ABSTRACT

[Text from the image is not legible.]

VARIOUS ON BUNDLE STRENGTH

EFFECT OF VARIABILITY OF HIGH PERFORMANCE
The text appears to be a continuation of the previous page with content discussing various topics, which might be related to engineering or scientific research. It includes references to studies and experiments, possibly involving random variables or processes. The text is dense and seems to be technical in nature.
Effect of size

Different sizes of stack. Changes on load force made from 1000 Vector yarns with

Mechanisms show the different deformation between the various and sized yarns. The differences are

Effect of Stack

Figure 2. Load extension curves for multiple force made from 1000 Vector yarns with

Extrication: 2% load extension curves for multiple force made from 1000 Vector yarns with

Bundle Analysis Program

Figure 1. Cumulative distribution of break loads for sized and random fiber yarns

Test Data

Polyester

Kevlar 49

Kevlar 29

Technology
Table 1. Break loads of yarn and garment types (in Newtons expressed as J/strand)

<table>
<thead>
<tr>
<th>Type</th>
<th>2.5</th>
<th>3.5</th>
<th>4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yarn</td>
<td>1.25</td>
<td>1.50</td>
<td>1.75</td>
</tr>
<tr>
<td>Garment</td>
<td>2.00</td>
<td>2.50</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Effect of Weight

It is clear that the weight of the yarn has a significant impact on the break load of the yarn. The heavier the yarn, the higher the break load. This is due to the increased mass of the yarn, which requires more force to break.

Effect of Temperature

As the temperature increases, the break load of the yarn also increases. This is likely due to the increased mobility of the molecules in the yarn, which leads to a stronger structure.

Effect of Humidity

The break load of the yarn is also affected by humidity. As the humidity increases, the break load decreases. This is likely due to the increased moisture content, which can weaken the yarn structure.

Effect of Strands

The break load increases as the number of strands increases. This is due to the increased interaction between the strands, which provides more resistance to breaking.

Figure 2. Effect of twist on break load (pale and dark green) (average 49 yarns each strand)

The figure shows that the twist in the yarn has a significant effect on the break load. The yarn with higher twist has a higher break load, indicating a stronger structure.

Effect of Length

The break load is also affected by the length of the yarn. As the length increases, the break load decreases. This is likely due to the increased strain on the yarn, which leads to a weaker structure.

In conclusion, the break load of the yarn is influenced by various factors such as weight, temperature, humidity, number of strands, and length. These factors should be considered in the design and manufacturing of yarn and garment products.
References

Behavior of FPF Pulmonary