The Superior Oil-free Air Solution

MPW's Industrial Air Services ensure reliability and productivity for compressed air

Oil-free compressed air is of critical importance to manufacturers in virtually every Standard Industrial Code. Simply, if oil reaches the product being manufactured, production down-time, product damage and even potential FDA violations can often be the result. Both down-time and product damage or waste, in any automated manufacturing facility, are events that can negatively impact the financial performance of the entire operation. Most industrial processes have zero tolerance for the introduction of oil into the end product being manufactured. Industries requiring oil-free compressed air include automotive, food and beverage, plastics, semiconductor, pharmaceutical and many others.

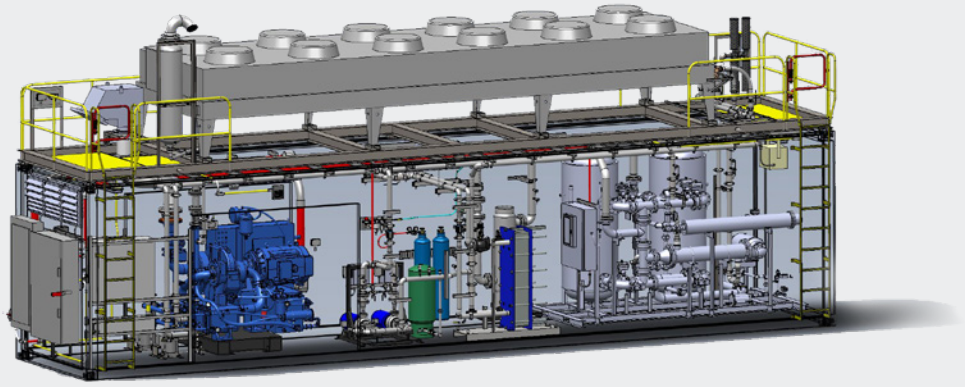
MEETING ISO 8573-1 CERTIFICATION

The International Standards Organization has issued the ISO 8573.1 Air Quality Classes, for compressed air, permitting engineers to place a clear specification on the air quality they require in their process.

There are two sources of oil being injected into the compressed air system. They are ambient hydrocarbons and the lubrication systems of air compressors. The goal of many modern manufacturers today is to not introduce oil into their compressed air system. Oil-free air compressors, with the appropriate air dryers, coalescing filters, and oil vapor removal filters, have become the preferred system solution to ensure ISO 8573.1 Quality Class Zero or One (oil concentration) reliable compressed air.

Specific to the MPW solution, all air dryers meet the customer's required pressure dew point all the time. Depending on the final system design, we can offer a dryer that meets your preferred conditions. None of MPW's air dryers experience spikes in dew point when the dryer towers switch due to the efficiency of the software control system to perform stripping and cooling cycles for optimum performance. A trim heater is employed at the inlet of the dryers.

The Dew Point Demand System measures the dew point of the outlet air, overriding the timer, eliminating unnecessary switching of towers resulting in considerable savings through reduction of regeneration cost.



Our dryer has continuous dew point monitoring with history. And particulate after filtering is available as an option.

EFFICIENCY = TOTAL COST SAVINGS

The equipment employed by MPW for Industrial Instrument air has a total life cycle cost advantage over our competitors that trends 18-20% lower. This savings is enabled by Compressed Air Audits, the use of new equipment, sequenced control schemes and selection of Centrifugal compression and HOC air dryers. (See chart for details.)

All MPW base-load air compressors employ centrifugal technology from Ingersoll Rand. Additionally, all preferred air dryers are "Heat of Compression (HOC)" desiccant air dryers from Ingersoll Rand/ Sahara Henderson Engineering dryers. (Ingersoll Rand and Sahara Henderson are the same company today). The air dryers regenerate with "free" energy from the heat of compression.

100% RELIABILITY – ALL THE TIME

MPW employs only new, modern, state-of-the-art centrifugal and oil-free rotary screw air compressors and Heat of Compression (HOC) desiccant air dryers. And our systems are continuously monitored by MPW technicians remotely from a central control room in Hebron, Ohio.

Our system design includes N+2 compressors, to enable routine weekly maintenance while having one spare compressor in standby. On a normal day, the system has two standby compressors.

Advanced PLC control systems software enables efficient routine operations, management of forced outage events, and routine maintenance without loss of air systems pressure, flow or pressure dew point 100% of the time.