Long and Short Term Rental



Humiscope



Not everything is resilient to environmental fluctuations. Sometimes for your company to succeed, you need to master your indoor environment.

# Solve temporary humidity problems with rental dehumidification.

With over 35 years' experience mastering indoor environments, it's safe to say we know our stuff. Let us help you identify where improvements can be made.

## LARGE RENTAL FLEET

CAPACITIES RANGE FROM 180m3/hr and up







# Some applications where our rental dehumidifiers have helped.

Let us optimise your indoor environment to best suit your assests and production processes.

## Sandblasting

Condensation on freshly sandblasted or painted surfaces can be a serious problem, particularly if unfavourable weather is about.

If condensation forms on critical areas in the midst of these operations, they usually have to be re-blasted and recoated. The moisture damage may be minimized by careful scheduling of the final "dust-down" and painting to coincide with acceptable weather, but this is not always practical.

With dehumidification we physically remove the moisture from the air, meaning that corrosion and condensation are unable to occur. It reduces the problems and costs resulting from quick oxidation on blasted steel and condensation on freshly blasted or coated surfaces. It also allows for scheduling independent of weather conditions; and decreases drying time.

## **Powdered Compounds**

A manufacturer of powdered products had issues with powder caking and solidifying on their factory floors during the more humid months.

This caused safety issues for employees when walking. It also resulted in excess cleaning time and associated costs.

Dehumidifiers substantially reduce humidity which allows hygroscopic compounds to remain as powder. The dry air is in direct contact with the product during the process so it is no longer affected by the weather. meaning no more clumping.



## **Cold Storage**

The build up of fog and wet floors in a cold room of a large meat processing plant caused vibility and safety issues. Forklifts often skidded in water puddles and cardboard packaging became soggy at the edges.

A desiccant dehumidification system provides a source of cool, dry air and allows the cold room to operate under positive air pressure, reducing humidity and preventing the moisture from entering the space.

## Transformer Repair

Our client needed to carry out maintenance on specialised transformers. To complete this work a temperature specific, very low humidity environment was required to maintain the integrity of the transformers. The transformer also had to be disconnected and stripped. This exposed electrical connections and parts.

If moisture was to form on any of these parts, the transformer would not function correctly once reassembled and reconnected to electricity.

Dehumidifiers control relative humidity (RH) levels and can be set to remain at the ideal temperature and humidity, which in this case was 5% RH and 27°C

These units have a robust construction, are easy and simple to maintain and have a very long operating life.

#### Ice Cream Manufacturer

One of Australia's largest soft serve ice cream producers deep clean their factory equipment after each product run. This process requires equipment to be dismantled, cleaned and thoroughly dried before they can reassemble the machinery.

This process takes them three days.

A desiccant dehumidifier removes moisture from the air and reduces drying time from a three day process, to one.

Significantly reducing production downtime and operating costs.







## Concrete Slab Drying

## A desiccant dehumidifier is the most effective piece of equipment for drying of a concrete slab. It lowers the relative humidity to near 0%.

Other dehumidification options can be used, however they are less effective than desiccant dehumidifiers. For example, Low Grain Refrigerant (LGR) type dehumidifiers can lower relative humidity (RH) to around 25%. Additionally, conventional dehumidifiers can only lower RH to around 35%.

For RH, the lower the percentage (i.e. 0%) the lower the moisture content in the air. The lower the RH, the faster the slab dries.

Desiccant dehumidifiers combined with air movement can be the most effective way to quickly dry a concrete slab. However CAUTION should be used as over-drying of the slab is a possibility. The process should be closely monitored by experienced technicians.

Minimising the volume of air (and concrete) being dried is a practical way to optimise the drying process. plastic sheeting is normally used to create a thin layer of dry air above the slab. Doing this helps reduce the volume of air being dried. Furthermore, it also helps the equipment cope with the size of the environment.

#### Most Cost Effective Drying Option

Waiting for the slab to cure by natural means would be the most cost-effective method of drying. However, time constraints are often a factor – especially on building sites. Using LGR dehumidifiers combined with air movers in a closed environment can have some success in drying the slab but it could still take several weeks. Alternatively, heating the slab in an open environment using infrared lamps may also help, however this method relies heavily on good ambient conditions.

#### Australian Standards for Flooring Installation

The Australian Standards for relative humidity (AS 1884–2012) in a concrete slab before installation of flooring states that relative humidity should not exceed 75% (Section A3.1.2 "Relative humidity in-situ probe test"). The levels of relative humidity in concrete slabs should be monitored according to ASTM F2170–18 (also referenced in AS 1884–2012 Section A3.1.1 "Test methods"). Failure to follow these recommendations may lead to issues post installation. These may include damage to resilient flooring, bubbling of flooring, flooring lifting or even mould and microbial growth on the underside of flooring.

IECL can provide assessment and testing of concrete moisture according to Australian standards. IECL can also provide recommendations of drying strategies or create a scope of works in how to dry the concrete slab.

Please note: Humiscope can provide a print out of AS 1884:2021 and pdf of F2170-19a Standard test method for determining relative humidity in concrete floor slabs using insitu probes.



We are a group of engineers, technicians and draftsmen dedicated to our clients and committed to providing energy efficient indoor environment systems; from simple applications to specially engineered solutions.

## Benefits of renting from Humiscope

Large range of industrial and commercial dehumidifiers for rent throughout Australia.

The opportunity to try dehumidification technology before investing.

High quality dehumidification equipment correctly maintained and serviced.

We provide continued support and maintain professional relationships.

Over 35 years' specialist experience in dehumidification technology.

66 Katherine was terrific! Nothing was too much trouble and she couldn't have been more helpful.

~ Peter Schulte, Managing Director, Schulte's (drying room)



## Our Rental Fleet

Highly efficient desiccant and refrigerant dehumidifiers from low dew point applications to larger air flow volumes.

Ideal for construction, flood restoration, dry and cold rooms and storage applications.





From the first phone call I made to you and to the follow-on communication, was perfect. Thank you.

~ Neil Rattray, Supervisor, BSA (rental dehhumidifer client)

## Our Rental Fleet

Large capacity industrial and commercial grade dehumidification equipment, correctly maintained and serviced.

## Examples of some of our units:



## Portable Refrigerant Dehumidifier

Removes up to 60 litres per day at 30° C - 80% RH Weight: 40kg - large wheels for ease of mobility



## **Compact Desiccant Dehumidifier**

Lightweight but robust M100 dehumidifier



#### **Mobile Desiccant Dehumidifier**

Humidity control at virtually any temperature HC300 dehumidifier



## **Weather Tight Construction**

Indoor and Outdoor Use Model: HCD-600



#### **Built for All Conditions**

Industrial Dehumidifier Model: HCD-1125

# Optional Extras

- ~ Ducting, delivery and installation available POA
- ~ Weekly tracking/monitoring of moisture levels POA







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## **Our products**

#### **Desiccant Dehumidifiers**

work by passing air through a rotating desiccant wheel to extract moisture from the air. They achieve relative humidity levels below 35% and have proven themselves to reduce both operating costs and energy consumption.

#### Refrigerant Dehumidifiers

work best in spaces where the temperature is at 20°C and above and humidity levels of 50% and above. They work on the humidity of the room and run when the humidity is above its set point.

#### **Humidifiers**

add moisture to the air. Humidity has a significant influence on the rooms climate and thus has a great influence on the well-being of people or on the stability of industrial processes that take place in the room

'We are very happy with the outcome. Drying times were reduced by 50%. Essentially we created our own climate' ~ Peter Schulte, Managing Director, Schultes Meat (Drying Room)

#### **Our Service**

With over 35 years experience in Dehumidification technology, its safe to say we know our stuff. We offer service and maintenance of any brand industrial and commercial dehumidifier, regardless of make or model.

## We service the following brands:















Call us - obligation free - and we can talk through your specific concerns and suggest some solutions that would work best for you!

## Humiscope

Master your indoors

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