

# History of COSA Xentaur BTU Measurement

COSA Xentaur represents the combined strength of COSA Instrument Corporation and the Xentaur Corporation. This combination has been involved with BTU measurement for over 40 years. Starting with mechanical calorimeters in the 1960's, COSA Xentaur has been active in the development and application of numerous BTU measurement technologies leading up to its current offering of state-of-the-art residual oxygen, gas chromatography and optical techniques.

Fuel blending and control for turbine efficiency, initially using flame calorimetry, was pioneered by the application engineers at COSA. Evolving the application, COSA Xentaur now offers a range of residual oxygen instruments or residual oxygen combined with gas chromatography to optimize turbine performance for waste fuel streams, coke gas and LNG/LPG streams. COSA Xentaur has installed feed forward fuel control measurement systems around the world for every major power turbine manufacturer.

In addition to fuel blending and optimization, COSA Xentaur has in depth knowledge of BTU measurement for emission control from power sources as well as flare applications. Working closely with the California Air Resources Board, COSA Xentaur was the first company to qualify a calorimeter for flare stack measurement for SCAQMD RULE 1118. Using its extensive application knowledge base, COSA Xentaur has been able to adapt technology to meet the most demanding flare stack applications. Globally, there are over 100 flare stack installations using COSA Xentaur application technology.

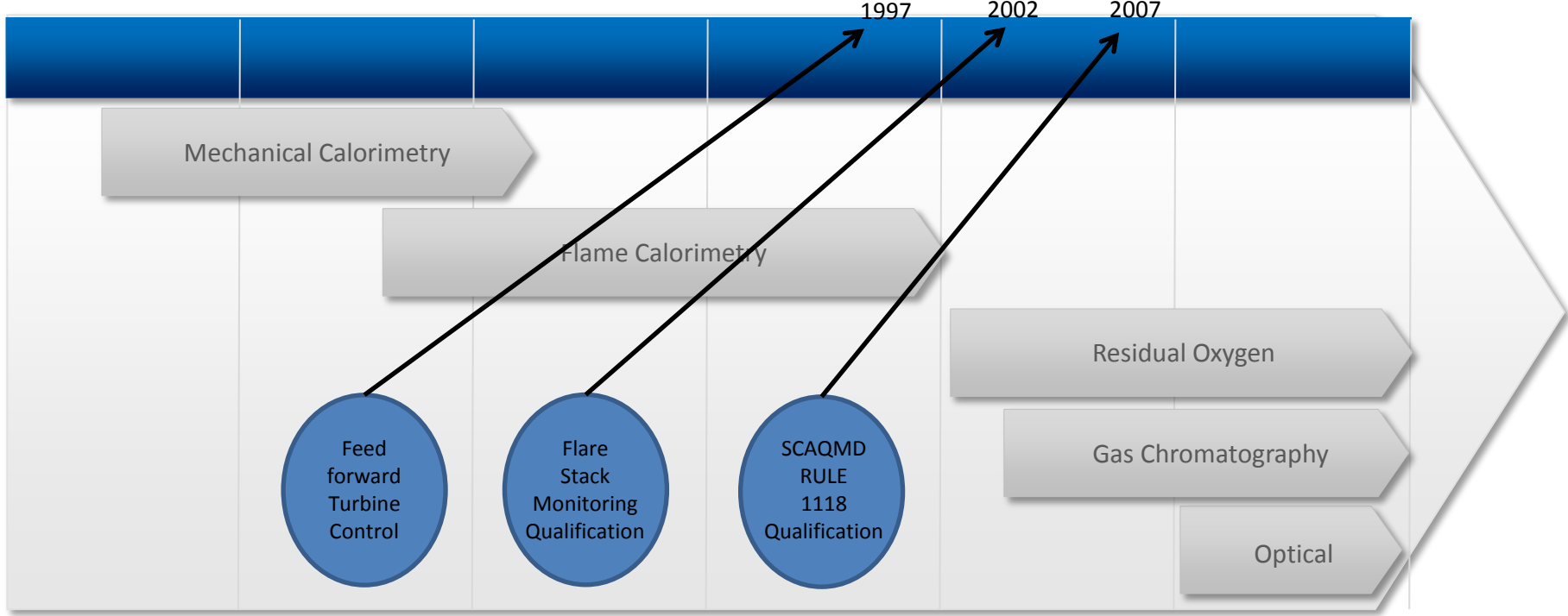
COSA Xentaur takes a broad view of BTU measurement. Through an aggressive development program which involves in-house technology as well as technology partners, COSA Xentaur offers the most advanced range of technologies that meet the specifications of almost every application. With a global reach, COSA Xentaur actively seeks the newest most advanced technologies for BTU measurement. Further, COSA Xentaur is actively involved with ASTM, GPA, ISHM, EPA and other regulatory/certification organizations keeping up-to-date with changes to regulations and industry standard methods.

At the current time, COSA Xentaur offers advanced optical refraction index instruments for measurement applications in street quality natural gas, LNG, propane or LPG. Gas chromatography methods are available along with Tunable Filter Spectroscopy (TFS) in applications where component speciation is required. For more complex applications in fuel blending and flare stack measurement, COSA Xentaur offer state-of-the-art residual oxygen measurement in the 9600 series of instruments.

Whatever BTU measurement requirement, COSA Xentaur is able to provide a technically advanced solution that is fast, robust and accurate with the lowest cost of ownership.

# COSA Xentaur History of BTU Measurement

1960 1970 1980 1990 2000 2010



***40+ Years of experience and counting***