

TY-300i Monthly Cost Calculator Manual



1. Language and Currency Selection

The calculator allows selection of interface language and currency, ensuring the tool adapts locally to the customer's market and provides a more relevant and user-friendly experience.

Roland DG — Cost Calculator
TY-300i Direct-to-Film Printer

Language: English (EN) Currency: EUR (€) Use currency defaults Reset Recalculate all Export to PDF

Language Selection:

- English (EN)
- Español (ES)
- Português (Portugal)
- Français (FR)
- Italiano (IT)
- Deutsch (DE)
- Nederlands (NL)
- Dansk (DA)
- Polski (PL)

Investment Section:

Printer price: ☒ Shaker

Monthly report:

Printer amortization:	638,89 €
Print Operational Cost (total):	1531,69 €
T-shirt cost:	3000,00 €

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Currency Selection:

- EUR (€)
- GBP (£)
- CHF (CHF)
- DKK (kr)
- NOK (kr)
- SEK (kr)
- PLN (zł)
- CZK (Kč)
- HUF (Ft)
- RON (lei)
- BGN (lev)
- TRY (₺)
- AED (د.إ.)
- SAR (ﷲ)
- ILS (₪)
- ZAR (R)
- MAD (ﷲ)
- EGP (£E)
- ISK (kr)
- UAH (₴)

Investment Section:

Printer price: ☒ Shaker

☐ Others (Service contract, installation,...) ☐ Finance rate (%)

Financing period (months):

Consumables Section:

Cartridge price CMYK: Cartridge price White: Powder bag price (1000g):

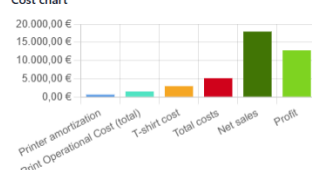
Cartridge price CJ-CL Cleaning: Film Roll Price: Film DTF Width (mm):

Film DTF Length (m):

Monthly report:

Printer amortization:	638,89 €
Print Operational Cost (total):	1531,69 €
T-shirt cost:	3000,00 €
Total costs:	5170,58 €
Net sales:	18.000,00 €
Profit:	12.829,42 €

Cost chart:



3. Investment Section

In this section, you enter the initial investment details needed to calculate the monthly equipment cost. This includes the printer price, the optional shaker (if used), the optional external JS100 filter, other services, and the financing terms (number of months and interest rate).

Based on these inputs, the calculator automatically determines the monthly amortization cost, distributing the total investment evenly across the selected financing term. This value is then incorporated into the overall monthly cost structure, allowing the user to understand the real impact of the equipment investment on profitability.

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TY-300i

INVESTMENT

Printer price
16500

☒ Shaker
6500

☐ External filter JS100

☐ Others (Service contract, installation,...)
☐ Finance rate (%)

Financing period (months)
36

CONSUMABLES

Cartridge price CMYK
59

Cartridge price White
59

Powder bag price (1000g)
40

Cartridge price CJ-CL Cleaning
50

Film Roll Price
270

Film DTF Width (mm)
762

Film DTF Length (m)
100

Monthly report

Printer amortization: 638,89 €

▶ Print Operational Cost by type

Print Operational Cost (total): 1531,69 €

T-shirt cost: 3000,00 €

Total costs: 5170,58 €

Net sales: 18.000,00 €

Profit: 12.829,42 €

Cost chart



4. Consumables

In this section, you enter the prices of all consumables used by the TY-300: CMYK ink, White ink, Cleaning cartridges, DTF film, and Powder.

When the selected currency is EUR or GBP, the calculator automatically loads the official SRP values for these items. However, you can freely modify any of these values manually at any time, allowing full flexibility to adapt pricing to local market conditions or customer-specific agreements.


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Reset
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INVESTMENT

Printer price

16500

6500

☒ Shaker
☐ External filter JS100

☐ Others (Service contract, installation,...)
☐ Finance rate (%)

Financing period (months)

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Monthly report

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Print Operational Cost by type

Print Operational Cost (total): 1531,69 €

T-shirt cost: 3000,00 €

Total costs: 5170,58 €

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Cost chart



Category	Value (€)
Printer amortization	638,89
Print Operational Cost (total)	1531,69
T-shirt cost	3000,00
Total costs	5170,58
Net sales	18.000,00
Profit	12.829,42

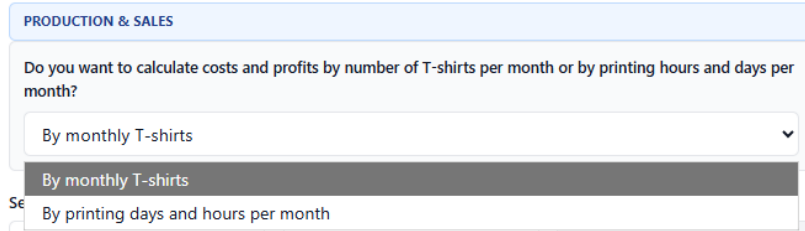
5. Artwork Size and Coverage

In this section, you define the complete printing layout parameters: the image size (width and height), the margins between each printed copy, the estimated amount of waste film generated per day, and the color coverage percentage. These values are essential for calculating how many images fit per linear meter of film, how much material is consumed, and the corresponding ink usage, ensuring accurate production and cost estimations based on real artwork dimensions.

ARTWORK SIZE (1 IMAGE PER TSHIRT)		
Image width (mm)	Image height (mm)	Margin between images (mm)
210	297	4
Waste film per day	Color coverage (%)	
3	100	

6. Production & Sales Settings

The **Production & Sales Settings** section allows you to choose *how* the TY-300 cost calculator estimates monthly production volume and costs. There are **two calculation modes**:



Mode 1 — “By monthly T-shirts”

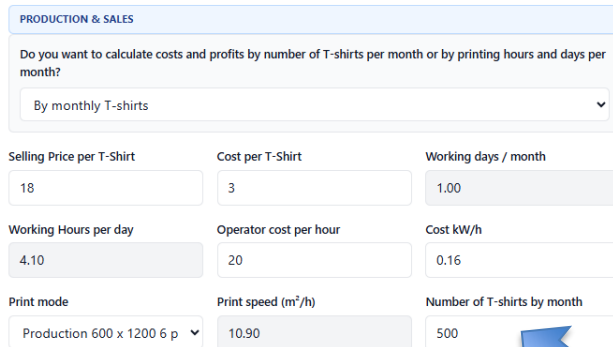
In this mode, the user already knows how many T-shirts they expect to produce per month. You simply enter:

- Selling Price per T-shirt
- Cost per T-shirt
- Monthly T-shirt Quantity

The calculator uses this *fixed* quantity to compute:

- Total ink and film consumption
- Total printing costs
- Net sales
- Profit

You manually define the number of units per month.



Results may not automatically recalculate when fields are changed. Press "Recalculate all" to obtain accurate data.

Mode 2 — “By printing days and hours per month”

This mode is significantly more powerful because it **automatically calculates** the total number of T-shirts you can produce based on:

1. Number of working days per month

Example:

- 15 working days/month

2. Number of working hours per day

Example:

- 5 hours/day of actual printing activity

3. Selected print mode (pass count)

Each print mode has a different production speed (m²/h), for example:

- **High Quality (8 pass):** slower
- **Production 600×1200 6 pass:** faster
- **Draft (3 pass):** fastest

The resolution you choose **directly changes the printing speed** and therefore the number of T-shirts you can produce.

PRODUCTION & SALES

Do you want to calculate costs and profits by number of T-shirts per month or by printing hours and days per month?

By printing days and hours per month

Selling Price per T-Shirt

18

Cost per T-Shirt

3

Working days / month

15

Working Hours per day

5

Operator cost per hour

20

Cost kW/h

0.16

Print mode

Production 600 x 1200 6 p

High Quality 1200 x 1200 8 pass
High Quality 900 x 1200 6 pass
Production 600 x 1200 6 pass
Production 900 x 1200 4 pass
High Speed 600 x 600 4 pass
Draft 600 x 600 3 pass

Print speed (m²/h)

10.90

Number of T-shirts by month

9150.00

Disc

The

calculator are for guidance only. They do not constitute a binding offer, official quotation, or con

7. Monthly Report Output

The calculator provides a complete and detailed monthly summary, including:

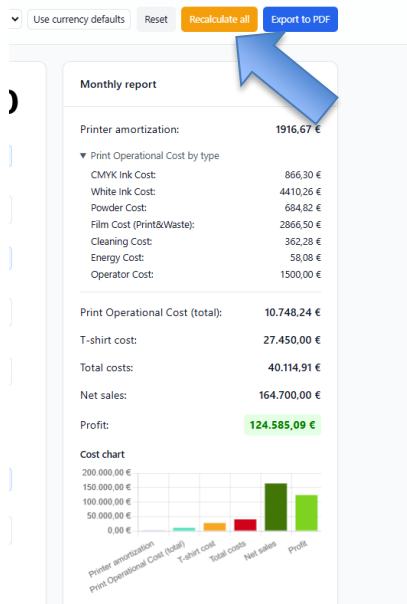
- A breakdown of ink consumption and cost (CMYK and White)
- Powder, film, cleaning, energy, and operator cost calculations
- Total operational cost
- T-shirt material cost
- Net sales based on selling price
- Total monthly profit
- A graphical cost chart for easy visual analysis

Important: Press “Recalculate all” to obtain accurate values

Although many fields in the calculator update dynamically, the TY-300 cost calculator includes multiple interconnected variables (artwork size, film usage, coverage, printing mode speed, working hours, consumable prices, etc.).

Because of this complexity, some calculations may not refresh automatically.

For this reason, it is essential to press the “Recalculate all” button after any modification. This ensures that all dependent values are updated correctly, preventing incomplete, outdated, or inaccurate results from appearing in the monthly report.



Disclaimer

This cost calculator is intended for guidance only. Actual production costs may vary due to image complexity, materials used, printing parameters, maintenance schedule, and operating environment. Roland DG reserves the right to modify specifications or pricing without prior notice.