



PRODUCTION OF BULKY RAW SILK YARN USING COCOON ENTANGLEMENT METHOD DURING THE PROCESS OF REELING

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ABSTRACT

During the process of reeling, cocoon filaments are combined to form raw silk yarn in the reeling machine. The cocoons are set to move slowly during the unwinding of silk from them. If the speed of movement of cocoons is increased by incorporation of a suitable device, it is possible that entanglement of filaments take place resulting in a bulky silk yarn. Central Silk Technological Research Institute (CSTRI), Bengaluru, India has developed a mechanism to rotate the inner vessel of reeling machine keeping the outer vessel constant, taking care that water won't be spilled during the rotation of the vessel in the reeling process. Due to this, the cocoon filaments entangle and also get false twisted thus making the end product, a very strong raw silk yarn. When the reeling was done with different number of cocoons per end, it revealed that as more number of cocoons are reeled per end, the average denier and size deviation are significantly influenced at 1 % level. The bulky yarn produced using cocoon entanglement reeling machine has exclusive end uses.

Key words: Bulky yarn, cocoon entanglement, raw silk quality, reeling basin.