# Cotton Traceability in Value Chain 

Shri. Pankaj Mepani, CEO, Shree Corporation, has more than four decades of experience in the cotton industry having worked in both trading and textile companies. Currently, he is a Director of Cotton Association of India.

Cotton traceability tracks the flow of cotton from the farmer to the consumer, while simultaneously gathering sustainability indicators from the farmer. This information is further used by stakeholders to improve farmer/ worker well-being and make trade more transparent and reliable.

Technology is utilised to trace and track the sustainable products throughout manufacturing chains to help brands and consumers gain more confidence in the products they buy. Here we will discuss the various traceability tools used for tracking sustainable products using the example of complex cotton textile supply chains to understand the role of technology in implementing traceability and sustainability.

Traceability of Cotton in the Value Chain:
Cotton Production
Ginning/ Lint Production
Spinning/ Yarn Production
Weaving or Knittin/ Fabric Production
Garment Production
Retail

The benefits of traceability are apparent in the long run to every stakeholder in the chain. While the end customer (the brand) gets the much needed confidence in its supply chain and the ability to communicate its ethical production stand to external stakeholders, the consumers get the confidence to purchase products which are coming from a sustainable production chain. For primary producers and suppliers, the credibility of bigger brand names as their customers bring in easier finance options and price premiums though certification.

The widely accepted definition of traceability of the prdouct is stated by the International Standard Organisation (ISO) as "The ability to identify and trace the history, distribution, location and application of products, parts and materials, to ensure the reliability of sustainability claims, in the areas of human rights, labour (including health \& safety), the environment and anti-corruption." This is a fairly broad definition, but it does not include the additional driver of protecting brand value.

One of the major challenges for European and American brands (especially apparel brands) is the lack of transparency in their complex supply chains in India, China, Bangladesh and other Asian countries. They neither have the resources nor the time to monitor the various processes starting from raw material crop production (cotton in the case
of apparels) to end retail taking place in the other half of the world. But incidents like the Rana Plaza factory accident in Bangladesh, which claimed more than 386 workers' (living at wages as low as \$38 a month) lives due to the collapse of a building (Luckerson, 2013), have shaken the world and question the role of western retailers in ensuring safety measures at workplaces throughout their chains. Ethical labour, health and safety, fair wages and enhanced livelihoods (especially for poorest of the poor amongst others) are some of the hygiene measures that ought to be taken at various levels in the chain. In the process to ensure sustainability and exercise more control, 'Traceability' of sustainable goods through the chain comes as another hurdle for brands in order to maintain seamless supply of sustainable products. The demand from the market and the end consumer for sustainable products is a very critical aspect in creation of a business case for owners of various processes in the supply chains to adopt sustainability. Without traceability, the brands ability to ensure this market goodwill gets hampered.

## Modules of Standard Traceability Systems

- Supply Chain Management modules support the logistical and operational aspects of cotton from production to final product
- Data Monitoring and Analysis: A lot of the data collected at the base to support the traceability can be used for sustainability reporting and communication to various stakeholders
- Traceability modules function to increase visibility and understanding of all actors and processes throughout the value chain
- Cross-functional modules stretch across the system, supporting management and organization of the program
Traceability As a Tool to Implement Sustainability

Transparency in supply chains becomes a major challenge for brands aiming to implement sustainability at every level. Most brands have still not been able to penetrate below the first tier (garment manufacturer) of their chains. Traceability has become a larger concern for brands as highprofile incidents have come to light demonstrating that many companies are unable to point to where their products come from, much less who created them, the conditions they were created in and the impacts on the environment. Awareness of where their products comes from becomes an important first step to initiate any kind of intervention to
improve the livelihoods of farmers growing their cotton and workers processing their products, to deploy sustainable farming to produce their cotton and use more sustainable processes for its conversion into high quality textile and garments. These growing risks arising from globalisation of supply chains, in addition to recent increases in consumer and stakeholder preferences for ethically sourced products, have led to sustainability becoming a core procurement requirement. For example, when state-sanctioned child labour in Uzbekistan came to light, Wal-Mart and Tesco vowed not to buy clothing made with cotton farmed in this region (Greenbiz, State of Green Business: Supply chain transparency ramps up, 2015). This seems like a straightforward commitment, but the Fair Labor Association found that it's almost impossible to categorically deny that Uzbek cotton has been used because there are no established data points through which the cotton used in a finished garment can be traced (Fair Labor Association, Tracing the cotton supply chain, 2010).

World wide, the traceablity system are utilised by the leading garment brands like, Levi, Strauss and co., Ikea, Marks and Spencer, Tesco, Wal-mart, etc. to build their brand value.

## Value Chain for Cotton Fibres

Cotton being a commercial crop of great economic importance, there exist a value chain in the sense that the seed cotton is converterd into lint and through the yarn and fabric route into garments and made ups for both internal consumption and export. However, in this conventional value chain therer are several weak as well as missing links. The crucial unit operation involed in value chain is ginning, i.e, conversion of seed cotton into lint, is still consider to be one of the weakest links charecterised by excessive use of energy, low productivity, absence of proper kapas and lint cleaning and lack of facilities for quality assesment of the lint that this sector produces. Although the spinning industry in India is considered one of the most modern sectors with standards that are comparable to the rest of the progressive countries, the same cannot be said about the weaving/knitting sector as far as quality of the end product is concerned. Further, in the downstream processing such as preparatory chemical treatments like scouring and bleaching of yarn or fabrics, eco-friendliness, energy use efficiency, effluent generation and its treatments are factors that need immediate attention.

Courtesy: Cotton India 2018 (Domestic) (The views expressed in this column are of the author and not that of Cotton Association of India)

# CAI Releases its October Estimate of the Cotton Crop for 2018-19 Crop Year at 343.25 Lakh Bales 

Cotton Association of India (CAI) has released its October estimate of the cotton crop for the season 2018-19 beginning from 1st October 2018.

The CAI has estimated cotton crop for 201819 crop year at 343.25 lakh bales of 170 kgs . each which is lower by 4.75 lakh bales than 348 lakh bales announced at the Second Domestic Conference for 2018 held on 6th October 2018 in Aurangabad. Statements containing the state-wise estimate of the cotton crop and the Balance Sheet for the crop year 2018-19 with the corresponding data for the previous year are enclosed. The CAI has revised downwards the crop estimate for Gujarat by 2 lakh bales, Maharashtra by 1 lakh bales, Karnataka by 1 lakh bales and Orissa by 75 thousand bales than compared to its previous estimate due to unfavourable weather conditions.

The CAI has projected total cotton supply during October 2018 at 50.13 lakh bales which consists the arrival of 26.13 lakh bales during the month of October 2018, imports during October 2018 which the Committee has estimated at 1.00 lakh bales and the opening stock at the beginning of the season as on 1st October 2018 which the Committee has estimated at 23.00 lakh bales.

Further, the Committee has estimated cotton consumption for during October 2018 at 27 lakh bales while the export shipment of cotton during October 2018 has been estimated at 2.50 lakh bales.

The stock at the end of October 2018 is estimated at 20.63 lakh bales including 16.53 lakh bales with textile mills while the remaining 4.10 lakh bales are estimated to be held by CCI and others (MNCs, traders, ginners, etc.).

The projected yearly Balance Sheet for the Season 2018-19 drawn by the CAI has estimated total cotton supply till end of the season i.e. upto 30th September 2019 at 390.25 lakh bales of 170 kgs . each which includes opening stock
of 23 lakh bales at the beginning of the season and imports of 24 lakh bales which are estimated to be higher by 9 lakh bales compared to the imports figure of 15 lakh bales estimated for the 2017-18 crop year. The CAI has estimated domestic consumption for the season at 324 lakh bales while the exports are estimated to be 51 lakh bales which are lower by 18 lakh bales compared to 69 lakh bales during the last year. The carry-over stock at the end of the 2018-19 season is estimated by the CAI at 15.25 lakh bales.

During October, record breaking cotton arrivals are witnessed due to the fact that there were no rains during the last 60 to 70 days in the entire cotton belt of India. Due to the dry and hot weather, kapas bolls opened in early stages this year. Moreover, in the northern region, kapas was sold at 4500 per quintal same time last year whereas this year farmers are getting substantially higher price of about 5300 per quintal. Due to this, arrivals are considerably higher in October this year.

> CAI's Estimates of Cotton Crop as on 31st October 2018 for the Seasons 2018-19 and 2017-18

| State | (in lakh bales) |  |  |
| :---: | :---: | :---: | :---: |
|  | Production* |  | Arrivals |
|  | 2018-19 | 2017-18 | $\begin{gathered} \text { 31st Oct. } 2018 \\ \text { (2018-19) } \end{gathered}$ |
| Punjab | 10.00 | 9.00 | 1.92 |
| Haryana | 24.00 | 23.60 | 4.50 |
| Upper Rajasthan | 11.50 | 11.15 | 3.36 |
| Lower Rajasthan | 12.50 | 12.25 | 2.65 |
| Total North Zone | 58.00 | 56.00 | 12.43 |
| Gujarat | 88.00 | 105.00 | 4.25 |
| Maharashtra | 80.00 | 83.00 | 2.00 |
| Madhya Pradesh | 24.00 | 21.50 | 3.00 |
| Total Central Zone | 192.00 | 209.50 | 9.25 |


| Telangana | 51.00 | 51.50 | 3.25 |
| :--- | :---: | :---: | :---: |
| Andhra Pradesh | 16.00 | 18.50 | 0.60 |
| Karnataka | 17.00 | 18.75 | 0.60 |
| Tamil Nadu | 5.00 | 5.75 | - |
| Total South Zone | $\mathbf{8 9 . 0 0}$ | $\mathbf{9 4 . 5 0}$ | $\mathbf{4 . 4 5}$ |
| Orissa | 3.25 | 4.00 | - |
| Others | 1.00 | 1.00 | - |
| Total | $\mathbf{3 4 3 . 2 5}$ | $\mathbf{3 6 5 . 0 0}$ | $\mathbf{2 6 . 1 3}$ |

* Including loose

The Balance Sheet drawn by the Association for 2018-19 and 2017-18 is reproduced below:-
(in lakh bales)

| Details | 2018-19 | 2017-18 |
| :---: | :---: | :---: |
| Opening Stock | 23.00 | 36.00 |
| Production | 343.25 | 365.00 |
| Imports | 24.00 | 15.00 |
| Total Supply | 390.25 | 416.00 |
| Mill Consumption | 280.00 | 280.00 |
| Consumption by SSI Units | 29.00 | 29.00 |
| Non-Mill Use | 15.00 | 15.00 |
| Total Domestic Demand | 324.00 | 324.00 |
| Available Surplus | 66.25 | 92.00 |
| Exports | 51.00 | 69.00 |
| Closing Stock | 15.25 | 23.00 |

Balance Sheet of 1 months i.e. from 1.10.2018 to 31.10.2018 for the season 2018-19

| Details | (in lakh b/s <br> of $\mathbf{1 7 0} \mathbf{~ k g}$ ) | (in '000 <br> Tons) |
| :--- | :---: | :---: |
| Opening Stock <br> as on 01.10.2018 | 23.00 | 391.00 |
| Arrivals upto 31.10.2018 | 26.13 | 444.21 |
| Imports upto 31.10.2018 | 1.00 | 17.00 |
| Total Available | 50.13 | $\mathbf{8 5 2 . 2 1}$ |
| Consumption <br> (27 Lakhs X 1 month) | 27.00 | 459.00 |
| Export Shipment upto <br> 31.10.2018 | 2.50 | 42.50 |
| Stock with Mills | 16.53 | 281.01 |
| Stock with CCI, MNCs, <br> MCX \& Ginners | 4.10 | 69.70 |
| Total | 50.13 | $\mathbf{8 5 2 . 2 1}$ |

As per Cotton Association of India Stock on 31.10.2018
(Figures in lakh bales of 170 kg .)

| State | Ginners | MNC | CCI | Total |
| :--- | :--- | :--- | :--- | :--- |
| NORTH | 2.05 | 0.10 | NIL | 2.15 |
| GUJARAT | 0.55 | 0.05 | 0.10 | 0.70 |
| MAHARASHTRA | 0.10 | 0.05 | NIL | 0.15 |
| ANDHRA PRADESH | NIL | NIL | NIL | NIL |
| TELANGANA | 0.30 | 0.15 | 0.35 | 0.80 |
| MADHYA PRADESH | 0.15 | NIL | NIL | 0.15 |
| ORISSA | 0.10 | NIL | NIL | 0.10 |
| KARNATAKA | NIL | NIL | 0.05 | 0.05 |
| TOTAL | $\mathbf{3 . 2 5}$ | $\mathbf{0 . 3 5}$ | $\mathbf{0 . 5 0}$ | $\mathbf{4 . 1 0}$ |

UPCOUNTRY SPOT RATES October 2018
号
 웅
( $₹ \backslash$ Quintal) 읍 운 을 플





 October 2018
 HOLIDAY












UPCOUNTRY SPOT RATES

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \infty \\ & \stackrel{0}{0} \\ & \stackrel{\pi}{2} \end{aligned}$ |  | 人 |
|  | $\begin{aligned} & \text { O} \\ & \text { הָה } \end{aligned}$ |  | － |
|  | $\begin{aligned} & \text { R} \\ & \text { N్స } \end{aligned}$ |  |  |
|  | $\begin{aligned} & \text { 그궁 } \end{aligned}$ |  |  |
|  | $\stackrel{\square}{0}$ |  |  |
|  |  |  |  |


October 2018


2018-19 Crop





S.






## UPCOUNTRY SPOT RATES

| Standard Descriptions with Basic Grade \& Staple in Millimetres based on Upper Half Mean Length [ By law 66 (A) (a) (4) ] |  |  |  |  |  |  | Spot Rate (Upcountry) 2017-18 Crop October-November 2018 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sr. <br> No. | Growth | Grade Standard | Grade | Staple | Micronaire | Strength /GPT | 29th | 30th | 31st | 1st | 2nd | 3rd |
| 1 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-101 | Fine | Below $22 \mathrm{~mm}$ | 5.0-7.0 | 15 | - | - | - |  | - | - |
| 2 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-201 | Fine | Below <br> 22 mm | 5.0-7.0 | 15 | - | - | - | - | - |  |
| 3 | GUJ | ICS-102 | Fine | 22 mm | 4.0-6.0 | 20 | $\begin{array}{r} 10095 \\ (35900) \end{array}$ | $\begin{array}{r} 10236 \\ (36400) \end{array}$ | $\begin{array}{r} 10292 \\ (36600) \end{array}$ | $\begin{array}{r} 10292 \\ (36600) \end{array}$ | $\begin{array}{r} 10348 \\ (36800) \end{array}$ | $\begin{array}{r} 10348 \\ (36800) \end{array}$ |
| 4 | KAR | ICS-103 | Fine | 23 mm | 4.0-5.5 | 21 | $\begin{array}{r} 10461 \\ (37200) \end{array}$ | $\begin{array}{r} 10461 \\ (37200) \end{array}$ | $\begin{array}{r} 10461 \\ (37200) \end{array}$ | $\begin{array}{r} 10461 \\ (37200) \end{array}$ | $\begin{array}{r} 10489 \\ (37300) \end{array}$ | $\begin{array}{r} 10489 \\ (37300) \end{array}$ |
| 5 | M/M | ICS-104 | Fine | 24 mm | 4.0-5.0 | 23 | $\begin{array}{r} 11192 \\ (39800) \end{array}$ | $\begin{array}{r} 11192 \\ (39800) \end{array}$ | $\begin{array}{r} 11192 \\ (39800) \end{array}$ | $\begin{array}{r} 11192 \\ (39800) \end{array}$ | $\begin{array}{r} 11220 \\ (39900) \end{array}$ | $\begin{array}{r} 11192 \\ (39800) \end{array}$ |
| 6 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-202 | Fine | 26 mm | 3.5-4.9 | 26 |  | - | - |  | - |  |
|  |  |  |  |  |  |  |  | - | - |  | - |  |
| 7 | M/M/A | ICS-105 | Fine | 26 mm | 3.0-3.4 | 25 | $\begin{array}{r} 10967 \\ (39000) \end{array}$ | $\begin{array}{r} 10967 \\ (39000) \end{array}$ | $\begin{array}{r} 10967 \\ (39000) \end{array}$ | $\begin{array}{r} 10967 \\ (39000) \end{array}$ | $\begin{array}{r} 10967 \\ (39000) \end{array}$ | $\begin{array}{r} 10967 \\ (39000) \end{array}$ |
| 8 | M/M/A | ICS-105 | Fine | 26 mm | 3.5-4.9 | 25 |  | - | - |  |  |  |
|  |  |  |  |  |  |  |  | - | - |  | - | - |
| 9 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-105 | Fine | 27 mm | 3.5.4.9 | 26 |  | - | - |  | - |  |
|  |  |  |  |  |  |  |  | - | - |  |  |  |
| 10 | M/M/A | ICS-105 | Fine | 27 mm | 3.0-3.4 | 26 | $\begin{array}{r} 11473 \\ (40800) \end{array}$ | $\begin{array}{r} 11389 \\ (40500) \end{array}$ | $\begin{array}{r} 11389 \\ (40500) \end{array}$ | $\begin{array}{r} 11389 \\ (40500) \end{array}$ | $\begin{array}{r} 11389 \\ (40500) \end{array}$ | $\begin{array}{r} 11332 \\ (40300) \end{array}$ |
| 11 | M/M/A | ICS-105 | Fine | 27 mm | 3.5-4.9 | 26 | $\begin{array}{r} 11810 \\ (42000) \end{array}$ | $\begin{array}{r} 11754 \\ (41800) \end{array}$ | $\begin{array}{r} 11754 \\ (41800) \end{array}$ | $\begin{array}{r} 11754 \\ (41800) \end{array}$ | $\begin{array}{r} 11810 \\ (42000) \end{array}$ | $\begin{array}{r} 11810 \\ (42000) \end{array}$ |
| 12 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-105 | Fine | 28 mm | 3.5-4.9 | 27 | - | - | - | - | - |  |
|  |  |  |  |  |  |  | - | - | - |  | - |  |
| 13 | M/M/A | ICS-105 | Fine | 28 mm | 3.5-4.9 | 27 | $\begin{array}{r} 12345 \\ (43900) \end{array}$ | $\begin{array}{r} 12288 \\ (43700) \end{array}$ | $\begin{array}{r} 12260 \\ (43600) \end{array}$ | $\begin{array}{r} 12204 \\ (43400) \end{array}$ | $\begin{array}{r} 12260 \\ (43600) \end{array}$ | $\begin{array}{r} 12260 \\ (43600) \end{array}$ |
| 14 | GUJ | ICS-105 | Fine | 28 mm | 3.5-4.9 | 27 | $\begin{array}{r} 12513 \\ (44500) \end{array}$ | $\begin{array}{r} 12457 \\ (44300) \end{array}$ | $\begin{array}{r} 12429 \\ (44200) \end{array}$ | $\begin{array}{r} 12373 \\ (44000) \end{array}$ | $\begin{array}{r} 12429 \\ (44200) \end{array}$ | $\begin{array}{r} 12373 \\ (44000) \end{array}$ |
| 15 | M/M/A/K | ICS-105 | Fine | 29 mm | 3.5-4.9 | 28 | $\begin{array}{r} 12795 \\ (45500) \end{array}$ | $\begin{array}{r} 12738 \\ (45300) \end{array}$ | $\begin{array}{r} 12710 \\ (45200) \end{array}$ | $\begin{array}{r} 12654 \\ (45000) \end{array}$ | $\begin{array}{r} 12710 \\ (45200) \end{array}$ | $\begin{array}{r} 12654 \\ (45000) \end{array}$ |
| 16 | GUJ | ICS-105 | Fine | 29 mm | 3.5-4.9 | 28 | $\begin{array}{r} 12851 \\ (45700) \end{array}$ | $\begin{array}{r} 12795 \\ (45500) \end{array}$ | $\begin{array}{r} 12766 \\ (45400) \end{array}$ | $\begin{array}{r} 12710 \\ (45200) \end{array}$ | $\begin{array}{r} 12766 \\ (45400) \end{array}$ | $\begin{array}{r} 12710 \\ (45200) \end{array}$ |
| 17 | M/M/A/K | ICS-105 | Fine | 30 mm | 3.5-4.9 | 29 | $\begin{array}{r} 12935 \\ (46000) \end{array}$ | $\begin{array}{r} 12879 \\ (45800) \end{array}$ | $\begin{array}{r} 12851 \\ (45700) \end{array}$ | $\begin{array}{r} 12795 \\ (45500) \end{array}$ | $\begin{array}{r} 12851 \\ (45700) \end{array}$ | $\begin{array}{r} 12795 \\ (45500) \end{array}$ |
| 18 | M/M/A/K/T/O | ICS-105 | Fine | 31 mm | 3.5-4.9 | 30 | $\begin{array}{r} 13244 \\ (47100) \end{array}$ | $\begin{array}{r} 13188 \\ (46900) \end{array}$ | $\begin{array}{r} 13160 \\ (46800) \end{array}$ | $\begin{array}{r} 13104 \\ (46600) \end{array}$ | $\begin{array}{r} 13104 \\ (46600) \end{array}$ | $\begin{array}{r} 13104 \\ (46600) \end{array}$ |
| 19 | A/K/T/O | ICS-106 | Fine | 32 mm | 3.5-4.9 | 31 | - | - | - | - | - |  |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 20 | $\mathrm{M}(\mathrm{P}) / \mathrm{K} / \mathrm{T}$ | ICS-107 | Fine | 34 mm | 3.0-3.8 | 33 | - | - | - | - | - |  |
|  |  |  |  |  |  |  | - | - | - | - | - |  |

(Note: Figures in bracket indicate prices in Rs./Candy)

## UPCOUNTRY SPOT RATES

| Standard Descriptions with Basic Grade \& Staple in Millimetres based on Upper Half Mean Length$\text { [ By law } 66 \text { (A) (a) (4) ] }$ |  |  |  |  |  |  | Spot Rate (Upcountry) 2018-19 Crop October-November 2018 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sr. <br> No. | Growth | Grade Standard | Grade | Staple | Micronaire | Strength /GPT | 29th | 30th | 31st | 1st | 2nd | 3rd |
| 1 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-101 | Fine | Below <br> 22 mm | 5.0-7.0 | 15 | $\begin{array}{r} 12176 \\ (43300) \end{array}$ | $\begin{array}{r} 12035 \\ (42800) \end{array}$ | $\begin{array}{r} 12092 \\ (43000) \end{array}$ | $\begin{array}{r} 12148 \\ (43200) \end{array}$ | $\begin{array}{r} 12176 \\ (43300) \end{array}$ | $\begin{array}{r} 12176 \\ (43300) \end{array}$ |
| 2 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-201 | Fine | Below <br> 22 mm | 5.0-7.0 | 15 | $\begin{array}{r} 12317 \\ (43800) \end{array}$ | $\begin{array}{r} 12176 \\ (43300) \end{array}$ | $\begin{array}{r} 12232 \\ (43500) \end{array}$ | $\begin{array}{r} 12288 \\ (43700) \end{array}$ | $\begin{array}{r} 12317 \\ (43800) \end{array}$ | $\begin{array}{r} 12317 \\ (43800) \end{array}$ |
| 3 | GUJ | ICS-102 | Fine | 22 mm | 4.0-6.0 | 20 | - | - | - | - | - | - |
|  |  |  |  |  |  |  |  | - | - | - |  | - |
| 4 | KAR | ICS-103 | Fine | 23 mm | 4.0-5.5 | 21 | - | - | - | - | - | - |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 5 | M/M | ICS-104 | Fine | 24 mm | 4.0-5.0 | 23 | - | - | - | - | - | - |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 6 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-202 | Fine | 26 mm | 3.5-4.9 | 26 | - | - | - | - | - | - |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 7 | M/M/A | ICS-105 | Fine | 26 mm | 3.0-3.4 | 25 | - | - | - | - | - | - |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 8 | M/M/A | ICS-105 | Fine | 26 mm | 3.5-4.9 | 25 | - | - | - | - | - | - |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 9 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-105 | Fine | 27 mm | 3.5.4.9 | 26 | $\begin{array}{r} 12598 \\ (44800) \end{array}$ | $\begin{array}{r} 12457 \\ (44300) \end{array}$ | $\begin{array}{r} 12429 \\ (44200) \end{array}$ | $\begin{array}{r} 12372 \\ (44000) \end{array}$ | $\begin{array}{r} 12457 \\ (44300) \end{array}$ | $\begin{array}{r} 12429 \\ (44200) \end{array}$ |
| 10 | M/M/A | ICS-105 | Fine | 27mm | 3.0-3.4 | 26 | - | - | - | - | - |  |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 11 | M/M/A | ICS-105 | Fine | 27 mm | 3.5-4.9 | 26 | - | - | - | - | - | - |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 12 | $\mathrm{P} / \mathrm{H} / \mathrm{R}$ | ICS-105 | Fine | 28 mm | 3.5-4.9 | 27 | $\begin{array}{r} 12682 \\ (45100) \end{array}$ | $\begin{array}{r} 12541 \\ (44600) \end{array}$ | $\begin{array}{r} 12513 \\ (44500) \end{array}$ | $\begin{array}{r} 12457 \\ (44300) \end{array}$ | $\begin{array}{r} 12541 \\ (44600) \end{array}$ | $\begin{array}{r} 12513 \\ (44500) \end{array}$ |
| 13 | M/M/A | ICS-105 | Fine | 28 mm | 3.5-4.9 | 27 | - | - | - | - | - | - |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 14 | GUJ | ICS-105 | Fine | 28 mm | 3.5-4.9 | 27 | - | - | - | - | - | - |
|  |  |  |  |  |  |  | - | - | - | - | - | - |
| 15 | M/M/A/K | ICS-105 | Fine | 29 mm | 3.5-4.9 | 28 | $\begin{array}{r} 13076 \\ (46500) \end{array}$ | $\begin{array}{r} 13020 \\ (46300) \end{array}$ | $\begin{array}{r} 13020 \\ (46300) \end{array}$ | $\begin{array}{r} 12963 \\ (46100) \end{array}$ | $\begin{array}{r} 13020 \\ (46300) \end{array}$ | $\begin{array}{r} 12935 \\ (46000) \end{array}$ |
| 16 | GUJ | ICS-105 | Fine | 29 mm | 3.5-4.9 | 28 | $\begin{array}{r} 13160 \\ (46800) \end{array}$ | $\begin{array}{r} 13104 \\ (46600) \end{array}$ | $\begin{array}{r} 13104 \\ (46600) \end{array}$ | $\begin{array}{r} 13076 \\ (46500) \end{array}$ | $\begin{array}{r} 13132 \\ (46700) \end{array}$ | $\begin{array}{r} 13076 \\ (46500) \end{array}$ |
| 17 | M/M/A/K | ICS-105 | Fine | 30 mm | 3.5-4.9 | 29 | $\begin{array}{r} 13216 \\ (47000) \end{array}$ | $\begin{array}{r} 13160 \\ (46800) \end{array}$ | $\begin{array}{r} 13160 \\ (46800) \end{array}$ | $\begin{array}{r} 13132 \\ (46700) \end{array}$ | $\begin{array}{r} 13160 \\ (46800) \end{array}$ | $\begin{array}{r} 13104 \\ (46600) \end{array}$ |
| 18 | M/M/A/K/T/O | ICS-105 | Fine | 31 mm | 3.5-4.9 | 30 | $\begin{array}{r} 13273 \\ (47200) \end{array}$ | $\begin{array}{r} 13244 \\ (47100) \end{array}$ | $\begin{array}{r} 13244 \\ (47100) \end{array}$ | $\begin{array}{r} 13216 \\ (47000) \end{array}$ | $\begin{array}{r} 13244 \\ (47100) \end{array}$ | $\begin{array}{r} 13188 \\ (46900) \end{array}$ |
| 19 | A/K/T/O | ICS-106 | Fine | 32 mm | 3.5-4.9 | 31 | $\begin{array}{r} 13498 \\ (48000) \end{array}$ | $\begin{array}{r} 13413 \\ (47700) \end{array}$ | $\begin{array}{r} 13413 \\ (47700) \end{array}$ | $\begin{array}{r} 13357 \\ (47500) \end{array}$ | $\begin{array}{r} 13413 \\ (47700) \end{array}$ | $\begin{array}{r} 13329 \\ (47400) \end{array}$ |
| 20 | $\mathrm{M}(\mathrm{P}) / \mathrm{K} / \mathrm{T}$ | ICS-107 | Fine | 34 mm | 3.0-3.8 | 33 | $\begin{array}{r} 16225 \\ (57700) \end{array}$ | $\begin{array}{r} 16169 \\ (57500) \end{array}$ | $\begin{array}{r} 16169 \\ (57500) \end{array}$ | $\begin{array}{r} 16169 \\ (57500) \end{array}$ | $\begin{array}{r} 16253 \\ (57800) \end{array}$ | $\begin{array}{r} 16253 \\ (57800) \end{array}$ |

(Note: Figures in bracket indicate prices in Rs./Candy)

