

**BIO-BLOK® INTELLIGENT FIXED FILM BIOLOGICAL FILTER MEDIA**

1.1.3. Product Outline

The requirements on modern wastewater treatment plants keep on getting heavier and heavier. This means that heavier requirements are made on the filter media too which results in the fact that the work on improving and developing filter media for wastewater treatment plants etc. never stops.

It is EXPO-NET's object to be leading within this development.

However, we are not able to accomplish this product development on our own as product development is always taking place as a co-operation between customer and producer.

Therefore, should you have any suggestions for improvements or for new products, we kindly ask you to approach us.

At present we have the following types to offer you:

- * BIO-BLOK® 100, size 54 x 54 x 55 cm
- * BIO-BLOK® 200 (150 m²/m³), size 55 x 55 x 55 cm
- * BIO-BLOK® 200, size 55 x 55 x 55 cm
- * BIO-BLOK® 300 (only tubes)
- * BIO-BLOK® 150 HD, size 55 x 55 x 55 cm
- * BIO-BLOK® 80 HD G, size 54 x 54 x 55 cm

The BIO-BLOK® types are available in heights from 45cm to 75cm. Furthermore, all types are available as net tubes in lengths according to the customers' requests.

We draw your attention to the fact that BIO-BLOK® 150 HD is produced with a specific gravity of 0.95.

Depending on the application, BIO-BLOK® 150 HD is available with rough or smooth surface.

A heavy BIO-BLOK® 150 with rough surface is called BIO-BLOK® 150 HD.

The heavy BIO-BLOK® types are being used in submerged filters where the buoyancy can be a problem or where heavy demands are made on the strength of the net tubes.

**BIO-BLOK® INTELLIGENT FIXED FILM BIOLOGICAL FILTER MEDIA*****Requirements on filter medium:***

1. The surface has to be rough as this makes a quick accumulation of the biological membrane possible, furthermore, the surface ensures that the membrane fixes.
2. The filter medium has to be constructed in such a way that it is possible to clean it on the spot, i.e. the holes have to be vertical and through.
3. The structure of the filter medium has to ensure a sufficient aeration of the filter (a sufficiently high porosity).
4. The structure of the filter medium has to have such a form that the washed off parts of the biofilm can pass through the filter (no clogging).
5. The filter medium should be constructed of round or oval threads. A growth on threads will increase the diameter and thus increase the active surface. This effect is not achieved by a filter medium with a plane surface.
6. The filter medium has to be biologically and chemically undegradable.
7. The filter medium has to be mechanically strong so that it can carry overlying material.
8. The filter medium has to be UV stable and it has to stand the necessary variations of temperature.
9. The filter medium has to be made from an environmentally compatible material (not PVC).
10. The filter medium has to stand handling so that it is possible to remove the filter in connection with repair or reuse of the filter in new plants.
11. It should be possible to fit the filter medium into all types of tanks without any essential waste.