

IV. CONCLUSION

The simple design of the drilling jig is easy to use and it eliminates the process of punching, since indexing is used. The jig has improved the accuracy of the holes due to which the rejection rate of the rings has reduced. From Table II it can be seen, due to the tool guide used in the jig, life of the drill bit has improved, earlier the drill bit would fail after every 25-30 rings. Though the loading and unloading process in this jig is time consuming the indexing makes drilling quicker and accurate operation and therefore the total cycle time has been reduced. Previously, the operator would rotate the ring manually which was an unsafe operation, due to the use of jig safety has been ensured. The jig is being used regularly in the organization and plans to develop more such jigs. Though there are so many advantages of using the jig there are some minor problems as well, the setting of the jig on the machine table requires time and has to be accurate. Swarf accumulation may decrease the accuracy of the machined holes, by accumulating under the ring assembly and varying the angle, if not removed regularly.

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