

## **ATEX, is my media conductive, and does it need to be.**

In the European standard, "EN 13463-1, non-electrical equipment for use in potentially explosive atmospheres", static electricity is identified as a potential ignition source for explosions.

In order to control this ignition source, conductive materials need to be used, or use of non conductive materials must be limited to a minimum.

There are some important things that need your attention

1. As the energy that can be generated by this kind of sparks is limited, the ignition risk becomes smaller when the required ignition energy for the dust is higher (high MIE). There is a difference in the allowed "non conductive material" depending on the MIE and depending on the zone in which it is used (measure for how often the risk is there).
2. Conductivity is relative. In order to avoid confusion, the standard defines conductive materials as "resistance does not exceed 1Gohm at (23+/-2)°C and (50 +/- 5)% relative humidity."
3. For dust, the dirty air side of a filter is generally zone 20 and the CAP is one 22. For gas, the zoning is similar to the zoning at the inlet, and CAP and DAP have the same zone, as our filters do not stop nor accumulates gas.

Based on these givens, we can now inform you following matrix on the use of our media

<b>Accepted Media</b>					
<b>Equipment Category</b>	<b>Dust (MIE &gt; 3 mJ)</b>	<b>Dust (MIE &lt; 3 mJ)</b>	<b>Gas / vapour IIA</b>	<b>Gas / vapour IIB</b>	<b>Gas / vapour IIC</b>
1	All media	Conductive	Conductive	Conductive	Conductive
2	All media	Conductive	Conductive	Conductive	Conductive
3	All media	All media *	All media *	All media *	All media *

\*: When there is a high risk on static sparks (eg. highly chargeable material that is very sensitive for static electricity) it is advisable to use conductive media also for category 3 equipment.