

A one time solution to all time problems of compressed air.....
Problems Solved & Quality Begins

With

LA-MAN™

EXTRACTOR/DRYER

Winner of the plant Maintenance Association's "Excellent Product" award.

Dirty & Wet pulsating air

Clean dry air



JAPAN PAT NO:1398483
 US PAT NO:4487618
 european pat no:0116130

TYPICAL PROBLEMS

- WATER, OIL & SLUDGE
- DIRT & CONTAMINANTS
- RUST PARTICLES
- AIR SURGE
- BREAK DOWNS
- EXPENSIVE REPAIRS
- HIGH MAINTENANCE
- TIME & PRODUCTION LOSS
- RE-DOs & REWORKs
- FREQUENT PARTS REPLACEMENT
- HIGH OPERATING & RUNNING COSTS
- PRESSURE DROP
- LOW EFFICIENCY

LAMAN'S PERFORMANCE STANDARD

- 100% REMOVAL OF WATER DROPLETS
- 99% REMOVAL OF OIL CONTENT
- 100% REMOVAL OF 5 MICRON PARTICLES & 50% REMOVAL OF 1 MICRON PARTICLES
- CONSTANT WORKING PRESSURE
- CATCH IN-LINE AIR SURGES
- LOW OPERATING COST
- EXTENDED & QUICK MAINTENANCE (1,000 HRS OR 4 TO 6 MONTHS)

THE EXTRACTOR/DRYER FAMILY

model	pipe size	max air flow l/m(cfm)	Capacity of air compressor	overall dimension (cm)	kilograms
M-103	1/4PT	800 (30)	1/4HP-5HP	18.0×7.5×3.2	0.4
M-105	3/8PT	1,350(50)	5HP-10HP	21.0×10.3×4.5	0.9
M-107	1/2PT	1,350(50)	10HP-15HP	21.0×10.3×4.5	0.9
M-110	3/4PT	2,700(100)	10HP-20HP	28.0×14.9×7.7	2.6
M-120	1PT	5,400(200)	20HP-30HP	37.0×20.0×10.2	7.7
M-140	1 1/4PT	10,800(400)	30HP-50HP	50.0×28.6×13.3	12.7
M-180	2PT	21,600(800)	50HP-75HP	67.0×38.4×17.8	28.5



THE FIRST NEW COMPRESSED AIR TECHNOLOGY ON 60 YEARS!

Constant pursuit to maximise efficiency has resulted in elimination of 100% of the liquid moisture and 99% of the oil from compressed air without using refrigeration or external energy. Your air equipment can now run at peak performance!

Design & Features

- All-in one unit
- Compact & giant in performance
- Robust construction & easy to install
- All aluminium body increases cooling effect
- 2 separate elements & stages
- 3 functional chambers — coalescer, extractor & high saturation vortex filter
- Auto drain & weep drain models
- Wide range of air flow & sizes to suit your usage requirements
- Working pressure range 3 kg/cm² — 17.5 kg/cm²

How La-Man Extractor/Dryer removes 100% of the liquid moisture

The entering air is wet, dirty, and pulsating. The air is accelerated and made to spin and tumble through the mesh in the first element. Moisture droplets stick to the surfaces of the mesh and unite with other droplets. Droplets grow in size, collect other contaminants, fall into the Surge Reservoir chamber, and flow into the Auto-drain Sump pulled by venturi action. The water accumulates, lifts the float, and is instantly purge through the drain tube. Approximately 95% of the liquid moisture is removed in the first element by combining a change in velocity, a tumbling - spinning action, and an expansion of the compressed air as it passes through the First Stage Element.

The compressed air containing about 5% liquid moisture then enters highly absorbent tightly wound Second Stage Element. The air spins violently to find its way through the element. As a result, thousands of small vortices are formed. Each mini vortex has a vacuum in its vortex. The majority of the remaining water droplets are pulled apart and vaporized in the vacuum of these vortices.

The rest of the droplets are absorbed in the element and held there until they are evaporated into the compressed air stream. 100% of any liquid moisture passing through the First Stage Element is converted into vapor in the Second Stage Element by combing the action of the mini vortex and the absorption ability of the element.

Water in vapor form is not harmful to any equipment or process and the air is used before the vapor has a chance to re-form into liquid droplets. Oil is also removed in the First and Second Stage Elements by the same processes. Oil mists absorbed in the Second Stage Element gradually reduce the ability of the element to absorb water.

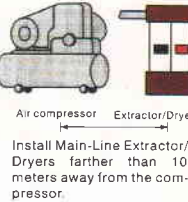
When oil saturates the Second Stage Element and it can no longer absorb water, it must be replaced. Under normal service the second stage element is changed 2 to 3 times each year. The exiting air is 99.99% clean, dry, and smoothly flowing!

Where to install La-Man Extractor/Dryers

CORRECT

1. Install units close to the equipment. For optimum results the Extractor/Dryer should be within 7 meters from the equipment using the air.
2. Locate units where the compressed air is at room temperature. For optimum results the Extractor/Dryer should be working in ambient temperature air.
3. Install units at least 10 meters away from the compressor. Use 10 meters of coiled copper pipe or coiled rubber hose between the compressor and the Extractor/Dryer if installing La-Man 10 meters away from the compressor is not practical in the pipework system.

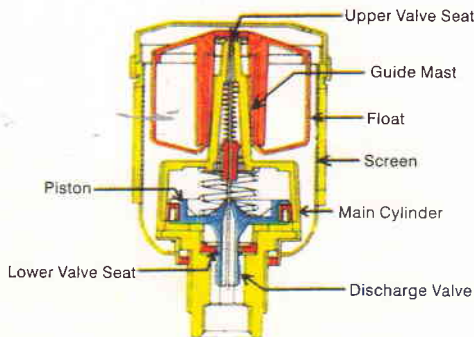
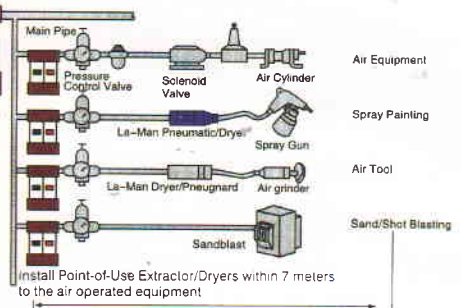
- Install all Extractor / Dryers upright and level so that the Weep-Drain or Auto-drain can work correctly.
- Mount the Extractor/Dryer for air flow in either direction using the universal installation bracket. Insert the Extractor/Dryer drain hose into the valve under the unit.
- Install In-Line Pneumatic/Dryers immediately in front of equipment.



Install Main-Line Extractor/Dryers farther than 10 meters away from the compressor.

INCORRECT

1. Installed where compressed air is still hot. The pipework system will eventually cool the compressed air to the room temperature. As the air cools, the dew point lowers and liquid water condenses. Extractor/Dryers can remove all the liquid water at any given temperature, if the air cools after it passes through the Extractor/Dryer the water vapors created by the Extractor/Dryer can recombine into liquid droplets.



Replacement Element

Stage I — 1 to 2 years

Stage II — 1,000 hrs or 4 to 6 months

How To Change

Loosen all top bolts, remove two corner bolts.

Slide old cartridges out,

Slide replacement cartridges in retighten

All bolts (air connections need not be disturbed)

Sizing Extractor/Dryer

1. ACCORDING TO AIR FLOW
- or 2. SIZE OF COMPRESSOR
- or 3. PIPE SIZE



Industries using LA-MAN™

- Electrical — pneumatic
- Engineering
- Food (FDA registered)
- Packaging
- Instrumentation —
- Air Control
- Air Tools
- Paint Workshop
- Plastic — Injection & Blow Moulding
- Foundries
- Dentistry
- Sand Blasting
- Printing
- Steel & Metal
- Rubber
- Automotive & Assembly
- Ship-building
- Quarries
- Service Stations
- Oil Refineries
- Cement Manufacturing
- Chemical Plants
- Air Craft Maintenance
- Glass Plants
- Pharmaceutical
- Mining
- Wood & Furniture
- Cable
- Tyre
- Textile
- Tobacco
- Spray Painting