



WASC 2216
WAI 599

ERDE Centrifuge process for aligned carbon fibre

General description

The plant deposited short carbon fibres approx 3mm long dispersed in a carrier fluid through a series of nozzles onto a rotating drum lined with wire mesh. This resulted in the majority of fibres being aligned circumferentially. The size of the sheet produced was limited only by the size of the drum and traversing arm. When the desired thickness had been achieved the sheet was removed, washed free of carrier liquid and impregnated with the desired resin system. The resulting aligned carbon fibre sheet showed much better stretch and drape properties compared to a woven material. The process in principle could be used for any short fibre material

Photo 1 shows the general layout of the machine

Photo 2 shows the inside of the drum and the nozzle layout

Photo 3 shows the finished sheet





