From compressed air filtration, condensate management to desiccant & refrigeration air dryers and onsite nitrogen generators, IATT has a solution to solve all kinds of challenges you may face in your everyday production demands.

IATT offer a comprehensive service from the initial design and installation of air & gas treatment and nitrogen generation systems to the onward service and maintenance contracts of your plant and ancillary equipment.

Our business is your business when it comes to ensuring that your essential air and gas utilities are fully operational. We have set ourselves apart from the way other companies operate, IATT offer you a service that is not only second to none – We Guarantee Service Excellence!

Service Excellence!

When your compressed air treatment or gas generation plant needs servicing or fails, your production falters or stops – what you want is a solution there and then. This is when IATT step in to solve your problems.

When it comes to your Compressed Air Treatment or Onsite Nitrogen Generation System, No matter...

What you require,

Where you are in the UK,

What your problem is,

Whether you are large or small,

IATT have a solution for you!

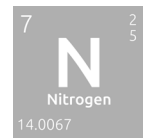


IATT always provide service that is **efficient**, **effective**, **economical** and **equitable** – **e⁴** we call it.

You might think this is revolutionary – to us at IATT it's standard practice with the added ingredient...

... Service Excellence!

Onsite Nitrogen Generation



IATT Onsite Nitrogen Generators offer you a less expensive, safe and environmentally sound solution compared to traditional nitrogen gas tank and cylinder gas storage. Onsite generation of nitrogen is a fraction of the costs of gas cylinders or tanked in supplies.

Nitrogen Generators are available for small lab based systems and medium size applications to large plant systems offering low to high flow capabilities.

IATT are Solutions Providers for nitrogen gas generation plant and will handle your project needs from initial concept to installation through ongoing service and support.

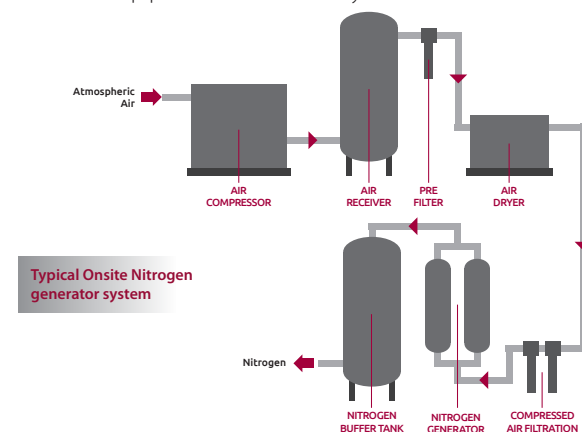
Why Use Nitrogen...

When products and some processes are exposed to air from the atmosphere or from compressed air the oxygen present can cause spoilage, the growth of moulds, yeast and aerobic bacteria. Degradation of materials due to oxidation such as impairing of taste and other detrimental effects can also occur. Even with vacuum packaging, products can suffer from spoilage and degradation.

Nitrogen however, is an inert, odourless and flavourless gas that is abundantly available in the atmosphere at 78% - Nitrogen seemed so inert that Lavoisier, the 18th century chemist that discovered it, named it azote, meaning "without life". When used in packaging and in product processing nitrogen improves the shelf life of perishable products, it does not cause degradation of the surface characteristics of materials, hence its usefulness in many processing and industrial applications.

How Onsite Nitrogen Generation Works...

Basically nitrogen is generated from the atmosphere via a compressed air, dryer and filtration system into the nitrogen generator where it is separated, purified and fed into the plant for use via a pipework distribution system.



There are two techniques used to generate nitrogen from the atmosphere – Membrane Technology and Pressure Swing Adsorption (PSA). Both techniques provide high purity nitrogen. Selection of the best one for an application depends on flow rates and the nitrogen purity required.

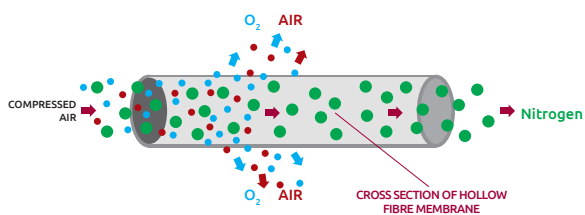
Membrane Nitrogen Generation

When nitrogen purity of up to 99.5% is required for small to medium flow rates then Membrane Nitrogen Generation is ideally suited.

How Membrane Nitrogen Generation Works...

Membrane Nitrogen Generation uses filtration to separate nitrogen from atmospheric air that is passed through an air compressor into the generator. The dry compressed air stream is passed through bundles of semi-permeable hollow fibre filtration membranes that are configured into a cartridge style. Under pressure oxygen, water vapour and other trace gases permeate through the micro porous structure of the hollow fibre filtration membranes. The nitrogen passes along the hollow fibres to the outlet to be further filtered and used in the process.

Membrane Nitrogen Generation



Multiple Membrane Nitrogen Generators can be connected together to enable larger flow rates.

Pressure Swing Adsorption (PSA) Nitrogen Generation

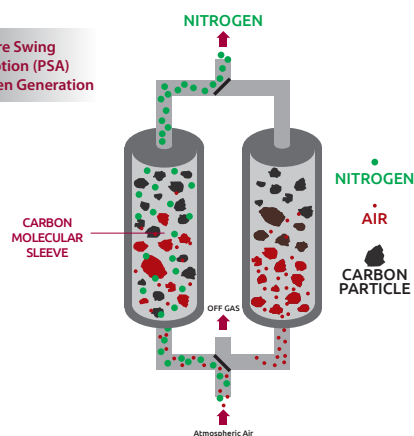
When nitrogen purity of better than 99.5% up to 99.9999% is required PSA Nitrogen Generation is recommended. PSA systems provide higher capacity than Membrane systems and are the recommended technology for many industrial scale applications.

How PSA Nitrogen Generation Works...

PSA Nitrogen Generation is carried out using the adsorptive properties of adsorptive media such as a Carbon Molecular Sieve (CMS) or Zeolite. Oxygen and other trace gasses are preferentially adsorbed onto the adsorptive media at varying portions depending on the system pressure while the nitrogen passes through due to its molecular structure being too large to penetrate the fine porosity of the adsorptive media.

The system uses two pressurised twin towers to contain the adsorptive media where the clean dry compressed air enters at the bottom of one of the towers – oxygen and trace gases are adsorbed and nitrogen passes through the adsorbent media bed into a buffer tank prior to the outlet, further filtration and onwards via the pipework distribution system to the process. After a predetermined time, dependant on the purity of nitrogen required, the tower switches to regenerative mode and flows the pressurised compressed air into the second tower (hence the term Pressure Swing...) where the process starts again. The first tower then depressurises and the adsorbed oxygen and other trace gases are released and exhausted to atmosphere.

Pressure Swing Adsorption (PSA) Nitrogen Generation



What is adsorption? – In a gas application such as nitrogen generation this is the accumulation of molecules of oxygen and other trace gases to form a thin film on the surface of a specifically selected solid such as carbon or Zeolite by intermolecular forces – the adsorption process is reversible which facilitates the constant use of the system to generate nitrogen on a commercially viable scale.

A number of PSA twin tower units can be piped or manifolded together into a larger unit to enable high flow capabilities.

The Benefits...

The benefits of Onsite Nitrogen Generators include:

Reliability - Nitrogen Generators are very efficient and operate automatically

Exact Requirements – Generate exactly what you need when you need it

High Quality Nitrogen - High purity nitrogen gas and food grade nitrogen up to 99.9999% purity

Savings in Running Costs - Costs savings of up to 80% compared to conventional supplies

Control Costs - no gas vendor price increases or contracts

Rapid Payback - low running costs with low cost price of nitrogen supply

Safe Working - no high pressure gas cylinders or tanks

Improved Work Area Space - no hazardous storage areas needed for cylinders

Constant Supply of Nitrogen - no tanker deliveries needed - no downtime

Modified Atmosphere Packaging (MAP)

Modified Atmosphere Packaging is one of the most reliable ways of extending the shelf life of fresh food products, first used in the 1970's in the UK and Denmark for the safe transportation of meat and dairy produce, it has now become an established technology for food packaging.

Using Nitrogen to modify or substitute the atmospheric air inside of a package as a protective gas mix, it helps the product to stay fresh as long as possible – it maintains freshness, quality and extends shelf-life.

Bread Products

Baked products such as tortilla wraps, baguette, bagels, pita bread, naan bread and other types of bread generally have a low moisture content and while not affected by bacterial contamination are prone to attack and spoilage by moulds. Because moulds are aerobic, removing the oxygen from their packaging and replacing it with nitrogen is an effective way of increasing their shelf life. The products do not need to be frozen and are therefore easier and cheaper to store and transport.

Cheeses and Cheese Products

Hard and soft cheese can be attacked by moulds and bacteria depending on their moisture content. Fats present in the cheese can become oxidised by exposure to atmospheric air or poorly treated compressed air making them rancid with an unpleasant smell.

Both hard and soft cheese can benefit from being packed in a nitrogen enriched atmosphere. This not only improves shelf life but due to being inert, unlike carbon dioxide which can be dissolved in the water content of the cheese causing package collapse, it has a positive affect on flavour and appearance.

By using IATT Onsite Nitrogen Generators in MAP, shelf life will be extended from a couple of weeks to ten weeks for hard cheese and from days up to three weeks for soft cheese. The same benefits can be given to grated and sliced cheese products.

Fish and Seafood

Fish, prawns and shrimp all have significantly different characteristics so careful consideration to packaging is vital if products are to be delivered to consumers in a good and healthy condition.

Bacteria present in raw fish and enzymes in the flesh as well as the high water content quickly degrade the product with bacterial and enzyme proliferation causing the unpleasant smell of bad fish. Fats in fish such as mackerel can become oxidised which becomes rancid adding to the problem.

Because both aerobic and anaerobic bacteria can be present in fish and seafood MAP gas mixtures need to be carefully balanced. The use of nitrogen as a constituent gas in the packaging process will improve shelf life from a few days to two to three weeks.

Food Ingredients, Fruit and Vegetables

When fruit, salad, leafed and root vegetables are harvested, unlike meat and fish products they still continue to breathe or respire taking in oxygen and releasing carbon dioxide. Low temperature can reduce the effects caused by this and help maintain the products taste and appearance. High water content and acidity also contribute to potential spoilage from yeast and moulds.

Enhanced product quality with extended shelf life is achieved by a nitrogen enriched packaging atmosphere which can extend shelf life from a few days to over eight days.

Fruits, apples, potatoes and other vegetables can be spoilt by enzyme oxidation when the skins or flesh are damaged. Packaging products in a high nitrogen content atmosphere improves life from a few minutes/hours to several days.

Prepared Foods and Ready Meals

Modern life has seen the increase of numerous ready meals in pre-prepared trays for easy heating and consumption – known as convenience foods. These along with prepared foods such as pizzas, sandwiches, meat & vegetable products and cheese based foods are all susceptible to airborne contamination from spoilage organisms.

Because of the array of different food stuffs in the one package, there are a lot of different deterioration effects that can occur while the product is in transit to the consumer. A careful gas mixture in the MAP is essential if extended shelf life is to be achieved.

Packaging Prepared Foods and Ready Meals using nitrogen and storing the products in a chilled environment can increase shelf life from a couple of days to several weeks. The flavour of pre-cooked meals that have not been oxidised in air which can cause a stale off-taste is also improved.

Food Industry Applications Continued...

Snack Foods

A wide array of snack foods such as potato crisps, peanuts, biscuits, dry fruit and other perishable products can benefit from being packaged in a nitrogen modified atmosphere.

Nitrogen helps maintain product freshness, quality and extends shelf-life. The nitrogen reduces the oxygen content within food packaging to prevent product deterioration which may occur due to oxidative rancidity, moisture loss or gain, bacterial and mould caused spoilage.

Nitrogen can also be used as a filler gas to create a pressurised atmosphere that prevents package collapse therefore helping to protect the product and ensuring that it is in good condition for the customer.

Raw and Fresh Meat

MAP for the packaging of raw, fresh and processed red and poultry meat has been used for many years.

The preservation of red meats such as beef presents a challenge to food producers due to the fact that oxygen loving aerobic bacteria can spoil the meat while on the other hand the presence of oxygen keeps the red colour of the meat preventing it turning brown. This is caused by the reaction of the myoglobin in the tissue with oxygen to produce either red or brown pigmented forms of oxy/metmyoglobin.

Using nitrogen in the MAP process can significantly increase shelf life from a couple of days to up to eight days with refrigeration – a slow rate of spoilage and product appeal is achieved.

Processed Meat

Processed meats such as ham, salami and other cold cut meats have a tendency to become discoloured in the air due to the reaction with the myoglobin in the tissue and atmospheric oxygen causing them to turn brown. Rancidity due to fat oxidation and a green tinge of colour on the meat surface from mould or bacterial growth all add to the problems with shelf life and top quality product appearance.

MAP with high nitrogen concentrations for the packaging of processed meat products will enhance shelf life from a few days to up to five weeks.

Coffee Packaging

After roasting, oxygen begins degrading coffee causing it to lose its flavour. Displacing oxygen with nitrogen during packaging process preserves the flavour and shelf life of coffee.

Food Storage and Transportation

Nitrogen can be used in food packaging to add pressure inside the package not only to ensure that the product will stay fresh but also to prevent package collapse to help protect friable products in transport ensuring they arrive at the point of sale in excellent condition.

Liquids and Ingredients

When liquids and ingredients are stored in silos and tanks it is vital that they are not contaminated by atmospheric pollutants and the ingress of organisms and insects. Nitrogen can be used to blanket silos and tanks to reduce the oxygen levels thus eliminating this problem.

Marine Transport

Marine vessels carrying food stuffs long distances through a wide range of climatic conditions can benefit by using on-board nitrogen gas generation to modify the atmosphere in the cargo holds. This eliminates the need for traditional high pressure cylinders or liquefied nitrogen gas supply whilst significantly extending the food stuffs transportation endurance.



Nitrogen is widely used in the preparation, production and packaging of foods. Oxygen if present can cause spoilage, the growth of moulds, yeast and aerobic bacteria and cause impairment of taste.



Beverage Applications

From breweries and winemakers to restaurants and bars beverage quality and shelf life are critical, consumers demands for clear beers, lagers, wines and spirits is fundamental to customer satisfaction.

Nitrogen is an inert gas that is safe, clean and dry. It is ideally suited for use in purging and pressure transfer but can also be used for preservation or can be blended with carbon dioxide for the optimal level of carbonation. Purging tanks and vessels with nitrogen also improves durability and shelf life.

Beverage Production

Beer and beverage production is a complex and multi-stage process where ingredient integrity is vital to maintain product quality throughout production, transportation and delivery to the discerning consumer.

Beer Dispensing

Using a mixture of carbon dioxide and nitrogen for the dispensing of draft beers has grown in popularity over recent years. It is particularly good when used for dispensing stout or nitrogenated beers and some other beers such as craft brews which require a subtle blend of carbon dioxide and nitrogen for the very best texture and presentation ensuring that they are not oxidised.

Winemakers

Nitrogen gas is commonly used in wineries during different production stages such as sparging, blanketing ,flushing, storage, transfer and bottling. The introduction of nitrogen as a modified atmosphere and when used as over pressure reduces enzymatic oxidation, bacterial growth and saves the wine from oxidation in the bottling process.



Steel and Metals Fabrication Applications



Laser Cutting

Laser cutting or profiling is a well established production method in the steel and metals fabrication industry. It enables complex and precise cutting of steel and aluminium sheets to a very high quality finish which would previously have been prohibitively expensive to machine cut. It enables the manufacturer to cut small diameter holes with complex detail and good edge quality in either sheet, plate, tube or box section metal items.

The process is blanketed with high pressure nitrogen as a shielding effect which eliminates oxidation and improves edge quality and other finishing procedures. It also ensures that stainless steels does not lose its corrosion resistance and aluminium items have a burr-less finish.

The laser beam melts the material and in addition to its blanketing benefits, the high pressure nitrogen blows away the molten material and forces the metal to harden quickly.

Welding and Brazing

Using a nitrogen based atmosphere in welding and brazing processes improves the quality of the welded steel or metal and minimises the risk caused by potentially harmful fluxes.

Plastics Industry Applications

When plastic products are manufactured by injection moulding their quality and strength are improved by the use of nitrogen.

Injection Moulding

High-pressure nitrogen is used to ensure that when the liquid plastic is injected into the mould, and as the molten polymer solidifies it is forced by the pressure into every section of the mould. The use of nitrogen in this way helps reduce wall thickness, producing an even surface without deformations or discolouration. Less polymer can be used which aids cooling time and production throughout.

Blanketing for Adhesive Curing

Furnaces where adhesive compounds are applied to various tape materials are purged with nitrogen, thus reducing the incidence of poor adhesive bonds, or hazardous atmospheres due to chemicals used for the bonding process.

Oil and Gas Applications

Nitrogen is odourless, non-polluting and non-reactive and above all is a safe gas to use in hazardous working environments and numerous applications are found in the oil and gas production industry.

Off Shore Platforms - On off shore applications air is replaced with inert nitrogen to displace oxygen which prevents oxidation and inhibits the possibility of explosion or fire.

Oil Extraction - Nitrogen is used to repressurise depleted oil wells. Along with the benefit of increased productivity, inert nitrogen has no corrosive effect on borehole piping.

Refineries - Nitrogen is used to inert storage or process tanks as well as move product through pipelines at refineries. Nitrogen prevents hazardous or explosive environments.

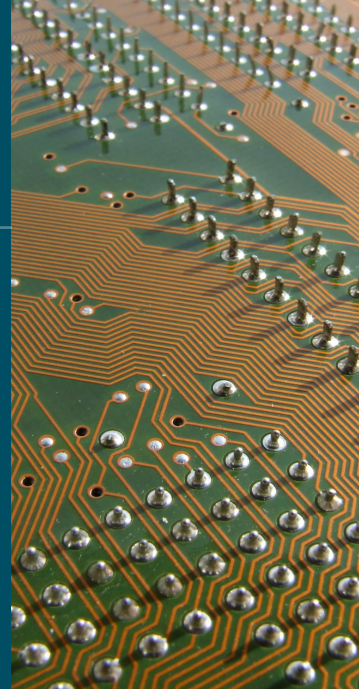
Pipeline Drying - The extremely low dew point of nitrogen makes it an ideal choice for drying of pipelines. As a value-added feature, nitrogen is totally inert thus retarding oxidation and preventing explosions.

Pipeline Inerting - Nitrogen is the gas of choice to displace oxygen, retard oxidation, break the "burning triangle," and prevent explosions.

Pipeline Pigging - Using nitrogen as an inert propellant for moving "pigs" through pipelines during performing major maintenance or remedial treatments is the ideal solution.

Electronics Applications

As electronics becomes ever more complex and miniaturised by the electronics industry, quality, price and efficient production processes are vital. It has become a generally accepted practice in the electronic assembly industry to use inert nitrogen gas in the production environment during soldering processes.



Wave Soldering

Wave Soldering is the automated technique employed in large scale production of printed circuit boards (PCB's) when electronic components are soldered into a printed circuit board (PCB) to form an electronic assembly using primarily through-hole technology. The component loaded PCB is passed over a wave of molten solder where the joints are soldered into place.

Efficient mechanical and electrical connection of components is essential to the correct working of the PCB – joint integrity is crucial. Carrying out the soldering process in an inert nitrogen environment reduces oxidization and significantly improves the quality of the soldered joints.

Reflow Soldering

As surface mount has largely overtaken through-hole technology, reflow soldering is the most common method of attaching surface mount components to a circuit board. The soldering processes take place in a reflow oven which melts the applied solder paste without damage to the components.

When nitrogen is added through the entire process joint integrity is improved by the elimination of oxidization.

Advantages of using Onsite Nitrogen Generation in the soldering process ensures that there is better 'wetting', less dross, fewer voids with the benefits of less errors, minimal use of fluxes and less or no rejects.

IATT onsite Nitrogen Generators provide a safe, regular supply of high purity nitrogen at the required capacity.

Laboratory Applications

For example nitrogen gas can be used to displace or obtrude other gases from technical instruments or instrument tubing. It can quickly evaporate liquid alcohols. Nitrogen gas is also routinely used to dry lab beakers and test tubes that have had liquid water in them.

Nitrogen is used in instrumentation such as high performance liquid chromatography (HPLC), gas chromatography, thermogravimetric analysis (TGA), differential scanning calorimetry (DSC), inductively coupled plasma mass spectrometry (IC) and other sensitive electronics equipment.

Such applications as liquid chromatography (LC) linked with mass spectrometry (MS) or evaporative light scattering detectors (ELSD) use nitrogen as a nebulising gas.

In an analytical laboratory nitrogen is used for a variety of jobs due to the gas being inert and pure.

Nitrogen is ideal to ensure that atmospheric borne water vapour and contaminants are not present and in eliminating the oxidisation effect of oxygen within the analysis equipment.



IATT Nitrogen Generation Systems

IATT offer a wide range of Onsite Nitrogen Generators.

Selecting the right Nitrogen Generation System for You...

IATT have expertise in selecting the right onsite Nitrogen Generation system for your needs now and in the foreseeable future.

When planning an installation IATT consider all of the facts and your needs:

What consumption is required?

Does consumption vary?

What pressure is required?

What purity of nitrogen is required?

Is the compressed air treatment system adequate?

Taking all of these parameters into consideration, IATT can select from an array of Nitrogen Generators best suited to your needs. This includes all of the ancillary equipment such as the air compressor, air receiver, pre filters, air dryer compressed air filtration as well as gas control/mixing and gas analysis.

IATT - Independent Air Treatment Technology



IATT Nitrogen Generation Systems

Complete Packaged Solutions

At IATT we believe in providing complete solutions, as an independent air and gas technology company, we only select the very best equipment for your application. From the selection of the Nitrogen Generator to the air compressor, air receiver, pre filters, air dryer, compressed air filtration as well as gas control/mixing and gas analysis, we will select, supply, install and maintain your complete system.

Depending on your needs for nitrogen purity and flow rates, IATT offer two types of Nitrogen Generators – Membrane or Pressure Swing Adsorption (PSA) technologies. These can be used for small flow rates in laboratory and bench top applications to full scale industrial processes that demand high flow capability.

Nitrogen is generated from atmospheric air via your compressed air system.

Full Control

Nitrogen quality is maintained and checked by the measurement of the temperature of the compressed air, the pressure of the compressed air, the nitrogen pressure and the purity of the nitrogen. All the measured values are documented on a compact easy to use touch control panel which can be remotely controlled and monitored from any location around the world using Internet connection from a desktop computer or portable device.



IATT Nitrogen Generator Systems Continued...



Membrane Nitrogen Generators

Membrane Nitrogen Generators produce nitrogen with a purity of up to 99.5% with reliable membrane technology covering flow rates from a few Nm³/hr to over 10,000 Nm³/hr. This technology is modular in design which enables easy integration into new or existing plant installations.

The membrane uses a filtration principle to separate the nitrogen from the atmospheric oxygen and residual gases. Because of their efficiency they take up only a small footprint and use a small amount of compressed air while generating large quantities of nitrogen.

The core technology of the process is the patented gas separating membrane in a hollow fibre format which is manufactured into modular bundles for easy use in a pressurised system. The compressed air flows into the centre of the hollow fibre membranes where the oxygen and residual gases are diffused through it, the nitrogen molecules pass along the hollow fibre and are passed to the downstream nitrogen buffer tank system tank where the high quality nitrogen is ready to use.

Membrane Nitrogen Generators are equipped as standard with touch control panels, upgradable expansion options and low maintenance valve technology.



Pressure Swing Adsorption (PSA) Nitrogen Generators

The technology of PSA Nitrogen Generators produces nitrogen with a high purity of up to 99,9999% with 1.0 ppm residual oxygen covering flow rates from a few Nm³/hr to over 10,000 Nm³/hr. Like Membrane systems, these too are designed as free standing modular systems for easy integration into new or existing plant installations.

PSA technology is based on the adsorption principle: The nitrogen and oxygen molecules from the intake atmospheric air are separated by a carbon molecular sieve (CMS). The larger nitrogen molecules penetrate the system as they are not adsorbed by the activated carbon of the CMS. The nitrogen is then passed to the downstream nitrogen buffer tank system tank where the high purity nitrogen is ready to use.

These PSA Nitrogen Generators can be equipped as standard with touch control panels, modular expansion options and low maintenance valve technology.



Onsite Nitrogen Generation

Gas Mixers, Gas Blenders and Gas Metering Systems

When a mixture of gases is required for applications such as welding, specific food and meat packaging and air for medical procedures and other specialised applications, IATT can provide the equipment for the process.

IATT offer the high quality WITT® range of Gas Mixers, Gas Blenders and Gas Metering Systems for use when two or more gases are required to be mixed. They are ideal for controlling the optimal gas mixture for low and high flow rates especially where there is a highly fluctuating gas demand.

These state-of-the-art mechanical or electronic gas mixing systems provide accuracy and process safety allowing convenient control of the gas mixer and control mixing systems via Intranet, Internet or mobile devices.





Gas Analysers

Gas purity is essential in many nitrogen and mixed gas applications. Use of portable or stationary gas analysers ensures your process is secure.

IATT offer the high quality WITT® range of Gas Analysers that are fast, precise and multifunctional. The gas analysers are used as stationary or portable units for sample or continuous gas analysis for almost any gas and application. They can be supplied as standalone units or integrated in gas mixing systems.

Intuitive and easy handling of the gas analysis is provided by intelligent operating controls. State-of-the-art sensors and intelligent software solutions guarantee accurate measurement results and ensure the quality of your processes.



IATT Products and Services

In addition to Onsite Nitrogen generation systems, IATT also provide:

Compressed Air Filtration – Replacement Filter Elements

Desiccant & Refrigeration Dryers – Air Treatment Equipment

Condensate Management – Compressed Air Equipment Maintenance

Independent Air & Gas Treatment

IATT provide products and equipment to ensure compressed air and gases that play a vital role in your production processes and ultimately your product quality and your profitability are clean and pure.

Compressed Air Filtration

A comprehensive range of compressed air filters that range from 0.5-15000 scfm and grades 0.01-25 micron with oil vapour removal down to 0.003mg/m³.

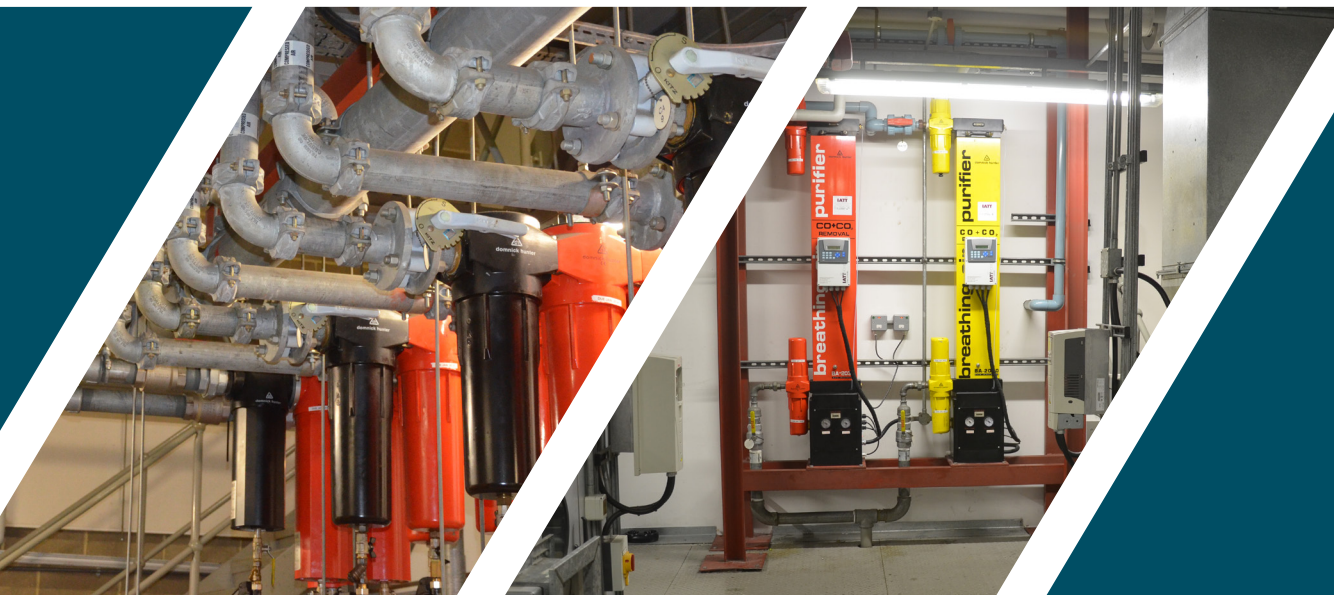
The range includes high efficiency filter housings with pipe sizes ¼" -3" BSP and flanged vessels from DN80 – DN300. They cover from low to high pressures up to 350barg (5000psig).

Breathing Air

A full range of breathing air packs and systems from 2 man station to full medical air treatment packages. All equipment is designed and manufactured in line with the latest BS, HTM and European Pharmacopeia standards. All systems can be installed and validated inline with current legislation and have remote and additional alarms for added peace of mind.

System Validation

IATT offer filter and system validation packages tailored to meet your specific needs covering compatibility, efficiency, integrity, microbiological removal, sterilisation regimes, particulate removal, oil carryover, leaks, pressure differential, flow rate and throughput.



Replacement Filter Elements

IATT offer a complete range of compressed air filter elements from all of the main manufacturers.

These include:

- Compressed Air Filters
- Process Filter
- Medical/Sterile Air Filters
- Vacuum Filters
- Autoclave/Vent Filters
- Panel Filters
- Activated Carbon Filters
- Hepa Filters
- Bag Filters
- Foam Filters / Filter Rolls
- Intake Filters
- Gas Filters



IATT always provide service that is **efficient, effective, economical and equitable** – **e⁴** we call it.

You might think this is revolutionary – to us at IATT it's standard practice with the added ingredient...

... Service Excellence!

Desiccant & Refrigeration Dryers

Heatless Desiccant Air Dryers

IATT offer a complete range of heatless desiccant air dryers suitable for drying air from -20°C to -70°C. All units have purge economy fitted as standard giving significant energy savings as the dryer only operates when the compressor operates, all controlled by an intelligent electronic processor.

Refrigeration Dryers

Refrigeration Dryers IATT supply are robust, economical and reliable. Using the latest technologies and energy efficient heat exchangers results in a compact simple to use dryer.

Air Treatment Equipment

Condensate Management

Automatic Drains with zero loss and condensate drain with electronic level control for applications.

Oil/Water Separation

The IATT range of Oil/Water Separation units offer a uniquely designed filter range, avoiding the problematic weir system most other units employ.

Carbon Bag Maintenance Kits

We also supply a complete range of original and alternative carbon bag maintenance kits.



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- economical** - using the minimum of time or resources necessary at a cost effective price.
- equitable** - fair to all parties as determined by reason and conscience.

UK wide coverage is an integral part of what IATT offer to ensure rapid action to get onsite and provide a solution to your plant failure.

IATT offers a comprehensive genuine spare parts, service and maintenance contracts to cover your compressed air, nitrogen gas generation & processing plant and equipment needs.

No matter what type of equipment you use in your processes, IATT provide service and maintenance for all brands of compressed air treatment products. Whether it's Compressed Air Filtration, Condensate management, Breathing Air Systems, Refrigerated Dryers, Desiccant Dryers, Nitrogen Generators or any other compressed air or gas treatment system we provide service and maintenance.

IATT have built a reputation for efficiency and putting our customers first.

When it comes to your Compressed Air & Gas Treatment System, **No matter...**
What you require,
Where you are in the UK,
What your problem is,
Whether you are large or small...
... IATT have a solution for you!

IATT Service and Support

As part of our commitment to our e⁴ Service Excellence we provide comprehensive Service and Support. We have service departments close to you throughout the UK.

With a dedicated team of engineers strategically located throughout the UK - we have expertise from compressor intake, through to your treatment systems right through to your point of use equipment and processes. Our specialists also provide professional services for the selection, supply and installation of new equipment, spare parts as well as plant service and maintenance contracts.

Independent Approach

We believe that as a truly independent air treatment technology company, IATT will provide you with the very best solution for your problems and new equipment needs now and ensure that with correct and timely maintenance they will serve you well into the future. Our independence from particular manufacturers gives us the capability to select the right equipment for your process without bias.

Ensuring that your compressed air treatment or onsite nitrogen gas generator plant runs efficiently is what IATT do – no matter where your business is situated in the UK, we have highly skilled and experienced engineers close to you.

We care and our people care about you and your business.



for service & support contact us on:

t. 0191 477 0060 or email: info@iatt.co.uk



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