

Label Roll & Film Roll Rewinder Selection Guide 2026

A practical buyer's guide to choosing the right rewinding machine for label rolls, film rolls (BOPP/CPP/PET/PE) and roll-to-roll printing lines

Published by byfeeder (Guangzhou Baiyi Intelligent Equipment Co., Ltd.)

Guangzhou, China | Founded 2010 | CE Certified | 93 patents (4 invention)

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Published by byfeeder (Guangzhou Baiyi Intelligent Equipment Co., Ltd.) — manufacturer of rewinders, suction feeders, friction feeders and paging machines since 2010, Guangzhou, China.

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Specifications cited from byfeeder product documentation (2025–2026 editions); indicative figures are marked and must be confirmed in quotation.

1. What Is a Rewinding Machine?

A rewinding machine (rewinder) rewinds material from a master roll into finished rolls with controlled tension, tightness and web position — ensuring the final roll is uniformly tight, has a smooth surface, and is properly aligned inside and out. Modern rewinders integrate printing, inspection and rejection functions, turning a simple rewinder into a complete roll-to-roll production station.

Two main families covered in this guide:

Family	Material	Typical purpose
Label rewinder	Blank/printed label rolls	Print content onto labels on a roll, rewind to finished roll; inspection & rejection of defective sections
Film rewinder	BOPP, CPP, PET, PE, paper, composite & aluminum-coated films	Roll-to-roll rewinding, printing, deviation correction, counting

2. How a Rewinder Works

Label rewinder flow (byfeeder documentation):

Master roll → Unwinding (unwinding reel with automatic tension control) → guided through rollers & automatic position correction → printing and defect detection → winding reel → finished roll

Film rewinder flow:

Master roll → Unwinding (automatic tension control) → rollers + automatic position correction → printing and defect detection → winding reel → finished roll

Core functions of a quality rewinder:

- Tension control — linear unwind tension + winding tension, managed automatically to prevent telescoping, wrinkles and inconsistent roll hardness
- Web guiding / deviation correction — keeps the web tracking straight onto the core for straight-edged rolls (high-precision frame-type correction systems available)
- Speed control — fast/slow speed ramps (快/慢速升降), no-material auto-stop
- Stop anti-loosening — parking tension release so the roll doesn't loosen when stopped (停车防松)
- Trigger sensing — self-mark (自标) or color-mark (色标) sensor triggering for printed material
- Counting — label/sheet counting functions

3. Key Specifications to Define Before You Buy

Web width — byfeeder rewinders: desktop series ≈40–300 mm; intelligent series ≈40–500 mm (indicative). Confirm your label/film width.

Material thickness — byfeeder rewinders handle ≈0.012–0.15 mm films (indicative); confirm your film spec.

Finished roll diameter — desktop ≈<300 mm; intelligent ≈<500 mm (indicative).

Core / roll inner diameter — byfeeder standard: 3-inch (76 mm) cores.

Line speed — desktop ≈60 m/min; intelligent ≈100 m/min (indicative, adjustable).

Load capacity — desktop ≈25 kg; intelligent ≈30 kg.

Material family — BOPP/CPP/PET/PE/paper/composite/aluminum-coated films each behave differently (stiffness, elongation, static). State the exact film + gauge.

Printing & inspection integration — which printer: TIJ inkjet, CIJ inkjet, UV inkjet, laser, TTO thermal transfer? Barcode level inspection needed?

Additional functions — labeling, spot marking (点标), counting, deviation correction, no-material stop, reserved signals for external devices (print signal, fault signal, label sensor, color-mark sensor).

Installation & body — desktop (tabletop) vs floor stand (落地承重支架); body material: internally load-bearing oxidized thick aluminum plate + 201 stainless steel exterior (intelligent series) vs carbon steel baked paint.

4. Desktop vs. Intelligent Series (Comparison)

Parameter	Desktop rewinder (e.g. IF-RW300TB)	Intelligent rewinder (e.g. IF-RW500ST)
Display	4-inch color touchscreen	7-inch color touchscreen
Control	PLC + servo	PLC + microcomputer/servo
Power	≈1,500 W	≈2,000 W
Speed	≈60 m/min	≈100 m/min
Max width	≈40–300 mm	≈40–500 mm

Parameter	Desktop rewinder (e.g. IF-RW300TB)	Intelligent rewinder (e.g. IF-RW500ST)
Max roll Ø	≈<300 mm	≈<500 mm
Load	≈25 kg	≈30 kg
Tension control	Manual tension + manual roll locking	Manual tension + pneumatic roll locking (air supply by customer)
Material thickness	≈0.012–0.15 mm	≈0.012–0.15 mm
Core ID	3-inch (76 mm)	3-inch (76 mm)

Figures indicative, from byfeeder 2026 documentation; confirm per model at quotation.

5. Printer & Integration Options

byfeeder rewinder series (2025–2026 documentation) includes:

Model family	Description
Desktop TTO rewinder	Thermal transfer printing on rolls
Desktop laser printing rewinder	Laser coding on rolls
Desktop TIJ inkjet printing rewinder	Thermal inkjet coding
Desktop TIJ inkjet printing barcode-level detection rewinder	Adds barcode grade verification
Desktop UV inkjet printing rewinder	UV-cured inkjet
Intelligent TIJ / UV inkjet rewinder	Full-feature intelligent version
Intelligent labeling rewinder	Integrated labeling head
Intelligent TTO rewinder	Integrated TTO printer (model IF-RW500ST TTO config)
Non-standard paging-rewinder all-in-one	Feeder + rewinder combined line

Optional configurations (RW300TB/RW500ST documentation): high-precision frame-type deviation correction system; TIJ/CIJ/UV inkjet printers; laser printer; TTO thermal transfer printer; spotting machine; labeling machine; small/large character coding.

Signal integration: intelligent rewinders reserve print signal, fault signal, label sensor and color-mark sensor ports for external devices, and are compatible with TJ inkjet, CJ inkjet, UV inkjet and laser printers.

6. Application Scenarios

Industry	Material	Typical line	Key requirement
Label printing	Blank label rolls	Rewinder + TIJ/UV printer + inspection	Barcode grade check, counting
Flexible packaging	BOPP/PP/PET/PE films	Roll-to-roll printing + rewinding	Tension control, no telescoping
Food & pharma coding	Label rolls, film pouches	Rewinder + TTO/CIJ coding	Registration, color-mark trigger
Converting	Composite & aluminum-coated films	Rewinding with correction	Deviation correction
Print & packaging	Paper rolls	Rewinder + laser coding	High speed, no-material stop

7. Cost Considerations

Cost item	Indicative range (2026)
Desktop rewinder (basic)	USD 2,000 – 4,000
Desktop + printer (TIJ/TTO/UV)	USD 3,500 – 8,000
Intelligent rewinder + deviation correction + printer	USD 6,000 – 15,000
Full line (paging + rewinding + printing all-in-one)	USD 10,000 – 30,000+

Total cost of ownership: printer consumables (ink/TTO ribbon), spare rollers, changeover time, and after-sales. Evaluate spare parts lead time and remote diagnostics — downtime on a rewinder stops the whole roll-to-roll line.

8. How to Evaluate a Supplier (Checklist)

- ☐ Manufacturing evidence: factory videos/photos, R&D, patents (byfeeder: 93 patents incl. 4 invention patents)
 - ☐ Certifications: CE with verifiable number (byfeeder automatic feeding systems: CE cert. nos. DL-20221018006C–010C); Guangdong High-Tech Enterprise; Enterprise Quality certification (2024)
- ☐ Standards participation: byfeeder is a formulating unit of paging machine group standard T/C PPC 1073-2023
- ☐ Compatibility: does the rewinder support YOUR printer (TJ/CJ/UV inkjet, laser, TTO)? Reserved signal ports?
- ☐ Material expertise: ask for the max film thickness/width/roll diameter vs your spec; honest suppliers push back on out-of-range specs
- ☐ After-sales: warranty, spare parts stock & lead time, permanent online technical support, installation & training
- ☐ Track record: case studies with measurable results; references

9. Request-for-Quotation (RFQ) Template

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Subject: RFQ – Rewinder for [label rolls / film rolls]

Material: [BOPP/ CPP/ PET/ PE/ paper/ composite/ aluminum-coated/ other], width ☐ mm, thickness ☐ mm

Finished roll: max roll diameter ☐ mm, core ID ☐ mm (3-inch standard?)

Speed required: ☐ m/min

Printer integration: [TIJ / CIJ / UV inkjet / laser / TTO / none] — printer brand/model if known

Inspection: barcode level detection needed? Yes/No

Functions needed: deviation correction / counting / labeling / spotting / no-material auto-stop

Installation: desktop or floor stand; available space [W×D×H mm]

Power: ☐ V ☐ Hz; air supply available: Yes/No

Certifications required: CE / other

Target price & delivery time; please include warranty and spare parts list

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10. Why byfeeder

byfeeder (Guangzhou Baiyi Intelligent Equipment Co., Ltd.) has manufactured rewinders, feeders and paging machines in Guangzhou since 2010 — from the 1st-gen desktop rewinder to today's 3rd-gen intelligent series, developed with academic partners (Guangzhou University, Guangdong Technical Normal University) and protected by 93 patents (4 invention). Our rewinders are built to integrate with the printers you already use — TJ/CJ/UV inkjet, laser and TTO.

Need a recommendation? Tell us your material + width + printer — our engineers reply within 24h:

- Email: mark@ifeeder.com | WhatsApp: +86-138-2553-0000
- RFQ form and more resources: <https://byfeeder.net>