



## Technical Bulletin No 14

### HYRATE Biofilter with HYCOVER Rotary Distributor



The above shows an 8.8 mt dia x 4.5 mt overall height open top HYRATE Polytower Biofilter shell which has been constructed on prepared civils base. The filter receives settled municipal sewage and contains some 190 m<sup>3</sup> of modular media, packed to depth of 3.15 mts. The media is installed on our specially designed timber media support matrix. The inclined stairway provides access, via an electrically interlocked gate, to a reaction type HYCOVER rotary distributor, fitted with 4 No stainless steel arms and an electro/pneumatic drive to enable rotational speed control and periodic slow speed operation for flushing the media pack when required. A local motor control panel is located at the top of the stairway enabling the Plant Operative to observe and control the distributor operation. The distributor receives a pumped feed ranging from 4.1—12.2 lt/sec

Sewaco design and manufacture a range of HYRATE Polytower and rectangular biofilter shells which are specially suited to contain modular plastic media. The concept ensures adequate ventilation of the media pack and has been used for media depths from 2.8 mts to 6.0 mts with shell diameters ranging upwards from 7.5 mts across flats and for rectangular filters up to 30 mt square. Both Polytower and rectangular filter designs require a simple civils design that enables rapid preparation of base slab.

To complement the range of HYRATE Biofilter shells, Sewaco manufacture prefabricated timber media support matrix modules arranged to suit every type of structured media and packed depth. Matrix modules are individually designed to suit any size and shape of filter shell. Matrix modules are formed from specially treated structural grade timber. Factory assembled on special jigs and delivered to site ready to place onto prepared dwarf walls that form part of the civils base.

HYCOVER rotary distributors are individually manufactured to meet each specific application. Our unique design obviates the need for an integral seal and ensures easy servicing and replacement of all parts without specialist equipment. Machines are manufactured from standard components including a galvanised steel central support column fitted with top mounted heavy duty bearing assembly and autogreaser. Stainless steel distributor arms incorporate spreader plates for maximum effective distribution. Please ask for more information on the various types of distributor we can offer.