

THE EFFECT OF YARN INPUT TENSION ON THE STRUCTURE OF PLAIN KNITTED FABRIC

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“The candidate confirms that the work submitted is his own and that appropriate credit
has been given where reference has been made to the work of others”

PREFACE

During weft knitting of plain fabrics, the setting of the stitch cam affects the length of yarn knitted by the knitting elements (needles). This in turn affect the stitch length. The work reported in this dissertation was designed to study the effect of stitch length on the properties of the knitted fabric.

The outline of the work reported in this dissertation is as follows;

The previously published literature related to the technology of the production of plain knitted fabrics was reviewed in Chapter One. Chapter Two discussed in more details the geometry of plain knitted fabrics and the proposed mathematical models established by different researchers. Chapter Three describe the design of the experimental work, samples production, the devices and equipments used for testing.

A study of the influence on knitted fabric properties of different parameters was carried out and is reported in Chapter Four. In the light of the results obtained, it was possible to draw some conclusions and recommendations for future work and this is reported in Chapter Five.