



Technical Bulletin No 6

Jedburgh 14.2 mt dia HYRATE Polytower.

This HYRATE Polytower biofilter shell, specially designed by SEWACO Ltd., to provide a light weight structure with an external cladding to blend with the rural surroundings, contains some 975 m³ of ordered modular media. The biofilter treats final effluent from a municipal sewage treatment works. Munters 120:60 modular media has been installed on our factory built modular timber media support matrix units and packed to 6.15 mts. The media provides some 234000 m² of surface area upon which nitrifying bacteria effect removal of NH₃ enabling the Treatment Works to comply with its discharge consent to the nearby water course.

Sewaco manufactured and erected the HYRATE Polytower biofilter shell on a concrete base constructed by others to our design. Our factory built media support matrix modules, prefabricated rotary distributor support column and access stairway are also delivered to site and installed. The HYRATE biofilter shell is in the form of a 10 sided open top portal frame structure, with internal impervious membrane and external plastic coated steel cladding which provides excellent protection for the galvanised steel structure. On completion of tower erection our team installed the modular media and rotary distributor, and commissioned the filter ready for operation.



Sewaco design and build a wide range of HYRATE Polytower and Rectangular Biofilter shells suitable to contain plastic modular media with packed depths extending from 1.5 mts to 7.2 mts.

Our HYCOVER Rotary Distributors are also available with variable speed electric drive to achieve required Sk values and can be provided with integral automatic dosing syphons to ensure effective application of effluent to the media surface irrespective of incoming effluent feed rates.

HYCOVER Static and Rotary distributors can be fitted into all shapes of biofilters and provide effective wetting of media surface via gravity and pumped feed systems.