

TECHNICAL DATA SHEET CHAPTER

MANUAL TAPE WRAPPING MACHINE

FOR COLD APPLIED PIPE COATING TAPES

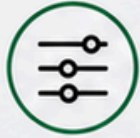
FROM 4" (DN 100) • TAPE WIDTH UP TO 150 MM



Manual Operation



Adjustable Overlap



Adjustable Tension



Modular Design



Film Collector*
*Complete version



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TECHNICAL DATA SHEET

MANUAL TAPE WRAPPING MACHINE

FOR COLD APPLIED PIPE COATING TAPES

YTM MAKINA Manual Tape Wrapping Machine is a modular, hand-operated machine for applying cold-applied corrosion and/or mechanical protection coating tapes on pipes of several diameters, from 4" (DN 100). Tape overlap and tape tension are both adjustable, making a correct, uniform application easier. For tapes with interleave film (3-ply), the Complete version collects the film automatically. All models are interchangeable by means of the corresponding accessories.



Modular Design

	PIPE DIAMETER FROM 4" (DN 100)
	MAX. TAPE WIDTH 150 MM
	TAPE CORE DIAMETER 41 MM / 76 MM
	MACHINE WEIGHT 4,2 KG – 4,8 KG



KEY FEATURES

- ✓ Adjustable tape overlap
- ✓ Adjustable tape tension
- ✓ Modular, interchangeable design
- ✓ Automatic film collector (Complete)
- ✓ Lightweight, hand-operated

SUITABLE FOR

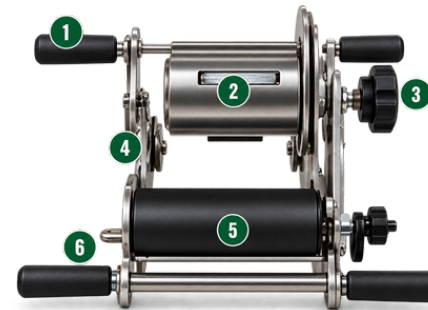
- ✓ Corrosion protection tapes
- ✓ Mechanical protection tapes
- ✓ 2-ply tape coating systems
- ✓ 3-ply tapes with interleave film
- ✓ Tape widths up to 150 mm

TECHNICAL CHARACTERISTICS

Specification	Basic Version	Complete Version
Pipe diameter	≥ 4" (DN 100)	≥ 4" (DN 100)
Maximum tape width	150 mm	150 mm
Tape roll core diameter	41 mm or 76 mm	41 mm or 76 mm
Machine weight	4,2 kg	4,8 kg
Operation	Manual	Manual
Adjustable wheel position	Yes	Yes
Adjustable overlap (advance angle)	Yes	Yes
Adjustable tape tension	Yes	Yes
Interleave film collector	—	Yes · automatic
Recommended tapes	Tapes without interleave film	All tapes, including 3-ply with film

i Both versions are interchangeable by the use of the corresponding accessories.

MACHINE OVERVIEW



- 1 Handles (×4)
- 2 Tape roll shaft
- 3 Tension knob
- 4 Pipe wheels
- 5 Film collector
- 6 Film fastener

OPERATING PRINCIPLE

- 1 MOUNT**
Adjust the wheel position to the pipe diameter and place the machine on the pipe.
- 2 LOAD**
Insert the tape roll on the shaft. On the Complete version, fasten the interleave film to the collector.
- 3 SET**
Adjust the advance angle for the required overlap and set the tape tension.
- 4 WRAP**
Rotate the machine around the pipe for a uniform spiral wrap at constant tension.

MANUAL TAPE WRAPPING MACHINE - OPERATING GUIDE

OPERATING INSTRUCTIONS

Step	Model	
1	All	Adjust the wheels' position over the pipe.
2	B	Insert the roll on the shaft with the adhesive side facing down.
2	C	Insert the roll on the shaft with the interleave film side facing down.
3	C	Fasten the interleave film to the collector with the fastener.
4	All	Adjust the advance angle to obtain the required overlap.
5	All	Begin wrapping, adjusting the tape tension as necessary.

i A detailed operating instructions guide is available for each model on request.

WORK PREPARATION

- ✓ Prepare and prime the pipe surface as specified in the data sheet of the tape system being applied.
- ✓ Make sure there is enough free space around the pipe for the machine to rotate.
- ✓ Check the tape roll width (≤ 150 mm) and core size (41 / 76 mm) match the machine.
- ✓ Have basic tools ready: adjusting wrench, tape measure and gloves.

WHY MACHINE APPLICATION

- ✓ Constant, controlled tape tension along the whole pipe.
- ✓ Uniform overlap, set once by the advance angle.
- ✓ Faster application than hand wrapping.
- ✓ Fewer wrinkles and air pockets for a more reliable coating.
- ✓ Less operator fatigue and less tape waste.

CARE & MAINTENANCE

- ✓ Clean adhesive and primer residues from shaft, wheels and rollers after use.
- ✓ Check the tension brake and wheel adjustment before each job.
- ✓ Store the machine clean and dry, protected from site dirt.
- ✓ Replace worn wheels or parts with original YTM spare parts.

TAPE CONSUMPTION GUIDE (THEORETICAL, METRES OF TAPE PER METRE OF PIPE)

Size	Pipe OD (mm)	100 mm Tape — 50% Overlap	100 mm Tape — 55% Overlap	150 mm Tape — 50% Overlap	150 mm Tape — 55% Overlap
DN 100	114,3	7,3	8,0	4,9	5,4
DN 150	168,3	10,6	11,8	7,1	7,9
DN 200	219,1	13,8	15,3	9,2	10,2
DN 250	273,0	17,2	19,1	11,5	12,7
DN 300	323,9	20,4	22,6	13,6	15,1
DN 400	406,4	25,6	28,4	17,1	18,9
DN 500	508,0	31,9	35,5	21,3	23,7
DN 600	610,0	38,3	42,6	25,6	28,4
DN 800	813,0	51,1	56,8	34,1	37,9
DN 1000	1016,0	63,8	70,9	42,6	47,3

Spiral wrapping, one tape layer, no allowance for waste. A 50 % overlap gives a double tape thickness at every point; 55 % adds extra safety at the overlap.

OVERLAP SETTING

Tape Width	Overlap	Advance per Turn
100 mm	50%	50 mm
100 mm	55%	45 mm
150 mm	50%	75 mm
150 mm	55%	67,5 mm

Set the advance angle so the machine moves forward this distance per revolution. Always follow the tape system data sheet.

ACCESSORIES

- ✓ Core adaptor — converts the machine between 41 mm and 76 mm tape cores.
- ✓ Interleave film collector kit — upgrades a Basic (B) machine to Complete (C).
- ✓ Spare parts — available on request.

i Contact **YTM MAKINA** for project-specific requirements.

The information in this data sheet is provided as a guide. Tape consumption and overlap values are theoretical and calculated for reference only. Because application conditions are beyond our control, the user is responsible for determining the suitability of the equipment for the intended use and for following the instructions of the coating system being applied. Information is subject to change without notice; this document supersedes all previous versions.