



TRINITY COLLEGE FOR WOMEN NAMAKKAL

DEPARTMENT OF COSTUME DESIGN & FASHION

**FABRIC SCIENCE
ODD SEMESTER**

Presented by

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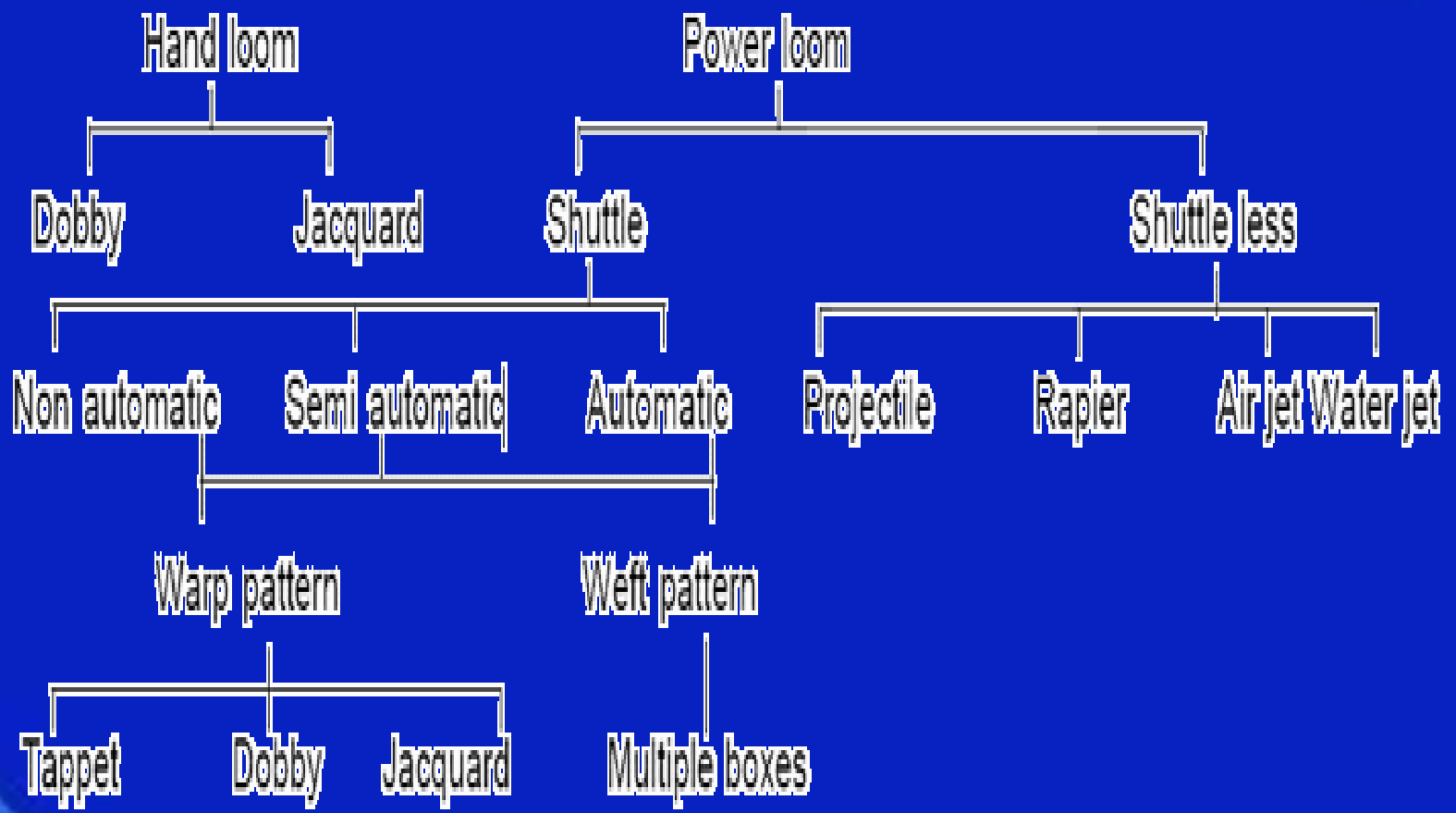
LOOMS AND ITS CLASSIFICATION

INTRODUCTION

A loom is a device that causes interlacement two sets of threads, namely, warp and weft threads, to form a fabric. Loom is **machine or device which is used to produce woven fabric**. It is the central point of whole process of cloth production. In other word, a loom is a mechanism or tool used for weaving yarn and thread into textiles.

The very first loom in history is the pit loom. Subsequently the handloom was developed and then the power loom.

Classification of Looms:



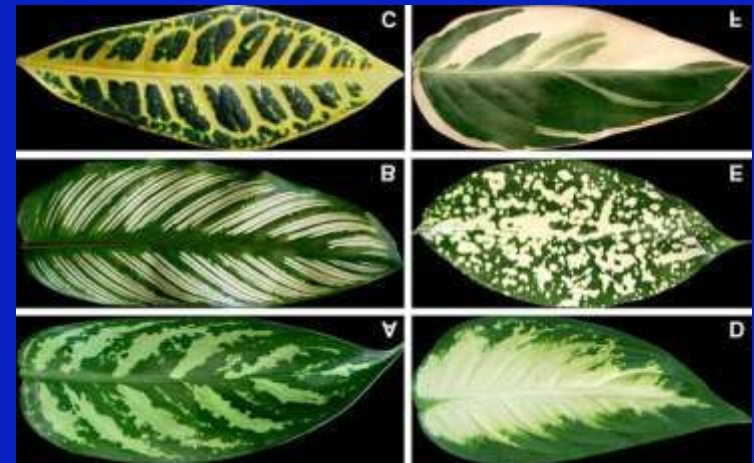
Dobby

Dobby, or dobbie, is a woven fabric produced on the doobby loom, characterised by small geometric patterns and extra texture in the cloth



JAQUARD

A fabric of intricate variegated weave or pattern having a pattern of different colors or marks.



Shuttle

A *shuttle* is a tool designed to neatly and compactly store a holder that carries the thread of the weft yarn while *weaving* with a *loom*.



SHUTTLE LESS LOOM



- Shuttle less loom weft yarn are inserted with special tools rather than shuttle
- Shuttle less loom operating at low noise levels and they are very fast weaving
- One example of shuttle less loom is waterjet loom

PROJECTILE :

Projectile weaving machine is a shuttle less loom method for filling yarn insertion. using a small metal device resembling a bullet in appearance with a clamp for gripping the yarn at one end,
which is then propelled into and through the shed.

RAPIER:

A **rapier loom** is a shuttle less weaving loom in which the filling yarn is carried through the shed of warp yarns to the other side of the loom by finger-like carriers called rapiers.

AIRJET :

An **air-jet loom** is a shuttle less loom that uses a jet of air to propel the weft yarn through the warp shed. It is one of two types of fluid-jet looms, the other being a **water-jet loom**, which was developed previously.

WATER JET:

A water jet loom is similar to an air jet loom but **uses water instead of air to transport the yarn around the shed.**

THANK YOU

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