Furniture production in the era of 4.0 manufacturing: Faster and un-interrupted!

**STEP ONE: DESIGN AND REVIEW**

Speed has become increasingly critical: today’s consumer just won’t wait. The winners are producing pieces faster than ever and it starts in the design room.

The latest design software allows for real-time collaboration and instantaneous feedback and improvements. Validation is as simple as a click of a button... from anywhere in the world.

And digitalization expands the creative process, allowing for limitless designs and variations.

**STEP TWO: PROTOTYPING**

Thanks to virtual prototyping, the moment when a company would normally start to physically “build” the design has been dematerialized. Traditionally it was impossible to know exactly how much an item would cost (i.e., a physical prototype—dimensions, upholstery and inner structure, leather or wood)—had been created in the “real-world.” Using a virtual prototype, companies can obtain the majority of final product costing elements before mobilizing any physical resources.

**STEP THREE: PATTERN MAKING**

Advanced pattern-making solutions enable companies to create variants and develop a complete range of upholstered products from a single prototype. They also allow modifications made on one pattern to be transferred to all models in the same collection—by using a system of dependencies among models.

The majority of components that make up a collection or piece have already been developed, tried, and used in prior pieces. Complete access to past and present product specifications makes it easy to deliver faster by mixing and matching the best of the past with the styles of the future.

**STEP FOUR: MARKER MAKING**

Complex markers can be generated quickly and automatically to achieve an accurate estimate of how much fabric is needed. This means costs can be calculated before any materials are purchased or cut, and gives negotiating power to the furniture companies, who were often basing orders on guesswork.

**STEP FIVE: CUTTING**

The cutting room is where bottom lines really play out: it’s the goal to produce more by achieving the most efficient material usage. Digital delivery of cutting jobs to the cutting room increases throughput, and ensures that any design modifications made upstream are automatically considered.

Connecting the production line with data reduces errors and is an essential step towards maximizing each fabric and leather cutting line.

**STEP SIX: OFFLOADING AND BEYOND**

Visual offloading assistance with color-coded pieces allow even unqualified operators to identify bundles, saving time and drastically reducing errors. It also enhances material savings by allowing several styles to be combined in the same work order, thanks to a color manager that organizes by variant or visualization of any other desired element.

INTERESTING STUFF, RIGHT? For more insight, download our latest e-guide to get the full picture.