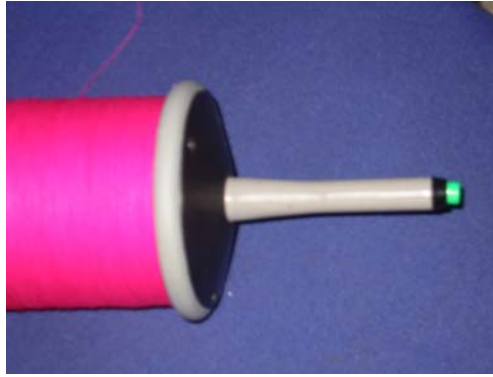
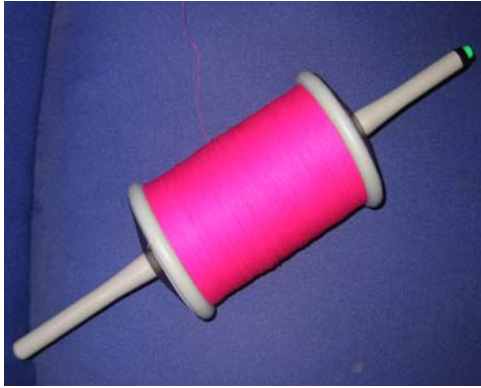


Grassroots Technological Innovations For National Awards



Innovation Ref No: 41GJ01A0268

1	Category	General
2	Name of the innovator	Pareshbhai Katurbhai Panchal
3	Address of innovator	302, Kalpataru Complex, Behind Premchand Nagar, Satyagrah Chaavani Road, Satellite. Ahmedabad-54 Ph No: 079- 26754489 (R), 22139337 (F), 9825954503 (M)
4	Title of the innovation	An Automatic String / Thread winder.
5	Keywords	Thread / String winder, motor
6	Background of the Innovator	9 th Std. Wooden job work, Age: 37 year

Summary: In kite flying the most cumbersome and boring part is rewinding of thread after kite gets cut in entanglement. Secondly, the thread quality also deteriorates due to entanglement when thread is pulled at high speed by the kite flyer and rewinding cannot be done with the same speed. Thirdly, to keep up the enjoyment level, the kite flyer generally would like to fly the next kite at the earliest.

For avoiding the problem mentioned above, the innovator has come up with a solution in the form of automatic string winder. The device has an electric motor. Incorporated in the system, is the spool wound on a shaft that is connected to the motor, and hence rotates when the motor is on. The movement results in the winding and unwinding of the string. A switch is provided at the end of the shaft, which is used to switch the motor on and off.

Features of the Entry:

1	Novelty of the innovation, feature or sub system	Automatic, easy and speedy string winding system.
	<p>Comparison to current conventional alternative by</p> <p>a) Functioning</p> <p>b) Cost</p> <p>c) Removal of drudgery</p>	<ul style="list-style-type: none"> • Easy and speedy operation • Simple in construction and thus a high degree of operational reliability is ensured. • It prevents the damage caused to the thread/string during the winding. • It provides an extra ordinary facility and thereby increase / boost the interest of the innovator <p>Rs 175/- (without string)</p> <p>Reduces the chances of accident and prevents knotting in thread while rewinding.</p>
3	<p>a) Demerits and Limitations</p> <p>b) Areas needing further work:</p>	<p>It is operated by battery and the life of battery is only a week.</p> <p>Low cost, Chargeable cell can be used.</p>

4	Commercialization a) How many has been made/sold/used locally? b) What is the diffusion potential?	About 4000 pieces have been sold in the market; NIF has provided MVIF support for commercialization.
5	Current and future application areas (multiplicity of utility)	Can be used for textile application and also in silk industry.
6	Social /environmental impact	For easy, enjoyable Kite flying.
7	Significance to women, handicapped and other marginalized sections	It reduces the winding work of women and they also enjoy winding, which was earlier drudgery for them.
8	IPR considerations	Patent filed (application no. 635/MUM/2004 dated 08/06/2004)