

Z-line^{GT}

The EMW® Z-Line version has been available as a pre-filter cell for many years.

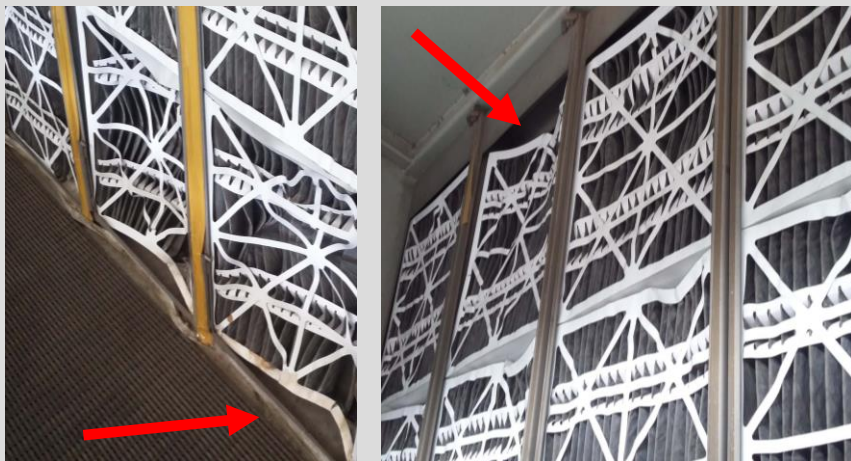
The latest generation promises stability and durability especially for air inlet filtration of gas-turbine power stations.



▪ **Important criteria in the field of pre-filter**

An optimally equipped suction system comprises several filtering stages. Referring to the filter class, especially large particles become separated from pre-filter cells. The stage of pre-filter therefore acts as a protective barrier for the filter levels with the much more efficient filter classes in the next area.

So much for theory!



The photo above shows a filter media mounted in cardboard frames, which are particularly susceptible to damage.

In practice, many pre-filter cells sadly do not achieve the criteria stated before. The main weakpoint is the instability of many pre-filter cells. At humidity unfortunately no rarity, the filter medium is collapsing within a short space of time. Filter media in the cardboard frame in particular are very vulnerable to high levels of humidity. For those reasons, such product variants not resisting the stress inside a suction system. In the worst case, incoming air passes the damaged air filter.

▪ **Benefit of Z-Line^{GT}**



The picture above shows an installation of the Z-Line^{GT} in a filter house at UK. As easily applicable at the existing frame system, EMW® has installed a version with a header frame. Presently the pre-filter cell is close-coupled in front of EMW®'s Minipleat GT Compact Cassette F8 (MPK48 - 20 GT).

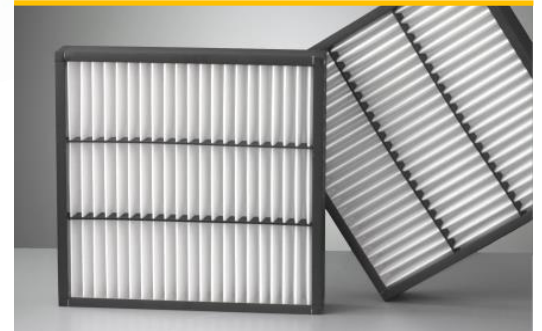
The Z-Line^{GT} pre-filter cell boasts high stability and durability, and effectively prevents constant filter changing. Accordingly reduction of maintenance work includes the stage of pre-filters as well as the following, more efficient operating filter stages.

A robust plastic housing is used instead of a vulnerable cardboard frame. The progressive filter medium is firmly attached thanks to permanent gluing on all four sides. In addition to a better adhesion, the spacers fitted in the core, influencing a permanently low pressure difference. Filter medium collapsing or framework parts falling apart are no longer an issue.

Dimensions

- Standard dimensions:
 - 592 x 592 x 48 mm
 - 592 x 592 x 96 mm
- With header frame:
 - 592 x 592 x 100 mm
 - 592 x 592 x 150 mm
- Filter Class **G4 / ISO Coarse** and **M5**
Custom-made version available on request.

Z-line^{GT}



Technical Data

Dimensions (mm)	592 x 592 x 48	592 x 592 x 96	592 x 592 x 100	592 x 592 x 150
Filter Class (EN 779)	G4	G4	G4	G4
Filter Class (ISO 16890)	ISO Coarse 80%	ISO Coarse 80%	ISO Coarse 80%	ISO Coarse 80%
Nominal Air Flow Rate [m ³ / h]	3,400	3,400	3,400	3,400
Average Arrestance	≥90 %	≥90 %	≥90 %	≥90 %
Initial Pressure Drop	65 Pa	55 Pa	50 Pa	80 Pa

Technical Data

Dimensions (mm)	592 x 592 x 96	592 x 592 x 100	592 x 592 x 150
Filter Class (EN 779)	M5	M5	M5
Nominal Air Flow Rate [m ³ / h]	3,400	3,400	3,400
Average Efficiency of 0.4 μm particles	≥40 %	≥40 %	≥40 %
Initial Pressure Drop	60 Pa	65 Pa	65 Pa