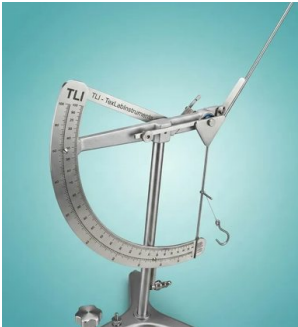


TXL-IPL-010 / 27 October 2026 · One-year manufacturer warranty

# Mechanical Yarn Count Balance

A mechanical quadrant (Knowles-type) balance for yarn count assessment. Sample length and count unit are selected to match the balance scale. Sample preparation and weighing requirements for the ISO 2060 skein method must be verified separately.



## Model technical data

|   |                                                                  |
|---|------------------------------------------------------------------|
| 1 | Mechanical pointer-type yarn count balance.                      |
| 2 | Direct-reading systems: tex, denier, Nm and NeC.                 |
| 3 | No battery or electrical supply required.                        |
| 4 | A defined-length, conditioned skein is used for the measurement. |

## Physical specifications and utilities

|                               |                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------|
| Electrical supply             | No battery or electrical supply required.                                         |
| Power / connected load        | Approx. 0 W connected load for preliminary planning.                              |
| Overall instrument dimensions | Approx. 400 × 250 × 400 mm (W × D × H).                                           |
| Instrument weight             | Approx. 2–5 kg net.                                                               |
| Gross / shipping weight       | Approx. 4.2–8.2 kg gross; estimated packing allowance.                            |
| Lab requirements              | Level, stable working surface; specimen conditioning follows the selected method. |

Dimension order and approximate values are stated in each row. Packaging data are separate from instrument dimensions and net mass. Approx. rows are preliminary engineering estimates based on comparable equipment and function/capacity; they are not verified manufacturing measurements or standard requirements. Installation and shipment are finalised against the approved drawing and nameplate. Estimate scope: base product / one unit; external computer, bench and auxiliary plant excluded.

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 or yarn count (tex, den, Nm, Ne) |
| Parameters selected for the method | Skein length, mass and selected count system    |
| Verification points                | Reel circumference, turn count and balance      |

## 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.
- $\text{tex} = 1000 \times \text{mass(g)} / \text{length(m)}$ ;  $\text{denier} = 9000 \times \text{mass(g)} / \text{length(m)}$ .
- 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

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 $\pm$ 2.5 mm. |
| 2 | Pretension with positive feed: 0.5 $\pm$ 0.1 cN/tex.  |