Project Title- 24	**Optimization of Inter Roller Distance of Draw Frames, Speed Frames and Ring Frames based on AFIS Length Data**
Principal investigator	Dr. Arindam Basu
Cost	Rs.16.47 lakhs
Date of Commencement	Feb 1999
Duration	24 Months
Date of Completion	January 2001
Abstract	The report deals with a study conducted by SITRA on optimization of roller settings in Draw Frames and Fly Frames using AFIS single fibre length data. At Ring Frames, processing parameters such as Top Roller Pressure and Spacer Size were optimized using AFIS short fibre content data. Single fibre length data can be used more efficiently for roller setting on draw frame. AFIS 5% length for front zone setting on breaker were found to be optimum. In the case of finisher draw frame another 2mm allowance can be given for both front and back zone settings. Yarns produced from AFIS 5% setting on draw frames showed improvement in all major quality characteristics.
Highlights	▪ AFIS 5% length for front zone setting on breaker was found to be optimum. In the case of finisher draw frame, another 2mm allowances can be given for both front and back zone settings. ▪ Yarns produced from AFIS 5% setting on draw frame shows improvement in all major quality characteristics.
Area of applicability	Spinners
Target beneficiaries	• The study findings were disseminated to SITRA member mills • The study results are useful to mills to optimize roller space settings in process machinery using AFIS fibre length data • The study results are extensively used by SITRA member mills to produce high quality yarns.
Status	Completed