

Mixed Gases & Custom Blends

Traceability

Traceability is the link between your gas mixture and an accepted reference standard. The National Institute of Standards and Technology, NIST, is part of the U.S. Department of Commerce. NIST is responsible for establishing and providing standards for the gas industry. All Primary and Certified Standard gas mixtures produced by LINWELD are traceable to standards provided by NIST.

Direct Traceability to SRMs. NIST provides the gas industry with several selected, standard gas mixtures known as Standard Reference Materials or SRMs. NIST also certifies selected, standard gas mixtures manufactured by commercial suppliers. These are known as NIST-Traceable Reference Materials, or NTRMs. An SRM or NTRM used to calibrate instrumentation for certifying gas mixtures will provide direct traceability to NIST. This traceability is established through analysis. Direct Traceability is limited to a select group and range of gas mixtures.

Other Methods of Traceability. SRMs and NTRMs are costly and not always available. Gas mixtures can be traceable to NIST through Gas Manufacturers Intermediate Standards or GMISs. The Gas Manufacturers Intermediate Standard is a standard that has been analyzed against an SRM or NTRM. A GMIS used to calibrate instrumentation for certifying gas mixtures will provide traceability to NIST. This traceability is established through analysis.

For many of the components used in gas mixtures SRMs do not exist. However, traceability can be established through production methods. All of LINWELD's gas mixtures produced gravimetrically are traceable to NIST using scales and balances calibrated by NIST traceable weights.

Gas Documentation

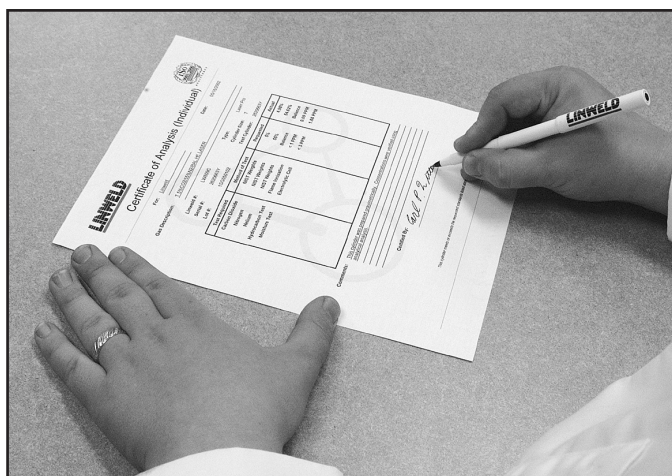
LINWELD provides several different types of certificates to meet your documentation requirements.

Certificate of Conformance is a written guarantee of quality stating that all cylinders of this gas type will meet or exceed specifications. A Certificate of Conformance is a one-time request that applies to all cylinders of a particular gas type regardless of lot number. Therefore, Certificates of Conformance do not contain lot numbers or cylinder serial numbers.

Certificate of Analysis (Batch) is an individual certificate provided with each cylinder. One cylinder from the lot is analyzed and represents the quality of the entire lot. This certificate coincides with the serial number of a particular cylinder from the lot. The certificate also contains the serial number and results of the test cylinder.

Certificate of Analysis (Lot) is a single certificate for an entire lot of gas cylinders produced. One cylinder is analyzed and represents the quality of the entire lot. This certificate contains the serial numbers of all the cylinders filled in this lot, as well as the serial number and results of the test cylinder.

Certificate of Analysis (Individual) is a certificate for a cylinder individually tested and certified. A unique certificate is provided for each cylinder. This can be very costly. Prices vary, depending on the certification and analysis required. This certificate must be requested at the same time the gas is ordered.



LINWELD can provide instant gas documentation electronically