

Air Separation Units

Uras26 – Preventing PPU CO₂ breakthrough

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Carbon dioxide breakthrough from the RHEs or PPU can present significant process problems. Continuous detection of CO₂ after the air purification equipment is therefore essential.

Measurement made easy

Introduction

Breakthrough on the RHEs could mean that a shorter cycle time is required or that channelling is taking place within the RHE.

- ABB has continuously refined the Uras26 NDIR analyzer to the point where it can measure up to 4 components with ranges from 0 to 5 ppm up to 100 vol%.

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01 Measuring point on Air Separation Unit

Uras26 - is it time to put our crowning achievement into retirement?

The Uras26 is a dual beam, Luft-type NDIR which was originally licensed from BASF in 1952. So, after 67 years in the ABB gas analyzer family, is it time to pension off the Uras26 and let it relax in retirement? We think not!

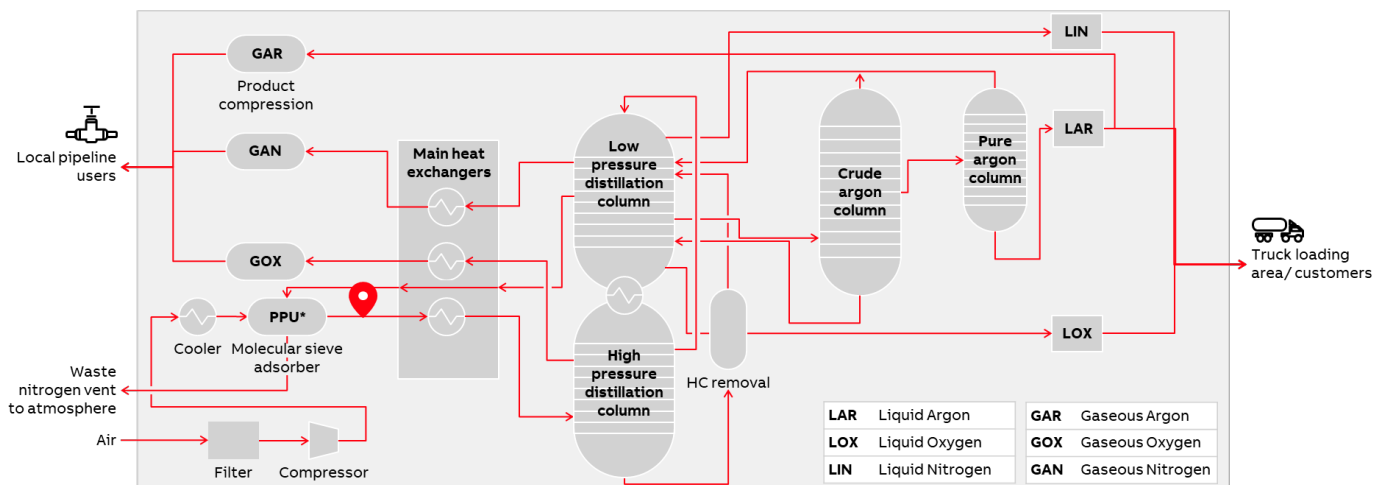
ABB (formerly through the work of Hartmann & Braun) has continuously refined the Uras26 to the point where it can measure up to 4 components with ranges from 0 to 5 ppm up to 100 vol%. Simultaneous measurement of Carbon Dioxide, Carbon Monoxide, Methane and Nitrous Oxide is therefore possible using one single instrument. In many applications, each photometer can be equipped with a gas filled calibration cell, meaning there is no need for expensive test gas mixture cylinders.

So, instrumentation technicians are free to focus on other process-critical tasks. In some cases, the zero point can also be set with ambient air, further reducing instrumentation calibration costs.

With such a pedigree, it's much too soon to put this stallion of an instrument out to stud: it's still fit enough to keep on winning races for several more decades. During the evolution of the Uras26, ABB has ensured that each instrument is supported in the field over many years, with a comprehensive lifecycle policy to ensure the availability of historical spare parts. The systems are also highly flexible and scalable with the possibility to add additional detectors to the box up to the maximum of four.

Buying the best at the outset means that you will be saving time and money in the years to come.

01



Securing operational success on the Air Separation Unit for years to come

As an ASU operator, carbon dioxide breakthrough from the RHEs or PPU can present significant process problems. Continuous detection of CO₂ after the air purification equipment is therefore essential.

Breakthrough on the RHEs could mean that a shorter cycle time is required or that channelling is taking place within the RHE. Both situations are fixable with suitable corrective actions – if an accurate measurement is made to raise the alarm.

On the PPU unit, carbon dioxide breakthrough can be symptomatic of adsorber material deterioration indicating the need to adjust the cycle time or replace some of the molecular sieve. Breakthrough may also be caused by incomplete regeneration which may be resolved with adjustments to the cycle time.

But how can you know that the analyser is working when the reading for most of the operational period will be zero? Because you chose Uras26, the most trusted NDIR in the world. With over 30,000 installations worldwide, ABB has the evidence to prove the claim that Uras26 is the most trusted NDIR analyzer in the world. Superior reliability and low operating costs are the reasons that users choose it time after time.

For the instrumentation specifiers and procurement team, it means a headache-free purchase and no come-backs from the operations team years down the line. When writing standards for others to follow, Uras26 sets the benchmark.

