**Government of Pakistan**
**Revenue Division**
**Federal Board of Revenue**
**Inland Revenue**
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C.No. 2(21) ST-L&P/2026/130931-R Islamabad, the 19th November, 2026

# Sales Tax General Order No. 39 of 2026

**Subject:** **ELECTRONIC MONITORING OF PRODUCTION IN THE SYNTHETIC / ARTIFICIAL LEATHER SECTOR**

In exercise of the powers conferred under sub-section (2) of section 40C of the Sales Tax Act, 1990, read with rules 150ZQR and 150ZQT of Chapter XIV-BA of the Sales Tax Rules, 2006 and S.R.O. 1751(I)/2026 dated 7th October, 2026, the Federal Board of Revenue is pleased to direct as follows:

1. **Application:** This order shall apply to every registered person who, whether on his own account or as a toll, conversion or contract manufacturer, carries on any of the following activities:

(a) coating, laminating or finishing woven, knitted or non-woven fabric or any other substrate with PU, PVC or any other polymer to manufacture synthetic / artificial leather (PU / PVC coated fabric, commonly known as rexine);

(b) winding, re-winding, inspecting, cutting or measuring synthetic / artificial leather into rolls for sale, supply or dispatch;

(c) operating a composite unit in which coating or finishing and winding, re-winding or inspection are carried out at the same premises; or

(d) manufacturing any other leather-sector product produced in rolls specifically brought within the scope of this Order by the Board.

2. **Mandatory installation and effective date:** Every synthetic leather manufacturer shall purchase or procure, install, integrate, calibrate, test and operationalize the production monitoring system at each manufacturing facility and on each active roll-producing line by **30th November, 2026.**

3. **Production monitoring architecture:** The system shall electronically monitor production through sensor-based running-length measurement and video analytics at the final winding / take-up stage of each line, at which finished rolls are cut and removed (the installation point), through the following four stages:

(a) **Stage 1 Running-length measurement:** A material-driven length-measurement sensor shall be installed at each installation point, being an incremental rotary encoder on a measuring wheel or idler roller turned by the material, a non-contact laser / optical rotation sensor reading an idler roller turned by the material, or a non-contact laser surface-velocity sensor reading the moving material directly. No sensor shall be fitted on a motor-driven roller, drive shaft or motor. Length shall be recorded with a resolution of 0.1 metre, reverse running shall not add to the length, and the current roll length, roll count and line speed shall be displayed locally.

(b) **Stage 2 Material presence and roll-cut detection**: An industrial camera with AI-based video analytics on an edge device shall cover the measuring point, the winder and the roll removal area. Length shall be accumulated only while the video analytics confirms material running at the measuring point. The system shall detect each Roll-Cut Event, being the roll cut and moved away from the winder, count each roll once, and capture a time-stamped snapshot and a video clip of at least ten seconds before and after the event. Manual registration of a cut from the operator panel shall be permitted only as a back-up, shall record the operator ID, and shall be alerted to the Board.

(c) **Stage 3 Roll record and cumulative running metres**: At each Roll-Cut Event the system shall, without operator intervention, close the roll, create a read-only Roll Record with a unique system-generated Roll ID, and restart the roll length counter from zero. The system shall separately accumulate the Cumulative Running Metres of each line and facility for each shift, day and month, which shall not reset at Roll-Cut Events, and shall report the area in square metres and square feet where the width of the material is recorded.

(d) **Stage 4 Reconciliation and additional installation points**: The sum of the lengths of all roll records of a period, including any open roll, shall be reconciled with the Cumulative Running Metres of that period, and any variance exceeding 0.5% shall be alerted. The Board may require additional installation points at inspection or re-winding machines where rolls are re-wound, re-cut or measured before dispatch.

The installation points of each unit shall be configured according to its manufacturing process, as documented during the site survey. The configuration shall not omit any winding, take-up, re-winding or inspection station from which finished rolls are removed for sale, supply or dispatch.

| Unit type | Stage 1 – Running-length measurement | Stage 2 – Material presence and roll-cut detection | Stage 3 – Roll record and cumulative running metres | Stage 4 – Reconciliation and additional points | Solution Topology |
|---|---|---|---|---|---|
| **Coating / finishing unit** | At the final winder of each coating or finishing line | At the final winder of each line | Roll-wise record and line-wise Cumulative Running Metres | Reconciliation of roll records with Cumulative Running Metres | One installation point per roll-producing line |
| **Re-winding / inspection unit only** | At each re-winding or inspection machine | At each re-winding or inspection machine | Roll-wise record and machine-wise Cumulative Running Metres | Reconciliation of roll records with Cumulative Running Metres | One installation point per re-winding or inspection machine |
| **Composite unit (Coating + Re-winding / Inspection)** | At the final winder of each coating line and at each re-winding or inspection machine | At each installation point | Roll-wise record at each installation point | Reconciliation at each installation point, and of coating-line output with re-wound / inspected rolls | Two installation points per line flow (coating winder and re-winding / inspection machine) |

4. **Minimum equipment and software**: The production monitoring system shall include the following equipment and software at each installation point, as applicable to the manufacturing configuration of the unit:

(a) an industrial-grade, material-driven length-measurement sensor rated IP66, being an encoder of not less than 1,000 pulses per revolution with quadrature output and a non-slip measuring wheel of known circumference, a laser / optical rotation sensor, or a laser surface-velocity sensor of ±0.2% stated accuracy or better, with tamper-evident sealed mounting and cabling;

(b) an industrial IP camera of minimum 4 MP resolution and 25 frames per second, with wide dynamic range, low-light / IR capability, PoE and IP66 housing;

(c) an edge AI computing device with GPU / NPU capable of real-time inference on all connected cameras;
(d) local storage at the facility of video for at least thirty days and of roll records, snapshots and logs for at least ninety days;
(e) a local display or operator panel at the winder showing current roll length, roll count and line speed;
(f) secure primary and back-up network connectivity with offline data buffering and automatic transmission upon restoration;
(g) an uninterrupted power supply for the monitoring equipment;
(h) tamper-detection controls for sensor disconnection or loss of signal, camera obstruction, defocus, movement or loss of video, power failure and unauthorized changes;
(i) time synchronization (NTP) of all sensors, cameras and edge devices; and
(j) software for roll records, Cumulative Running Metres, reconciliation, product / article master, alerts, dashboards and reporting.

5. **Functional and data requirements:** The installed system shall comply with rule 150ZQT and the approved technical specifications and shall, at a minimum, provide the following functions:

(a) real-time capture of the production process at every installation point;
(b) accumulation of running length only while material presence is confirmed, with rotation without material and reverse running excluded and logged;
(c) automatic registration of each Roll-Cut Event, single counting of each roll, and capture of a snapshot and video clip linked to its Roll ID;
(d) a read-only Roll Record for each roll showing Roll ID, running length, area where width is recorded, start and end date and time, snapshot and video clip reference, line / machine, product / article and width, the manufacturer's NTN / STRN, facility, sensor and camera IDs, mode of cut registration with operator ID where manual, and linked alerts;
(e) accumulation of Cumulative Running Metres by line and facility for each shift, day and month, and automatic reconciliation with roll records, with an alert where the variance exceeds 0.5%;
(f) real-time transmission of roll records, snapshots and Cumulative Running Metres to the Central Control Unit of the Board through secure APIs, with each Roll-Cut Event time-stamped at the edge device within one second, together with secure storage and archiving;
(g) automatic detection and reporting of unexpected stops, rotation without material, reverse running, manual cut registration, mismatch between registered cuts and detected rolls, obstruction, data gaps, connectivity loss, power failure, abnormal variance and suspected tampering;
(h) dashboards for the Board and manufacturers showing a roll-wise register with snapshots, running metres by line, facility, product, shift, day and month, roll count, line speed, area, reconciliation, alerts, device health and calibration status;
(i) role-based access, secure authentication, encryption in transit and at rest, hosting of all data in Pakistan, minimum system uptime of 99% on a daily basis, and protection against unauthorized deletion or alteration of records.

6. **Accuracy and calibration:** All length-measurement sensors, cameras, analytics models and calculation parameters shall be calibrated and validated. The registered person and the authorized vendor shall ensure that:

(a) running length is measured with an accuracy of at least 99% (minimum acceptable 95%) of the reference length of each roll across the full operating speed range of the line, roll count accuracy is at least 99% (minimum acceptable 95%), and a roll record is created for every roll cut;

(b) each length-measurement sensor is calibrated at installation, before the Operational Acceptance Tests, against a reference length of at least one hundred metres established by a calibrated measuring tape, meter counter or measuring machine, in the presence of the Board's representative, and the calibration factor is recorded with the Board;

(c) calibration is verified at least once every six months and after any maintenance or replacement affecting the sensor, measuring wheel or roller, and all calibration and model-version records are retained in the audit trail; and

(d) no registered person or vendor changes a calibration factor, counting line, device location, product / article master or analytics configuration except through a procedure approved by the Board and recorded in the audit log, with an alert to the Board.

7. **Authorized vendors:** Production monitoring equipment shall be procured, installed and maintained only through a vendor authorized by the Board under Chapter XIV-BA of the Sales Tax Rules, 2006. The details of the authorized vendor for the Synthetic / Artificial Leather Sector shall be as follows:

| Sr No | Authorized vendor | NTN | Contact person | Phone or WhatsApp | Email |
|---|---|---|---|---|---|
| 1 | M/s National Radio & Telecommunication Corporation (NRTC) | 0009815-9 | Waqas Ahmed Masood | 0300-4081111 | waqas.masood@nrtc.com.pk |
| | | | Rizwan Khan | 0319-5891534 | rizwan.khan@nrtc.com.pk |

8. **Responsibilities of authorized vendors:** Without prejudice to rules 150ZQZA, 150ZQZC and other applicable provisions of Chapter XIV-BA, each authorized vendor shall:

(a) procure, install, integrate, calibrate and maintain the prescribed monitoring equipment at all designated installation points;

(b) commence installation within one weeks of the purchase / work order and complete delivery and installation within the applicable statutory or implementation deadline;

(c) ensure secure and uninterrupted capture, processing, storage and transmission of roll records, snapshots and Cumulative Running Metres;

(d) maintain accurate running-length measurement, material-presence and roll-cut detection, roll counting, roll records and reconciliation functions;

(e) respond to any equipment fault within four working hours, restore length measurement or video analytics within twenty-four hours, and provide timely maintenance, software updates, bug fixes and technical support;

(f) maintain incident records, report material failures and provide the required training and system documentation;

(g) facilitate inspections, audits, calibration, periodic calibration verification and Operational Acceptance Tests; and

(h) ensure data security and comply with the applicable tax laws, Authorization Order and directions of the Board.

9. **Responsibilities of synthetic leather manufacturers:** Without prejudice to rule 150ZQZE, every synthetic leather manufacturer shall:

(a) provide access to production lines and to winding, re-winding and inspection points for installation, inspection, calibration, testing and maintenance of the monitoring system;
(b) provide the required IT infrastructure, connectivity, power supply and installation facilities;
(c) route all rolls through the monitoring system, not cut, wind or remove any roll without a roll record, use manual cut registration only as a back-up where automatic detection fails, and not remove unmonitored goods from the premises;
(d) pay the prescribed vendor fees and charges under rule 150ZQZD;
(e) protect the installed equipment from obstruction, disconnection, bypass, alteration or tampering, and not alter any measuring wheel, roller, sensor position or counting line;
(f) report any system failure, damage, tampering or inoperative production line within one hour to the Board, Central Control Unit and to concerned Commissioner Inland Revenue;
(g) give thirty days' advance notice of any product, production-line, winder, re-winding or inspection machine change affecting the system;
(h) facilitate inspection of damaged equipment and comply with the sealing and de-sealing requirements under rule 150ZQZE; and
(i) maintain accurate product / article master data including width, and retain all production, roll record, calibration, maintenance and incident records required under the law.

10. In accordance with sub-rule (2) of rule 150ZQT, no synthetic leather manufacturer shall remove or supply specified goods from its business premises unless the production has undergone monitoring under Chapter XIV-BA and a roll record has been created for every roll through the approved system. A manual register, private camera system or stand-alone meter counter shall not substitute the Board-approved production monitoring process.

11. The concerned Chief Commissioners Inland Revenue shall ensure implementation of this Order within their respective jurisdictions and shall:

(a) nominate and notify a dedicated focal person for coordination with the Board, Central Control Unit, manufacturers and authorized vendors;
(b) identify every operational synthetic / artificial leather coating, finishing, winding, re-winding and inspection unit required to be integrated with the Production Monitoring solution;
(c) facilitate joint site surveys, approve or forward installation-point plans in the prescribed manner, witness calibration and Operational Acceptance Tests, and verify commissioning;
(d) monitor the implementation schedule and submit progress to the Board at the intervals and in the format prescribed by the Board;
(e) review alerts, downtime, manual cut registrations, unexplained running-length or reconciliation variances and other exceptions and take action strictly in accordance with the Sales Tax Act, 1990 and the rules made thereunder; and
(f) use monitored production information for lawful reconciliation with returns, invoices, stocks, electricity-consumption data, purchases and imports of PVC / PU resin, plasticizers and base fabric, and other available information.

12. **Non-compliance:** Failure to install, operationalize, protect or use the prescribed production monitoring equipment; removal or supply of goods without monitoring; obstruction of access; tampering; concealment of a production line, winder, re-winding or inspection point; failure to report a prescribed incident; or any other contravention shall be dealt with under the Sales Tax Act, 1990 and the rules made thereunder, after observance of the applicable legal procedure.

13. **Power to issue directions:** The Board may issue technical specifications, data standards, operating procedures, calibration and acceptance criteria, reporting formats and other directions necessary to implement this Order. Such directions shall be read with this Order and the applicable provisions of the Sales Tax Rules, 2006.

14. **Approval and commencement:** This issues with the approval of the competent authority, i.e. Member, ST & FED (Technical), Federal Board of Revenue, Islamabad, and shall be applicable with immediate effect.

**(Khalid Mehmood)**
Second Secretary, ST&FED (Technical)

**Cc:**

(i) Member, ST&FED (Technical), FBR, Islamabad
(ii) Member (Strategic Reforms and Transformation), FBR, Islamabad
(iii) SA to Member (IR Operations), FBR, Islamabad
(iv) Director General (IT and Digital Transformation), FBR, Islamabad
(v) Chief Commissioners Inland Revenue, LTOs, CTOs and RTOs
(vi) Chief (Transformation Delivery Unit), FBR, Islamabad
(vii) Chief (TPS)/Webmaster, FBR, Islamabad, for uploading on the FBR website