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| **Abstract:** |  |
| Development of any manufacturing industry highly depends on the employment of the latest technology and well trained manpower. Likewise, automation plays a significant role in every sector of modern industry including Textile. Textile industry is one of the fastest growing manufacturing industries of the new era all around the world where technological development of automated machineries can be seen in almost every section to maintain the better quality product. Higher production with greater efficiency, lower labor cost and minimized wastage percentage with better quality products in each section of production can lead one to the front line of the competitive market. Cutting section of this sector is a very important section where precise cutting with higher accuracy must be maintained to meet the lead time and on time shipment. In Bangladesh, most of the factories use semi-automatic machine to accomplish the cutting process. But with the increasing demand of automated technology, the automatic fabric cutting machine is also being used gradually in some factories because of the higher efficiency and reduced production time. In this paper, the cutting process for same fabric has been studied using both manuadl and full-automatic machine to evaluate the various cutting parameters. After spreading, multiple lays of single jersey fabric were cut using straight knife cutting machine and automatic fabric cutting machine. After completing the cutting process, the variation of same criteria for two different machines was found out. This study helps to determine the effectiveness and usefulness of both machines from various perspective of production. The significance and viability of using automatic cutting machines have been reported to cope up with the evaluation of Industry 4.0. | |