



# PRINTER SELECTION GUIDE

HOW TO CHOOSE THE RIGHT LABEL PRINTER FOR YOUR APPLICATION

**TOSHIBA**

# PRINTER SELECTION GUIDE

**Whether this is your first label printer purchase, you've already been using them for a while and want to upgrade or whether you simply want to know more, you'll find everything you need to know in the following pages.**

Label printers come in three main configurations, with each type designed for a different daily volume of labels and environment.

DESKTOP

THE 3 TYPES



PORTABLE

INDUSTRIAL

**If you're here because you'd like to know more about choosing the right label printer for your business, you're in the right place!**

# CHOOSING YOUR PRINTER

We've seen a lot of businesses pick a lot of label printers. Many get it right, but some get it wrong. The impact of getting it wrong is the increased cost and time of having to replace a printer more frequently.



**Here's the five mistakes we come across most frequently:**

**Not picking the right printer** for the volume of labels required

**Purchasing the wrong printer** for the operating environment for initial cost savings

**Not choosing the best print head warranty** resulting in fast print head burn outs

**Not selecting the correct print resolution** for the requirement

**Missing out on consumable saving** features such as Ribbon Save

**These situations can cause a lot of unforeseen expense in the long run – so it is better to get it right first time.**



# PRINT TECHNOLOGIES

There are two types of print technologies used for labels: Thermal transfer and Direct thermal. As their names imply, both use thermal heat to create the printed information, but they do so in different ways.



## What does it mean and which is best for your business?

**Thermal transfer** printing transfers ink from a ribbon to the label, using heat. As the ribbon passes under the heated print head, ink is released and the image is printed. Like fax machines!

Great for: moderate to long term identification requirements, harsh conditions or processes

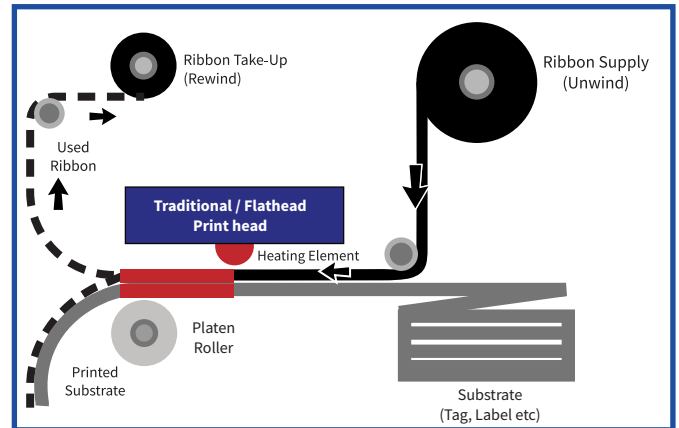
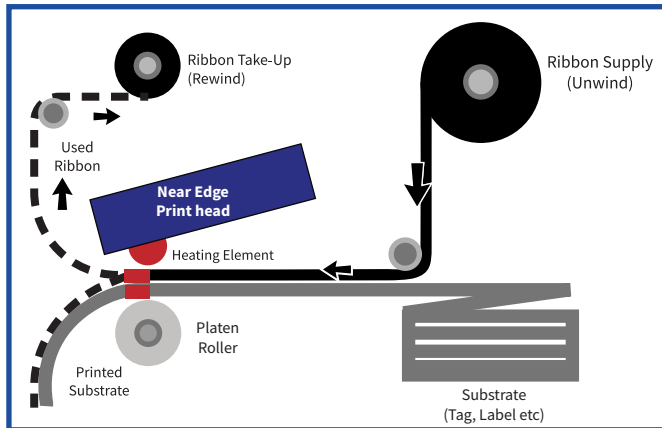
**Direct thermal** printing does not use ink, and therefore has no ribbon. Instead it uses thermal paper which has a special coating that changes colour when heated. As the paper passes under the print head, it turns black and creates the image. Like receipt paper!

Great for: short term identification requirements, such as freight or pallet labels

The type of print technology you choose will very much depend on what you are labelling and why.

# PRINT HEAD TECHNOLOGIES

If you've decided that you need Thermal Transfer technology, then the next thing you need to know is that there are two types of print heads used in thermal transfer printing: Flathead and Near Edge.



## What does it mean and which is best for your business?

The names '**Flathead**' and '**Near Edge**' refer to angle of the print head and the positioning of the heating element. This determines the way that the print head makes contact with the ribbon and the label surface, which impacts:

**Speed** - Near edge technology uses less contact time and so can produce an image faster

**Print head life** – Near edge technology has double the print head life compared to Flathead

**The ability to save ribbon wastage** - Ribbon Save is available with Near edge technology

**Intensity of the image** – Flat head printers produce darker images

**So when you're deciding on your printer purchase, and are looking at thermal transfer, do consider the type of print head which will best suit your business as it may save your business money over time.**

# THE 3 TYPES

**Your label printer is a mission critical element of the overall system. Getting the selection wrong can have a big impact on the processes that rely on label production, extending the printing window and every process downstream of it.**

The first thing you need to know about label printers is there are three classifications:



**DESKTOP**



**INDUSTRIAL**



**PORTABLE**

**Decision factors for selecting the right label printer are the print environment, volume of prints and the required print life.**

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# DESKTOP

**Desktop printers are designed to print up to 1000 labels a day, best suited in an office environment. Desktop printers are built to operate in an office environment - clean, air-conditioned, and with low operator handling.**



Desktop printers have a double walled plastic case instead of metal. Sometimes, Desktop printers can be used in a warehouse however, we do not recommend this as the motor is designed to handle a smaller print volume than typically seen in a warehouse environment. Over use of the motor can cause unforeseen service expenses.

## PROS

### **Cost**

Desktop printers are the most economical label printer

### **Flexible print options**

Available in both Thermal transfer and Direct thermal, as well as additional connectivity options such as Bluetooth or Wi-Fi

### **Easy to use**

Very quick set up and easy to maintain

## CONS

### **Capacity**

Limited to up to 1,000 labels per day, desktop printers also have the smallest ribbon and label capacity

### **Print head life**

Print head life (measured in kilometres) is generally rated at 25KM of printing

**Insight: globally, desktop printers are experiencing high growth rates due to the increase in e-commerce business applications.**

## USES

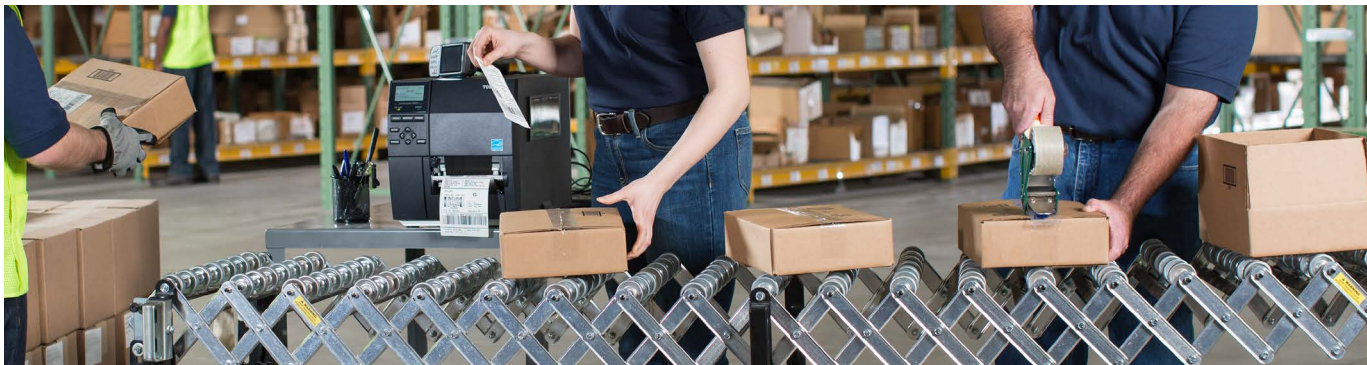
Office, freight and healthcare labels.





# INDUSTRIAL

**Industrial printers can handle from 1000 labels or more a day and are much more resilient to an environment with dust, dirt and vibration. Available in print widths from 4" up to 8" wide.**



Industrial printers are built to last, a warehouse workhorse made of steel. Best suited for mission critical applications or large printer fleet requirements, industrial printers also offer user serviceability for key parts meaning no down time during production.

## PROS

### **Speed**

Industrial printers are the fastest configuration on the market

### **Capacity**

Industrial printers have big motors that produce high volume output as well as extra room for larger ribbons and label rolls

### **Durability**

Extremely rugged casing and long lasting parts

## CONS

### **Cost**

All that metal and motor does come at an increased cost however, will last over a decade if maintained well

### **Size**

Industrial printers require additional space and so are not suited for an office environment

**Insight: industrial printers have the longest print head life available, ranging up to 100KM of printing depending on the configuration selected.**

### **USES**

Freight, FMCG, asset labels.





# PORTABLE

**Portable printers, designed for use on the move, on the shop floor or out with the public, can handle up to 1000 labels a day. Labels are usually printed one at a time, with speed not a major factor.**



Portable printers are often exposed to dusty environments or liquid spills. Always check what Ingress Protection (IP) rating the portable printer has to make sure it meets your environment requirements.

## PROS

### **Mobility**

Operators can move freely and print on demand in the field or store front

### **Connectivity**

Available in Bluetooth and Wireless configurations, great for pairing with scanners

### **Durability**

Rugged edges and high drop rating prevent breakage or damage

## CONS

### **Print technology**

Available only in Direct Thermal printing (short term identification)

### **Fleet management**

Often portable print requirements involve multiple printers, which can be difficult to manage – businesses often need to utilise Mobile Device Management (MDM) systems

**Insight: globally, portable printers are undergoing functionality upgrades to meet demand of Android platforms as Android becomes more prominent particularly in Logistics and Retail environments.**

## USES

Inventory, ticket, retail labels.



# GET IN TOUCH

**With a little bit of planning and the knowledge we've shared with you in this guide, you'll have the right label for the job, every time.**



Get in touch today to continue on your ribbon journey.



AU: Option 3 on 1300 794 202  
NZ: Option 3 on (9) 570 8530



AU: [www.toshiba-business.com.au/label-printer](http://www.toshiba-business.com.au/label-printer)  
NZ: [www.toshiba-business.co.nz/label-printer](http://www.toshiba-business.co.nz/label-printer)



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To learn more about labels and which to choose, go to:  
[www.toshiba-business.com.au/label-printer](http://www.toshiba-business.com.au/label-printer)  
[www.toshiba-business.co.nz/label-printer](http://www.toshiba-business.co.nz/label-printer)