VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM-590010

PROJECT WORK

"SOME STUDIES ON FABRICS PRODUCED BY DYNEEMA FIBRES FOR DEFENCE APPLICATION."

Submitted in partial fulfillment of the requirements for the award of degree of

BACHELOR OF TECHNOLOGY

IN

TEXTILE TECHNOLOGY

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ABSTRACT

Dyneema is a superstrong polyethylene fibre that offers maximum strength combined with minimum weight. It is up to 15 times stronger than quality steel and up to 40% stronger than aramid fibers, both on weight for weight basis. Dyneema floats on water and is extremely durable and resistant to moisture, UV light and chemicals. The applications are therefore more or less unlimited.When incorporated into body armour, Dyneema's light weight and flexibility allows the wearer an unparalleled freedom of movement without compromising protective value. Additional armour plates made with Dyneema UD can be moulded to fit the shape and size of the wearer's body and inserted into garments. This allows for protective products to be 'tailor-made' to fit the wearer, enhancing both comfort and confidence for those in the line of fire.

In this project an effort is done, on some studies on fabrics produced by dyneema fibres for defence application and tested results are obtained. The produced fabric is accepted as per standards.