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Product: DFU 911 Subject: DFU 535 modernization with DFU 911	SI number		98
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DFU 535 modernization with DFU 911

For a successful changeover from DFU 535 to DFU 911, the following points should be taken into account. Otherwise, false alarms or faults in the ASD 53x operation cannot be excluded.

1. Insects, fruit flies, etc.

Are there fruit flies or other small insects which could lead to problems?

→ Check filter cartridge and DFU 535 housing for insects, fruit flies, etc.

- i. Yes → No DFU 911 should be used or only if a FBS 25 PC is used in series.
- ii. No → Check points 2 and 3.

2. False alarms

Are there disturbance variables which could possibly lead to false alarms with the necessary alarm sensitivity setting for the DFU 911?

→ Check event memory for pre-signal 3 (70%) entries.

- i. Yes → Then the new calculated alarm threshold according to the PipeFlow should be compared with the currently set alarm threshold to find out whether the pre-signals would lead to new false alarms.
- ii. No → Check point 3.

3. Airflow sensor AFS 3x contamination

Will contamination in the monitoring area of the ASD 53x in question possibly lead to contamination at the AFS 3x and this in turn to airflow faults?

→ Before changeover the complete site to DFU 911, one of the ASD 53x concerned should be in trial operation with a DFU 911 for at least 3 months. After that, an assessment of the airflow sensor contamination is necessary.

This assessment can look as follows:

1. Check airflow (read out and note; e.g. 93%)
2. Carefully remove the airflow sensor from the device, clean it with a soft, dry brush (caution: do not touch the sensor surface with your fingers) and then reinsert it into the device.
3. Check airflow again (read out and note; e.g. 97%)
4. Determine how much of the flow rate deviation is due to airflow sensor contamination.
(Ex: 97% - 93% = 4% in 3 months ≈ 8% in half a year ≈ 16% in one year).
5. Evaluate whether or not the DFU 911 provides the desired benefits over the existing DFU 535. (The DFU 535 must be replaced every 3 months).
 - a. Worst case: Cleaning work on the AFS 3x is necessary every ≤ 3 months to be able to operate the ASD without faults.
→ Changeover to DFU 911 does not make sense.
 - b. Status quo: Cleaning work on the AFS 3x is necessary every ~3 months to be able to operate the ASD without faults.
→ Changeover to DFU 911 does not make sense.
 - c. Best case: The contamination on the AFS 3x is very low or negligible. Cleaning work on the airflow sensor is rarely or never necessary.
→ Changeover makes a lot of sense to benefit from the longer replacement intervals and the other advantages of the DFU 911.