

Costly Mistakes You MUST AVOID

When Buying Commercial Dryers



Introduction

In this guide you'll learn from the steps we've used to help hundreds of Australian businesses to get the most out of their laundry.

This approach has been refined by us over decades to help our customers succeed. We continue to help generate broad scale operational efficiencies, deliver quality output and deliver best practice across their laundry operation. Importantly these steps are easy and straightforward to follow.

If you're ready to unlock the potential across your laundry - keep reading to discover the costly mistakes to avoid when buying a commercial dryer.



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The Heat Source, that Wastes Your Resource

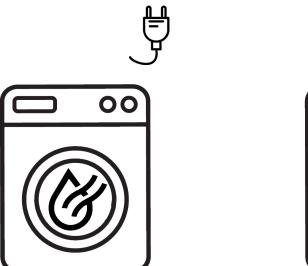
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The Heat Source, that Wastes Your Resource

All dryers operate in the same way. Heat, airflow, and movement combine to provide the drying effect that we see in clothes dryers. Air is drawn into the dryer, which is then heated to warm the linen inside to remove moisture. The perforated drum with paddles on the sides tumbles to keep the linen turning and in constant contact with the warm air – to dry the lien.

However, there are two primary ways to create the heat needed to dry the linen; gas or electricity. **Gas dryers** use gas burners, **electric dryers** use electrical elements. So what difference does it make which one you choose?

Let's take a look at each heat source to determine which type of dryer would best suit your laundry.







Gas is a more efficient heat source than electricity. Electric dryers need to convert electric power into heat, which creates some energy loss.

For this reason, gas dryers are also faster at heating up clothes than electric dryers. Gas ignites immediately whereas electric coils take time to heat up, extending the drying time required.

Any reduction in drying time means you'll be able to run more loads in less time and save money in the long run.

Typically on smaller commercial dryers, gas options can be slightly more expensive to purchase than an electric alternative.

When gas is available, additional precautions must be taken and adherence to standards must be followed. Gas dryers must be installed by a professional gas fitter or plumber. The consequences of a faulty installation could be dire.

Operating costs can be as much as 50% cheaper than electric dryers.



Electric dryers may not cost as much up front to purchase. Installing electric dryers can be much easier.

Simply remove it from the box and plug it in.

Depending on the power supply available, you may not need a tradesman or any additional works.

Typically the cost of electricity required to dry a typical load of linen will be approximately twice as much as a load dried using gas as the heat source. As gas is more fuel efficient, the cost of electricity over the lifetime of your electric dryer could have a significant impact on the cost of processing linen in your laundry. This is subject to your utility rates.



Electric dryers take longer to heat up, and are not as hot as gas dryers, leading to longer drying times. This means fewer loads can be dried with an electric dryer than a gas dryer in a similar time period.





IMPORTANT CONSIDERATIONS

\odot **Sensor Technology**

Drying times are even longer if your dryer does not have sensor technology. Moisture sensors automatically turn the machine off when the clothes are dry. These sensors save energy and reduces wear and tear on your clothes because they are not over dried. It is estimated that moisture sensing controls can save around 15% in energy costs.

Ventilation

Another factor to consider in the installation is ventilation, as all dryers must be vented to the outside. Ducting design, installation and maintenance is critical for optimal drying performance. For maximum efficiency and minimum lint accumulation, tumble dryer air must be vented to the outdoors by the shortest possible route.

Summary

Before you buy any type of dryer, consider the needs of your laundry. The choice of which dryer to buy may be made for you - because of connections already in place or significant investments.

Ultimately a dryer is a long-term investment - consider one that can offer faster drying cycles, drying times and greater energy efficiency, it could save your operation a lot of time and money.

Ventilation & Make Up Air Impacts Dryer Performance

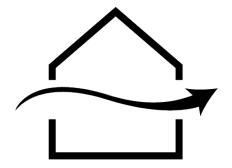
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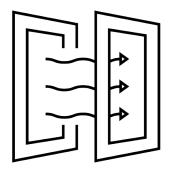
Ventilation & Make Up Air Impacts Dryer Performance

Make Up Air

Make up air is the air that is brought into the room to replace that which has been exhausted by the dryers. Make up air can be made most efficient by simply fitting open air panels from the environment. These panels allow for air flow from an external wall to the rear of the dryer and help to replace the exhausted air. Design considerations must be taken into account to allow for optimal make up air flow.

Dryers use heat to dry linen effectively - so its natural that they radiate a lot of heat themselves. Line up a number of dryers side by side and presto you have even more heat. This added heat must be accounted for when designing room for the comfort of staff and/or customers.







Enclose The Dryers

It is usually desirable to enclose the tumble dryers to segregate the make up air supply, especially if the laundry room is air-conditioned. The ultimate inefficiency is make up air that comes from an air-conditioner.

Tumble dryer enclosures provide significant benefits:

- The dryer's won't use conditioned room air for combustion make-up air. This will ensure the operational costs of both your dryer and your air-conditioning are at their lowest (24° is not taken and reheated to 71-82°).
- Heat emissions from the tumble dryer are reduced by up to 80%. If a tumble dryer is not enclosed, its 5 faces are exposed. If the same tumble dryer is enclosed, there is only 1 face exposed so the heat emission is significantly less.

Air Pressure & Air Quality

Air quality management is a consideration for your laundry operations to ensure hygiene of the finished product and safety for all employees.

Laundries should have a separate dirty side and clean side as a starting point and from this, air quality systems can be implemented.

Air management systems can be installed that will keep all of the air from the dirty linen side from ever entering the clean linen side. To achieve this requires negative air pressure on the dirty side to constantly be sucking air through open doors from the clean side.

This keeps any contaminated air from ever entering into the clean side and potentially contaminating clean linen.



Summary

The goal of make up air is to move air into the tumble dryer at the same pace that air is being sent out via exhaust. For maximum effectiveness and efficiency - design considerations should allow for adequate make up air, ideally where dryers are segregated & air pressure is controlled.

Dryer Positioning & Exhaust Venting Not Purposefully Thought-out

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Dryer Positioning & Exhaust Venting Not Purposefully Thought-out

Dryer exhaust venting design, installation and maintenance are critical for optimal drying performance.

Design

Venting design is critical - a poor design may not allow proper airflow to exhaust the damp air, which can allow lint to accumulate. The venting system is further compromised as lint accumulates making the system less efficient. This buildup continues which ultimately impacts dryer performance and the overall efficiency of your laundry.

Exhaust venting efficiency can be measured by pressure readings taken from your venting by a qualified technician. Here they can measure back pressure and ensure the system is operating as designed. The reading should match the values outlined in the installation manual for your dryer.

If the venting system has turns, bends or is quite long - the venting can contribute to higher back pressure. Ideally the venting system follows the shortest possible route with few, if any bends. The diameter of venting that is used can greatly assist in reducing the pressure in the system.

Common Venting

While it is preferable to exhaust tumble dryers individually to the outdoors - common venting systems are sometimes used. When this system is implemented, care must be taken to ensure the individual vents enter the common system to encourage airflow.

The individual tumble dryer vents should enter the common venting system an angle of 45 degrees in the direction of the airflow. Never connect individual tumble dryer vents at a 90 degree angle to the common venting system.

Improperly sized or assembled ductwork can cause excess back pressure which results in slow drying, lint collecting in the duct, lint blowing back into the room and greater potential for fire hazards

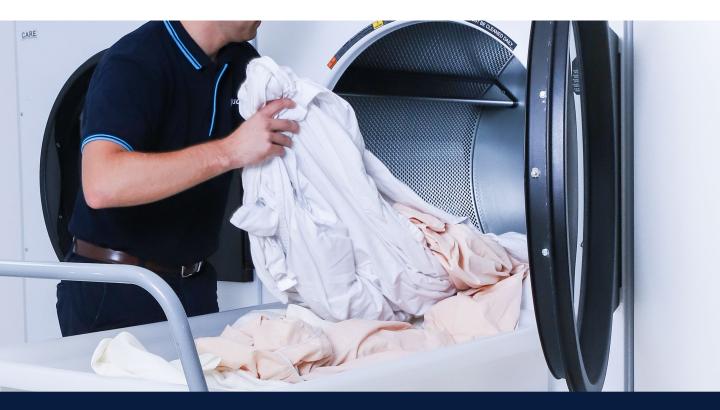
Maintenance

Laundry dryer venting systems accumulate with lint, dirt and debris - this build up lines the walls of your venting system.

This both impacts the efficiency and effectiveness of your dryer, resulting in higher utility costs, increased stress on equipment and presents potential for a fire hazard.

Regular dryer vent cleaning & maintenance programs help to optimise dryer performance. It's important to have a regular cleaning & maintenance program in place to help get the most out of your dryers.

Be sure to reach out to an Laundry Expert for an inspection on your Ventilation System.





Summary

The goal of ducting is to move air out of the tumble dryer at the same pace that air is being brought in by the fan. A perfectly positioned dryer will ultimately lower operating costs, extend equipment life and offer an excellent user experience.

Not Effectively Pairing Your Washer & Dryer

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To help your laundry run efficiently, it's important to 'pair' your washer and dryer. For example, it would be very inefficient to pair a 20kg washer with a 50kg dryer, or vice versa. There are a number of reasons for this.

Waste of Resources

Apart from wasting gas and electricity resources, running unmatched appliances also wastes time. When one appliance has a higher capacity than the other, bottlenecks occur. Either you have washed laundry piling up waiting to be placed into a dryer, or dryers are waiting for enough laundry to fill them. If you then overload either machine the problem is compounded because washing and drying times can vary significantly.

Ideal Wash & Drying Time

Ideally, laundry should come straight out of a washer into an awaiting dryer. To do this, wash and dry times should be similar. Running machines with the same capacity is the most efficient way to achieve this.



Effects of Underloading and Overloading

When a dryer is overloaded it takes longer to dry the contents because they do not move as freely inside. This also places more strain upon the motor, so if the dryer continues to be overloaded it will also require extra maintenance and servicing, and will develop major faults prematurely.

Similarly, an overloaded washer does not launder its contents as effectively and unnecessary strain is placed upon the machine. Underloading can put the machine off balance and eventually damage the washer. It can also damage fabrics because the concentration of chemicals will be too high.



A dryer can run underloaded, but it adds to energy bills unnecessarily because a lot of heat energy is simply wasted.

When one appliance has a greater capacity than the other, at least one unit will not be running efficiently. One is always going to be either under- or overloaded.

A combination of small washer and large dryer will result in either trying to fit more into the washer and overload it, or when you place the contents of the washer into the dryer, the dryer is underloaded.

The opposite will happen with a large washer and small dryer combination. There are numerous ways unmatched machines can negatively impact the efficiency of your laundry and add extra costs.

Suitable Location, Flow, Layout And Space To Operate The Laundry

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Suitable Location, Flow, Layout And Space To Operate The Laundry

To run an efficient laundry, it is not only the machinery that is important. The entire laundering process from beginning to end needs to be carefully considered and the layout needs to create the best workflow, mitigate potential bottle necks, and enable optimum efficiency.

Location

- The ideal location for a laundry is the ground floor. This
 enables ease of deliveries without having to waste time with
 elevators etc.
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- If you have hard mount washers the ground floor is crucial as they require solid concrete floors. Even if you have soft mount washers, the ground floor is still the best choice.





Cross Contamination

- The placement of entry and exit doors is also important. To avoid cross contamination, you should have one door for the dirty linen entering the laundry room and another for the clean linen leaving the laundry room.
- For the same reason, positive air pressure should be used to ensure the air flow goes from the clean area to the dirty area.
- There should also be a clear separation between the dirty and clean work areas.
- The room should ideally be designed so that 1/3 of the space is dedicated to the dirty side and 2/3 to the clean side.
- The clean side needs more space for folding tables, ironing and storage for dispatch.

Structure

- Make sure that the access route to the laundry room has sufficient openings to be able to install the machines. When you are concentrating on which machines to buy and the general layout, this is a point which can easily be overlooked.
- Each washer needs to have its own power supply and drainage. Pipes need to be large enough to supply and remove high volumes of water. As well, trapped foul drains are required for the washing machines as the waste water contains chemicals.

No Programmed Preventative Maintenance



No Programmed Preventative Maintenance

Regular maintenance keeps machines running as they should and increases the life expectancy of assets. Any wear on parts can be detected early before they have a chance to develop and damage the machine, and minor adjustments made to reduce costly repairs.

Aging equipment is the number one reason for unplanned downtimes as reported by 50% of maintenance personnel. It is much more cost effective to prevent issues developing than reacting to them when they do. Businesses spend as much as 80% of their time reacting to maintenance issues.

Labour costs can also be reduced by scheduling regular maintenance. It is more economical to have scheduled daytime appointments for maintenance workers than having to pay extra for emergency callouts (perhaps out of hours) to repair breakdowns or waiting for days for a technician to turn up. When developing problems are detected early it also allows time for technicians to order replacement parts and bring them on the next appointment, saving you both time and overtime costs.











Here is what happens when an asset fails and you don't have a preventative maintenance program:

- Unplanned downtime will cost your business money as it will halt production, and won't be able to meet client expectations.
- Employees won't have anything to do.
- You will be paying technical staff overtime for working longer on the failed asset.

It is a tempting idea to have maintenance done only when required in order to save costs. However, this can end up costing you more.





- You will pay a high premium to get parts quickly.
- You may need to hire consultants and seek help from professional technicians to get the asset up and running quickly.
- It may impact your brand image and reputation, especially if you're in the B2C industry.

Operator Training To Support Best Practise & Continuous Improvement

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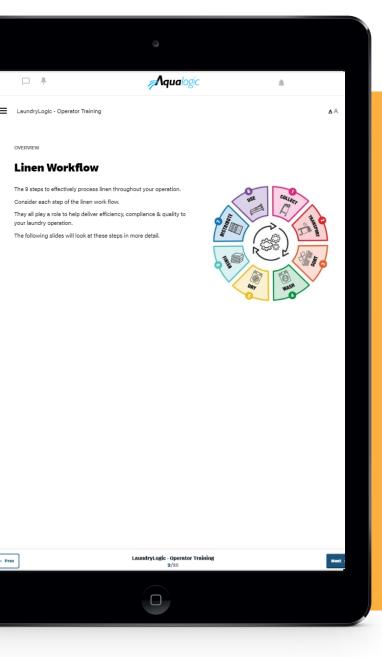
No matter how good the products are in your laundry, they rely on operators. Training is pivotal to achieving efficient and effective laundry processing.

Every business should have a training program that clearly teaches staff how things are done. This is crucial for a large operation, so that the various areas work together effectively, but it is just as true for a small operation so things can run smoothly when the manager is away from the laundry.

This training should include best practices, core process descriptions, and the specific methods and standards for how work is to be performed. The training helps to avoid inconsistencies and will give your team a clear direction on how to handle common laundry procedures.

Drive best practise and unlock potential with LaundryLogic

Training should have clear guidelines and teach employees all laundry procedures including:



- The correct operation of all laundry equipment
- The potential infectious hazards of soiled linen and appropriate handling procedures to prevent the spread of micro-organisms
- Minimising staff movement from dirty areas, where soiled linen is handled, to clean areas
- Instructions in staff personal hygiene, particularly the need for hand washing after handling soiled linen
- Instruction and training of safe chemical handling

When your staff are properly trained in all aspects, it allows you to focus on core outcomes for your customers.

Having access to such training for both new staff and existing, your team can maintain and improve upon their operational and hygiene skills. This will also assist your organization in proving to any auditing authorities that you have the recommended processes in place and are continuing to work toward best practise.



Claim Your FREE Strategy Session

The best way you can unlock the potential of your laundry is by implementing everything we have recommended here in this report. This is everything you need to get started, but if you have any questions, or would like our help on discussing any of the above, be sure to contact us.

Even better, for a limited time we're offering you a strategy session where we'll discuss machine selection, technical information, and laundry design for FREE.

Please note this is NOT a sales call. You will be speaking with one of our highly experienced Laundry Specialists, not a salesperson.

WARNING: Before you claim your free strategy session you must understand that this is only for people serious about setting up their laundry for long term success. If you are ready to kick your Laundry into overdrive and increase your potential; book your FREE strategy session now.

Our Laundry Specialists only have a limited number of slots available for FREE sessions each month and they're filling up fast.

BOOK YOUR FREE STRATEGY SESSION NOW



