Cutting & Laser Engraving

The employment of laser technologies has a wide variety of applications within a Vocational & Educational Training Centre, more precisely in the wood area. Some of the ways this laser technology can be used are:

- Precision cutting: Furnishing manufacture, architectonic & design models and other projects which require clean and precise cuttings.
- Engraving and marking; It allows engraving designs, texts or images over the wood surface. It allows the customization of wood products, creating custom decorations, and tagging products with specific information, such as serial numbers and barcodes. It also allows the addition of decorative motifs on the wood.
- Making of models and prototypes: Likewise, we can employ the laser system for cutting and engraving wood pieces for the assembly of models and prototypes for several sectors like wood, architecture, product design and engineering. It allows the students to experiment with different designs and make rapid & economic tests before mass production.
- Teaching concepts of design and manufacture: The use of Laser in wood projects offers an excellent opportunity for teaching the students concepts like Computer Assisted Design (CAD) and Computer Assisted Manufacturing (CAM). In summary, the students learn how to design products with 2D & 3D software and, afterwards, they can transform them into real objects.
- Development of Technical capabilities. The use of this technology in wood projects helps the students in the development of valuable technical capabilities, such as programming Computer Numerical Control (CNC) machines, the settings for cutting & engraving and the basic maintenance of the equipment.