Textile Machinery Manufacturers' Association (India)

Citation of Export Excellence and R&D Awards 2018-19

The Association's Export Awards Scheme covers the following categories of Awards:-

1) Apex Export Award

2) Segment Export Awards for each of the major sectors of the Textile Machinery Industry i.e.

   (i) Textile Machinery Sector
   (ii) Parts and Accessories Sector
   (iii) Textile Testing, Monitoring & Controlling Instruments Sector

3) Special Export Awards: Category-wise

The Association also presents Research and Development Awards for indigenous development of new technology/processes under different categories in the field of Textile Machinery Industry.

1) EXPORT EXCELLENCE AWARDS:

The Association received ten nominations for Export Excellence Awards. These nominations were evaluated by the Awards Committee of the Association and selected eight nominations as winners.

a) *Apex Export Award:*

The Apex Award Winner is: Saurer Textile Solutions Pvt. Ltd., Vadodara

During the year 2018-19 ***Saurer Textile Solutions Pvt. Ltd.*** exported Textile Spinning Machinery to the tune of Rs.484 Crore which formed 79% of the total turnover. The country to which they had exported is Germany, China, Switzerland & Singapore.



Recipient of the Award is: *- Mr. Vikas Sharan - Director-India Operations of the Company.*

b) Segment Export Awards:

i) **Machinery Sector:**

Winner of the Award is: Lakshmi Machine Works Ltd. Coimbatore

During the year 2018-19, ***Lakshmi Machine Works Ltd.*** have exported Spinning Machineries to the tune of Rs.694 Crore which formed 39% of the total turnover. The major countries to which they have exported to are Bangladesh, Kenya, Vietnam, Pakistan, Turkey, Indonesia, China, Nepal etc.



Recipients of the Award is: *Mr. R. Sasi Mahendran - Deputy General Manager – Sales Global of the Company*

ii) *For Parts & Accessories Sector:*

<u>Winner of the Award is</u>: Lakshmi Card Clothing Mfg. Co. P. Ltd., Coimbatore

During the year 2018-19, ***Lakshmi Card Clothing Mfg. Co. P. Ltd.*** exported Parts & Accessories worth Rs.27 Crore which formed 21% of the total turnover. regions to which they have exported to are Major Far East, Asia, Europe, Africa, North and South America, Middle East and CIS.



<u>Recipient of the Award is</u>: *Mr. R. Jagadeesan - Vice President-Corporate Administration of the Company.*

iii) *For Textile Testing, Monitoring & Controlling Instruments Sector:*

<u>Winner of the Award is</u>: Premier Evolvics Pvt. Ltd., Coimbatore

During the year 2018-19, *Premier Evolvics Pvt. Ltd.* exported Textile Testing, Monitoring & Controlling Instruments to the tune of Rs.39 Crore which formed 37% of the total turnover. The countries to which they had exported to are Bangladesh, Turkey, China, Brazil, Uzbekistan, Sudan, Indonesia, Argentina, Vietnam and Taiwan.



<u>Recipient of the Award is</u>: *Mr. Sanjay Gandhi, Deputy General Manager - Sales of the Company.*

c) <u>Special Export Awards</u>:

i) Spinning Machinery Sector:

<u>Winner of the Award is</u>: Rieter India Pvt. Ltd., Pune

During the year 2018-19, *Rieter India Pvt. Ltd.* exported Spinning Machineries to the tune of Rs.569 Crore which formed 49% of the total turnover. They had exported their products to various countries. Major export destinations are Malaysia, Netherlands, Switzerland, China, Germany, Czech Republic, Uzbekistan etc.



<u>Recipient of the Award is</u>: *Mr. Shashank Deshpande – Product Manager and Ms. Swati Kadu – Head Commercial of the Company.*

ii) Processing Machinery Sector:

Winner of the Award is: Dhall Enterprises & Engineers Pvt. Ltd., Ahmedabad

During the year 2018-19, *Dhall Enterprises & Engineers Pvt. Ltd.* exported Textile Processing Machineries to the tune of Rs.53 Crore which formed 85% of the total turnover. The countries to which they had exported to are Bangladesh Nigeria & Turkey.



Recipient of the Award is*: *Mrs. Ashani Sachin Chopra – Director of the Company.

iii) Parts and Accessories Sector:

Winner of the Award is: Inspiron Engineering Pvt. Ltd., Ahmedabad

During the year 2018-19, *Inspiron Engineering Pvt. Ltd.* exported Parts and Accessories to the tune of Rs.19 Crore which formed 39% of the total turnover. They exported their products to many countries i.e. Italy, Spain, China, Germany, Turkey Etc.



Recipient of the Award is: – Mr. Amol Bhagwati – Managing Director of the Company

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iv) Small Scale Sector: Machinery

***Winner of the Award is:* Yamuna Machine Works Ltd., Mumbai**

During the year 2018-19, *Yamuna Machine Works Ltd.* exported Textile Processing Machineries to the tune of Rs.20 Crore which formed 17% of the total turnover. The countries to which they had exported to are Uzbekistan, Mauritius, Egypt, Brazil, Kenya, Turkey etc.



Recipient of the Award is : Mr. Prashant Mangukia - Director of the Company.

2) **RESEARCH & DEVELOPMENT AWARDS:**

Six members nominations were received for seven product developments for R&D Awards. The Jury considered four nomination eligible for the Award for their R&D efforts during the year 2018-19.

The Award winner are:

InspirOn Engineering Pvt. Ltd., Ahmedabad for their development of "High Squeeze Padder"

After the successful development of SprintOn Stenter machine InspirOn further focused on improvement in energy saving by optimizing of water removal through the textile Padder in order to obtain uniquely efficient squeezing rate.

The open width squeezing Padder is used to extract the maximum amount of liquid from the fabric by means of squeezing the fabric between two or three rollers covered with rubber. This process is known as **Hydro-extraction by Squeezing.**

The newly developed 12T High Squeeze Padder equipped with below listed features:

- High efficiency squeezing roller
- Robust mechanical frame structure
- Compact trough design
    - Optional jacketed trough for heating/ cooling application
    - Liquor level controller
    - pH meter with temperature sensor
    - Pneumatically liftable and lowerable trough facilities
- Pneumatic control panel
- Bowed roller assembly with outside adjustment
- Fine pitch scroll roller assembly with direct drive system.

The benefits of this development are:

1. Padder squeezing roller having high-tech elastomer indigenized formulation, having excellent compression capability showing its best result when working under strong mechanical stress.
2. Uniform Nip dimension for uniform squeezing throughout the fabric width.
3. Uniform padding pressure across the fabric width, having minimum passage with extreme low tension.
4. Minimum fabric elongation due to very short fabric path.
5. Auto cleaning arrangement of squeezing rubber rollers.
6. Reduced requoting intervals by maintaining properties for years.
7. Rubber rollers are valid for any type of fabric: thin, thick, compressible, non-compressible.
8. Reduction in initial moisture content by **12%**.
9. Robust mechanical frame structure with anti-corrosive coating which can withstand and generate high amount of squeezing force of up to 12 Ton (46kg/lcm 260cm fabric width).
10. User-friendly concept, ensuing easy access either at Padder itself or central HMI to modify controlling process parameters.
11. Comact trough design having minimum liquor storage capacity (50% of existing trough capacity), Tilting and lowering mechanism for quick cleaning and draining, auto level controllers, temperature sensor, pH monitor, Heating/Cooling facilities.
12. High tech pneumatic control panel box with width wise squeezing force adjustment chart.
13. Bowed roller assembly with outside adjustment gives safer access to online bow adjustment.
14. Fine pitch scroll roller assembly before dip and before nip for removing curling from knot or delicate fabric.
15. Minimise wastage of finishing chemicals by using lowering and tilting trough mechanism.



Recipient of the Award is: *Mr. Amol Bhagwati – Managing Director of the Company*

Nantex Machineries Pvt. Ltd., Gurgaon for their development of "Computerized Vertical Embroidery Machine"

The existing technology of horizontal embroidery machine which requires fabric frames to be made before embroidery could be done. Nantex developed "Computerized Vertical Embroidery Machine" in which continuous fabric roll of 150 meters can be embroidered in one go.

Presently schiffli (all over) embroidery used for embroidery in wrong direction i.e. against the grain line of the fabric. This development has the roll to roll embroidery

along with grain line of the fabric is possible. This machine can do both way roll to roll and frame to frame embroidery like the existing technology. Because of the vertical format the machine save lot of capital investment like space, manpower, value addition, electricity, labour, fabric and yarn wastage and more.

This development has the additional benefits like Embroidery over knitted fabric is possible, minimal investment, create designs with freehand, less noisy, less maintenance, reducing shrinkage of fabric, Fabrics dimensional stability remains the same after embroidery.

This development is patented in India and has good sales record and expected more sales in coming year.



Recipient of the Award is: *Mr. Shiv Deep Baru – Embroidery Industry Expert consultant with Gherzi of the Company*

Premier Evolvics Pvt. Ltd., Coimbatore for their development of "Double Roving Stop Motion"

As there is no conventional product available for roving stop motion in double roving spinning frames, The Premier Evolvics Pvt. Ltd. developed "Double Roving Stop Motion".

In Ring Frames there are many manufacturers equipped with double roving processing system in which two roving strands are fed together to one drafting position and combined as single yarn. The main purpose is to improve the quality of yarn with respect to imperfection and hairiness properties.

In the above models, in case of a roving beak or exhaust, then the yarn will continue to produce but the count of the yarn will be double (finer) when compared to the actual yarn to be produced because of one missing Roving strand.

The above condition will create quality rejections and huge loss of yarn

To avoid Premier Evolvics Pvt. Ltd. developed "Double Roving Stop Motion System" with following benefits:

a. When yarn breaks, the individual spindle sensor will detect the yarn break and activate the Double Roving stop motion which will stop the supply of both rovings fed into one drafting position.
b. Additionally, in case one roving breaks or exhaust, a special optical sensor which monitors both the rovings detects the missing roving condition. This in turn sends the signal to the Double Roving stop motion and the supply of the second roving will also be stopped thereby initiating yarn break. This avoids production of non-standard yarn in that spindle.

Additional benefits over the present process

Presently, The missing roving can only be detected manually through eyes., This will lead to deviation in yarn quality of the production position where the roving is missing. This will get eliminated when the Ring Frame is installed with Double Roving Stop Motion.

This product contributes waste reduction, adds value to the produced yarn and avoids additional manual inspection.

Patent is applied in India and China for this product, also has good sales record within India & abroad and expect good sales in coming years.

PEPL had accreditation ISO 9001: 2015 since 14ht October 1999



Recipient of the Award is : *Mr. Sanjay Gandhi., DGM Sales of the Company.*

The Indian Card Clothing Company Ltd., Pune for their development of "Process for manufacturing improved Card Clothing"

To achieve consistency in carding quality, maintaining sharpness of the wire tip is very important. The wearing of the wire tip is controlled by using steel of expensive metallurgical composition and by improvement in the wire tip hardening. The manufacturing of card clothing involves rolling process in which the round wires are cold drawn to get a specific shape. Hence the drawability of the round wires is a critical requirement which limits the use of high alloying components in the steel metallurgy. This necessitates the use of additional coating as a protective layer to dampen the wearing of the fine metal tip of wires.

The other critical requirement of card clothing wire is a smooth surface finish to provide low frictional resistance to the movement of fibres during processing. This also helps the movement of impurities like dirt, trash without sticking to the surface or in between the rows of the wires.

While various cleaning process of the wires are in use, effective coating of metallic card clothing wires have not been successful due to non-achievement of controlled microfine thickness of coating material deposition on the carding wire tip.

ICC after conducting various controlled developmental trails using latest technologies in coating, has been able to provide a controlled surface coating of metallic wire. The process made it possible that a few layers of high wear resistant metal compound in atomic stages are deposited with ionic bond. This ionic bonding of the hard and wear resistant metal compound with metallic wire tip surface, increases wear resistance properties multifold as compared to normal heat treated metallic wire.

These properties were tested in laboratory as well as on the field i.e. in actual working condition on high production carding machines.

This development is covered by Patent application in India and has good sales record in the name of "ProLyf Card Clothing" and also expected to increase their sales in coming years. The ICC is accredited under ISO 9001: 2015 and is holding ISO accreditation from 1997.



Recipient of the Award is:

Mr. Ashok Kumar Pal - Vice President – Product development & Technical Support of the Company.