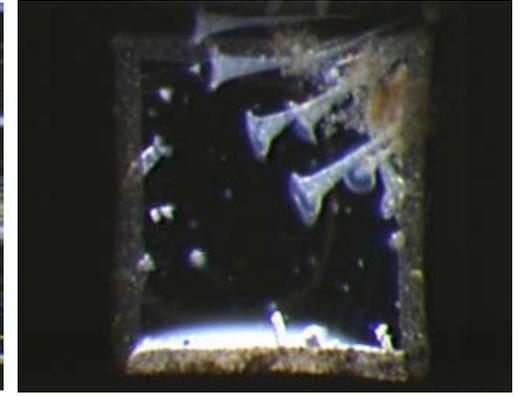
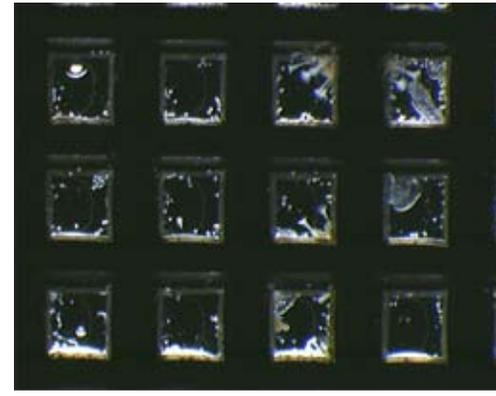
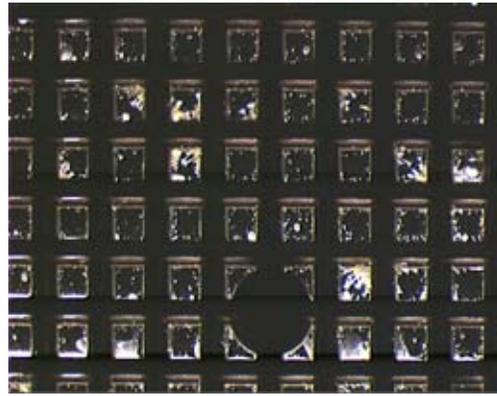
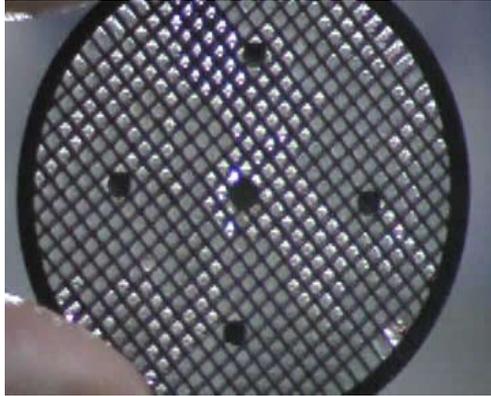


# NEW KALDNES BIOCHIP

## BEYOND NITRIFICATION



Since the development of the Kaldnes moving bed process and its successful introduction into the waste water treatment industry in 1991, Kaldnes K1 media has become the industry standard throughout the world. However Kaldnes have not been idle and they have continued their extensive R+D programme to further improve the efficiency of their process over the last 12 years.

The Bio Chip is the result of this R+D and is much more than just a different shaped media. Although the total protected surface area is more than 2.4 times higher than K1 this is only part of the story.

The main difference to K1 is that the protected area or quiet zone in Bio Chip is designed to be the perfect environment for micro animals not just bacteria. The extremely quiet zones created by the hydrophilic layer protecting every cavity in the

Bio Chip is critical to allow these micro animals to flourish. With other types of media they tend to be flushed out.

These micro animals feed on small particles such as fish waste, dead bacteria and algae. There are many different types of these micro animals as you can see from our illustrations. Consider that the Rotifer as illustrated above is filtering 100,000 times its own volumes per hour and is feeding on particles up to 10 micron in size. It is these small particles that are always difficult to remove by mechanical means and make our water cloudy !

Once fully colonised the bio chip contains an army of these micro animals, all filtering hundreds of thousands of times their own volume in every hour searching for these tiny particles.

Gleaming healthy water low in BOD (Biological Oxygen Demand) and high in oxygen must follow!

Total Media - Litres	Recommended Airpump
100	Airtech 40
100 - 200	Airtech 80
200+	Airtech 120