

SOLAR SILK REELING CUM SPINNING MACHINE



Problem addressed

- ✓ Silks are traditionally reeled by man operated hand reeling machines.
- ✓ The traditional way of reeling and spinning silk is a separate process and a tedious task.
- ✓ Conventional heavy machinery design with very high power consumption.
- ✓ Portability and very high cost machinery

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Intellectual Property:
392958

Category of the invention:

- ✓ Textile Machinery
- ✓ Machine Automation
- ✓ Sustainable Technology

Application

- ✓ Silk Textile Manufacturing Industries
- ✓ Silk Sericulture Farms
- ✓ Traditional Silk Artisans and Craftsmen
- ✓ Silk Garment Industry



Fig: The reeling cum spinning machine at work

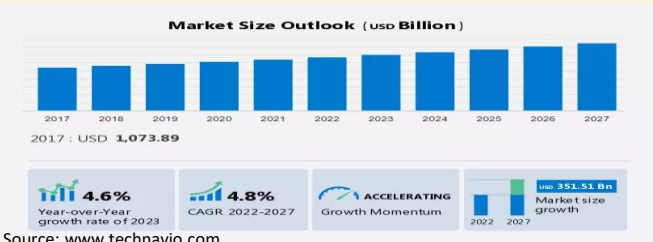
Technology:

The 'Solar Silk Reeling cum Spinning Machine' is an automated reeling and spinning technology. It seamlessly handles reelable cocoons like Mulberry, Muga, and *Tasar*, simultaneously reeling and spinning, while also accommodating non-reelable cocoons manually. Notably user-friendly, it ensures easy installation, operation, and maintenance, even for individuals with limited skill. Operating on solar power during the day with a backup battery, the machine sets a new standard for energy efficiency, requiring only 1-2 watts of power input. In essence, it represents an innovative, sustainable, and low-energy solution for producing high-quality silk yarn.

Advantages:

- ✓ One time finish method (both reeling and spinning simultaneously).
- ✓ Magnetic attachment auto connector.
- ✓ Energy efficient and operable with solar power.
- ✓ The machine do not produce any toxic or polluting by products and is very environment friendly.
- ✓ Single use to unlimited count functioning mechanism.
- ✓ Easy handling, easy learning and easy earning.
- ✓ Two functions: Primary function from virgin cocoon, secondary function from waste cocoon.
- ✓ High quality end products.
- ✓ Highly portable.
- ✓ Low power consumption, less area and low cost.
- ✓ Less manpower

Potential Value:



Source: www.technavio.com

USP:

- ✓ High quality end products.
- ✓ Highly portable.
- ✓ Less area
- ✓ Low cost.
- ✓ Less manpower
- ✓ Green technology with minimal carbon footprint

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