

About Standard Gases



Introduction to standard gases. Standard gases is an industrial term for gases, which are standard substances. They are used in the fields of physical, chemical, biological and engineering measurements to calibrate measuring instruments and measurement processes, to evaluate the accuracy of measurement methods and the testing capabilities of testing laboratories, to determine the characteristic values of materials or products, and to arbitrate values. In large ethylene plants, ammonia plants and other petrochemical enterprises, dozens of pure gases and hundreds of multi-component standard gas mixtures are needed for calibration and calibration of online analytical instruments and instruments used in the production process to analyze raw materials and product quality during start-up, shutdown and normal production.

Standard gases are also used for environmental monitoring, measurement of toxic organics, automotive emission testing, natural gas BTU measurement, LPG calibration standards, supercritical fluid processes, etc. Standard gases are classified into binary,

ternary and multi-gas standard gases depending on the gas component fraction; gas distribution accuracy requirements are characterized by gas distribution tolerances and analytical tolerances; the more common ones are SE2MI gas distribution tolerances, but each company has a corporate standard. The minimum concentration of the components is 10 levels, and the number of components can be as many as 20 or more. The preparation method can be weight method, and then calibrated by chromatographic analysis, or can be passed according to the standard transfer procedure.

