TXL-IPL-019 / 28 October 2026 · One-year manufacturer warranty

Yarn Count Measurement and Analysis System

Yarn count measurement and analysis system consisting of a precision balance, measurement software on a laptop and an 80 mm thermal receipt printer. Calculates the linear density of yarn, roving, sliver and lap from the mass of a specimen of known length, monitors specimen-to-specimen count variation (CV %) and compares test series in one report.



Model technical data

1	Specimen materials: yarn, roving, sliver and lap.
2	Precision balance: 1 mg readability; RS-232 / USB serial port connection.
3	Computer: laptop, Windows 10 / 11 (64-bit), measurement software.
4	Count units: Ne, Nm, tex, den, ktex, g/m, grain/yd, oz/yd.
5	Live analysis: series mean, standard deviation, CV %, 95% confidence interval, minimum, maximum and deviation from nominal update during the test.
6	The mass is recorded automatically when the reading stabilises; automatic detection scans serial ports and a compatible balance profile can also be selected in the software.
7	Tolerance monitoring: count and CV limits are set in the test template; comparison graphs show series outside the selected tolerances.
8	Traceability: test history, user permissions, calibration tracking, test templates and automatic database backups.
9	Reporting: A4 PDF, Excel and 80 mm thermal receipt (Rongta RP336); interface and report languages (Turkish, English, Russian) can be selected independently.
10	Software updates: signed releases are downloaded in the application or installed from USB; the database is backed up before installation.

Physical specifications and utilities

Electrical supply	Specified in the technical datasheet for the order configuration.
Power / connected load	Specified in the technical datasheet for the order configuration.
Overall instrument dimensions	Specified in the technical datasheet for the order configuration.
Instrument weight	Specified in the technical datasheet for the order configuration.
Interfaces	RS-232 / USB serial port (balance); laptop, Windows 10 / 11 (64-bit); 80 mm thermal receipt printer (Rongta RP336).

Dimension order and approximate values are stated in each row. Packaging data are separate from instrument dimensions and net mass.

Specifications, dimensions, and power requirements are approximate and subject to change without prior notice for continuous design improvements.

Product technical specifications and images may vary according to manufacturing conditions and applicable standards.

Test and configuration

Measured output / function	Linear density / yarn count (Ne, Nm, tex, den, ktex, g/m, grain/yd, oz/yd) and count variation (CV %)
Parameters selected for the method	Material, sampling method and specimen length, count unit, nominal value, count and CV limits
Verification points	Balance calibration (calibration tracking in the software) and specimen length

Control and recording specification

Method-specific software and recording requirements follow. Delivered software modules are defined by the order scope.

• The need for integrated software depends on the method and selected hardware; manual instruments use an external test record.

• Method code and edition, specimen ID, operator and selected test parameters are linked to the record.

• tex = 1000 × mass(g) / length(m); denier = 9000 × mass(g) / length(m).

• Raw measurements, units, valid/invalid test flags and the reported result remain traceable.

• Calculations are checked against known inputs and an independent calculation; sensor channels are checked against calibration values.

Related test methods

ISO 2060 · ASTM D1907 · ISO 139 · ASTM D1909

Listed methods are application references. Suitability is established by assessing hardware, method edition and calibration together.

Test parameters for the reviewed method

The values below were reviewed in selected clauses of the stated source edition. They are not a declaration of equivalence to a later edition or independent instrument verification.

ISO 2060:1994 / 5.1 / Ek A

1	Recommended reel circumference: 1.000 m ± 2.5 mm.
2	Pretension with positive feed: 0.5 ± 0.1 cN/tex.

ASTM D1907-97 / 6.1

1	For the skein method, recommended reel perimeter 1.000 m or 1.500 yd with ±0.25% tolerance. Record turns, actual perimeter, tension and weighing condition together; use actual wound length for linear-density calculation.