



## Motorized Thread Winder for Kite Fliers

*Consolation*

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#### Background

Keeping in mind the needs of ardent kite flyers, Paresh Panchal (38) has made a motorized string winder that can be used to roll up thread on to the reel, once the string is cut.

Having studied up to class ninth, he had to stop his school studies because of untimely death of his father due to heart attack and being the eldest son he had to shoulder the responsibility of running his family. Currently, Paresh stays with his mother, wife Harshaben, his daughter and son along with his brother and his family.

After death of his father, Pareshbhai took over the workshop run by his father. Once settled in business he started thinking of doing something different to increase the income of this workshop. He used to make conventional 'firakis' or thread winders used for kite flying, in his workshop.

It occurred to him one day to make a different kind of a thread winder that could reduce drudgery of rewinding thread and make whole process of kite flying faster and more enjoyable.

He came up with the first prototype in 2003, which costed him a great deal. At nearly Rs. one lakh, burnt a hole in his pocket. Initially, he had to invest his own money but later coming in contact with GIAN-West and NIF, he got supported for mass production under MVIF (Micro Venture Innovation Fund scheme) scheme. At present, he owns two workshops in Ahmedabad out of which one is totally dedicated for the production of automatic thread winder.

#### Genesis

During kite flying, when a kite gets cut, the user should be able to very quickly rewind the thread, without any damage or knotting on thread and then fix the thread quickly to the next kite. Manual rewinding takes too much time and is quite boring. The looping of thread is a big problem as at times it gets entangled in other buildings and is difficult to pull. Besides, there is damage to the thread and to the fingers in pulling and winding as in some cases, the thread is laced with ground glass particulates designed to cut other kites. Some times if it is not pulled back quickly and left loose, it might hurt people also by entangling in their body

parts. To address this issue, Paresh decided to develop a fast action motorized string winder.

#### Innovation

The motorized string winder is fitted with a battery-operated motor and has a spooling mechanism to rewind the thread at high speed. Standard batteries power the electric motor.

The user flying the kite has to press a small button. By pressing a red push button located at the end of the handle, one can when he wants to rewind the thread fast by switching on the motor, which rotates the thread winder. This gives power to the spooling mechanism and rewinding of thread takes place until the push button actuation is stopped.

The basic components include a central chassis made of wood or plastic which is electrically non-conductive and which houses the gears, spooling unit (mounted on main shaft with bearings), electric motor and batteries along with an operating push button switch on one side of the main operating handle.



While this product is costlier than the usual manual winding options, the value of the product is tremendous as it winds 500 yards in half a minute without damage to hands and thread, and with no knotting.

This product saves the kite flyer enormous amount of time (1000 yards rewind in 1 one minute), protects his hands from injuries due to tugging at entangled sharp thread. It also protects the thread from abrasions and knots and escalates the joy of kite flying by delivering a fast and safe winding method.

With its simple push button operation, this motorized thread winder is a simple and effective device. Even women and children can experience the joy of kite flying to it's fullest, using this device.

The motorized thread winder was launched in the market in the year 2004 with the market price of

Rs. 230. Same year in June, a patent was also filed to protect IPR of innovator. Till date, the innovator has sold more than 5000 pieces of thread winder and the price has been brought down by almost half due to tough competition in the market. He was invited by NIF-GIAN (W) to display his innovation in the traditional food festival, 'Saatvik', organized by SRISTI at IIM Ahmedabad in November 2006. His string winder was widely appreciated by people and entire stock of 500 winders that he brought was sold within two days.