

Tape Analyzer material changes

This service bulletin is to inform of two changes made to materials incorporated in the assembly of our 801 and 902 analyzers. These changes do not affect any aspect of the assembly process of the analyzers, but were made to improve the functionality and quality of its operation.

Subject: 801/902 model hydrogen sulphide analyzer compression head

Date: February 07, 2003

Description: This technical note is intended to provide technical background information on the new compression head assembly SA0469. This compression head can be identified by the black colour of the plastic in contact with the tape.

Background: The compression head has been manufactured in various configurations using white Teflon to seal the tape to the sample chamber. Several problems with this configuration have been observed.

1. Close machining tolerances can not be maintained using Teflon.
2. A sensor fail alarm cannot be guaranteed when the tape runs out.
3. Intense ambient light in outdoor installations may cause inaccurate readings and make maintenance more difficult.
4. Variations in sealing capability from part to part.

The material has been changed to black high density polyethylene. This provides the following advantages:

5. Close machining tolerances can be maintained.
6. A sensor fail alarm can be guaranteed when the tape runs out.
7. Intense ambient light has no effect on analyzer performance.
8. Improved resistance to wear.
9. Better and more consistent seal from part to part.

801 H2S analyzers

Software revision 9.04 is recommended when using the black compression head. Control action of the analyzer can be selected with dipswitch 3.

Dipswitch 3 position

- | | |
|------|--|
| Down | Sensor fail will cause the fail relay to de-energize. |
| Up | Sensor fail will cause the fail relay to de-energize, the analog output to go to full scale and the alarm relays to be actuated. |

The following conditions cause a sensor fail alarm:

1. Failure of the sensor electronics.
2. Analyzer has run out of tape.
3. Tape breakage.
4. Extremely high concentrations of hydrogen sulphide.



Tape Analyzer material changes

Subject: 801/902 Sample Chamber PN: AF0905

Date: July 29, 2003

Change: Sample chamber material from Delrin to PVC
Add threaded inserts for sensor block clips
(Part remains mechanically identical to Delrin sample chamber, and so no changes to servicing procedures of part is required)

Rationale: PVC is more resistant to deterioration from chemicals used in natural gas production.

Notes: Due to the familiarity of the AF0509 part number, the MC1280 PVC sample chamber part number will be shall reclassified to AF0509 Rev.11