

— DRYERS | FILTERS | PRESSURE VESSELS

AIR TREATMENT, DRYERS & PRESSURE VESSELS

**CLEAN, DRY AIR PROTECTS YOUR COMPRESSOR AND
YOUR PROCESS.**

Supa-Air supplies a complete air treatment package engineered to complement our oil-injected screw compressors. Each system combines refrigerated plate-type air dryers, multi-stage inline filtration, and automatic condensate removal – delivering consistently clean, dry compressed air.

ISO 8573-1

AIR QUALITY
COMPLIANT



REFRIGERATED AIR DRYERS & FILTRATION

All dryers are 16 bar rated and fitted with energy-efficient plate heat exchangers for superior cooling efficiency. Latest models include PLC control for synchronization between compressor and dryer – enabling smart load management and reduced power consumption.

KEY FEATURES

REFRIGERANTS

R134A (7.5kW–15kW) and R410A (22kW–355kW) – matched to compressor size for optimal efficiency.

INTEGRATED EVAPORATOR + DEMISTER SEPARATOR

Combined unit for maximum moisture removal in a single compact stage.

AUTOMATIC DEFROST CYCLE

Reliable dew-point control without manual intervention.

OPTIONAL PLC / HMI

Set dew-point targets, log alarms, and enable dryer-to-compressor communication for synchronized operation.



SADR DRYER SPECIFICATIONS

MODEL NO.	AIR FLOW (M ³ /MIN)	CONNECTION	PRESSURE (BAR)	REFRIGERANT	VOLTAGE
SADR-1F	1.2	ZG1"	16 bar	R134A	220V/50HZ 1PH
SADR-2F	2.4	ZG1"	16 bar	R134A	220V/50HZ 1PH
SADR-3F	3.8	ZG1"	16 bar	R410A	220V/50HZ 1PH
SADR-6F	6.5	ZG1½"	16 bar	R410A	220V/50HZ 1PH
SADR-8F	8.5	ZG1½"	16 bar	R410A	220V/50HZ 1PH
SADR-10F	10.7	ZG2"	16 bar	R410A	220V/50HZ 1PH
SADR-13F	13.8	ZG2"	16 bar	R410A	220V/50HZ 1PH
SADR-15F	17	ZG2½"	16 bar	R410A	380V/50HZ 3PH
SADR-20F	23	ZG2½"	16 bar	R410A	380V/50HZ 3PH
SADR-25F	27	DN80	16 bar	R410A	380V/50HZ 3PH
SADR-30F	33	DN80	16 bar	R410A	380V/50HZ 3PH
SADR-40F	45	DN100	16 bar	R410A	380V/50HZ 3PH
SADR-50F	55	DN100	16 bar	R410A	380V/50HZ 3PH

Aluminium shell inline filters rated to 1.6 MPa – available in 11 sizes from 1.5 to 40.2 Nm³/min capacity. Available in grades C, T, A, F, H for every filtration requirement. Simple element replacement for minimal maintenance downtime.

SA-YF SERIES SPECIFICATIONS

MODEL NO.	CONNECTION (G)	DIMENSION (MM)			AIR CAPACITY (NM ³ /MIN)	ELEMENT MODEL	QTY.	MATERIAL
MODEL NO.	CONNECTION (G)	A (MM)	B (MM)	C (MM)	NM ³ /MIN	ELEMENT MODEL	QTY.	MATERIAL
SA-YF- [*] -015 (1.6MPa)	½" ¾" 1"	100	200	235	1.5	MS-015*	1	Aluminium
SA-YF- [*] -025 (1.6MPa)	½" ¾" 1"	100	240	275	2.5	MS-025*	1	Aluminium
SA-YF- [*] -038 (1.6MPa)	1", 1-1/2"	125	290	335	3.8	MS-038*	1	Aluminium
SA-YF- [*] -060 (1.6MPa)	1-1/2"	125	420	465	6	MS-060*	1	Aluminium
SA-YF- [*] -085 (1.6MPa)	1-1/2"	125	420	465	8.5	MS-085*	1	Aluminium
SA-YF- [*] -120 (1.6MPa)	2"	155	510	570	12.3	MS-120*	1	Aluminium
SA-YF- [*] -150 (1.6MPa)	2"	155	550	610	15.2	MS-150*	1	Aluminium
SA-YF- [*] -200 (1.6MPa)	2", 2-1/2"	180	610	670	20	MS-200*	1	Aluminium
SA-YF- [*] -250 (1.6MPa)	2", 2-1/2"	180	670	730	25	MS-250*	1	Aluminium
SA-YF- [*] -300 (1.6MPa)	2", 2-1/2"	210	610	685	30.5	MS-300*	1	Aluminium
SA-YF- [*] -400 (1.6MPa)	3"	210	800	875	40.2	MS-400*	1	Aluminium

WHY INLINE FILTRATION MATTERS

ALUMINIUM SHELL CONSTRUCTION

Lightweight, corrosion-resistant aluminium shell rated to 1.6 MPa. Designed for long service life in harsh industrial environments.

5 FILTER GRADES AVAILABLE

C (coalescing), T (dust/particulate), A (activated carbon), F (fine), H (high efficiency) – specify the right grade for your application's ISO purity requirement.

SIMPLE ELEMENT REPLACEMENT

MS series filter elements drop in without tools – minimising service time and downtime. OEM elements maintain performance specification.

MATCHED TO SUPA-AIR RANGE

Each SA-YF model is sized to match specific Supa-Air compressor outputs – from 1.5 Nm³/min for 7.5kW units through to 40.2 Nm³/min for the largest installations.

ISO 8573-1

Supa-Air's combined dryer and filtration system is designed to meet ISO 8573-1 air purity classes for all industrial and food-grade applications.



ISO 8573-1

AIR PURITY STANDARD

5-STAGES TO PERFECT AIR

Even with the best air dryer, fine oil aerosols, particulates, and vapours remain. Supa-Air's multi-stage filtration ensures compressed air meets the ISO 8573-1 purity levels your process demands – from heavy industrial to food-grade and medical applications.

STAGE 1

01

WATER SEPARATOR

- Removes 99% of liquid condensate straight from the compressor outlet.
- Reduces load on downstream dryer and filters.
- Automatic drain on every unit.
- First line of defence against bulk water.

STAGE 2

02

COALESCING FILTER

- Capture oil aerosols and fine particles down to 0.01 µm.
- Protects dryer internals from oil contamination.
- Significantly extends dryer service life.
- SA-YF series grade C element.

STAGE 3

03

REFRIGERATED DRYERS

- Cools and removes residual moisture to dew point +2°C to +10°C
- Integrated drain + demister separator
- SADR range – 13 models from SADR-1F to SADR-50F
- 16 bar rated · PLC/HMI optional

STAGE 4

04

AFTER-FILTER

- Captures fine oil mist and microparticles post-dryer
- Ensures ISO 8573-1 air quality compliance.
- Essential for automotive, food & beverage, and manufacturing.
- SA-YF series grade A element

STAGE 5

05

ACTIVATED CARBON FILTER

- Removes residual oil vapour and odour.
- Essential for food-grade, medical, and pharmaceutical applications.
- Painting and packaging lines
- SA-YF series grade H element

SANS 347-COMPLIANT PRESSURE VESSELS

Supa-Air manufactures a complete range of SANS 347-compliant vessels engineered to work seamlessly with our screw compressors. Available in vertical and horizontal configurations from 150L to 5,000L – each vessel is pressure-rated to 16 bar and supplied with a Certificate of Manufacture, meeting every legal requirement under South Africa's Pressure Equipment Regulations (PER) and the OHS Act.

KEY SPECIFICATIONS

- Capacity range: 150L - 5,000L
- Working pressure: 16 bar rated
- Vertical & horizontal configurations
- Fitted with drain valve, safety valve port
- Pressure gauge connection
- Date plate fixed per PER requirements

COMPLIANCE & CERTIFICATION

- SANS 347 conformity assessment
- Certificate of Manufacture supplied
- AIA-verified for Category II & above
- Compliant with OHS Act & PER 2009
- 16 bar hydraulic pressure tested
- Nameplate stamped per PER requirements

! PRESSURE VESSEL TESTING (PVT) - STATUTORY REQUIREMENT

Under the SA OHS Act and Pressure Equipment Regulations (PER), every pressure vessel must be inspected and hydraulic pressure tested at intervals not exceeding 36 months by an Approved Inspection Authority (AIA). This is not optional – non-compliance exposes your business to liability, shutdown, and serious safety risk.



Proper condensate management prevents rust, valve sticking, corrosion, and air contamination. Here's what happens without proper air treatment – and how Supa-Air solves it.

PROBLEM

- ⚠ Water in airlines
- ⚠ Oil carry-over from compressor
- ⚠ Condensate build-up in pipework
- ⚠ High pressure drop across filters
- ⚠ Contaminated air to production process

RESULT IF UNTREATED

- ✗ Rust, valve sticking, product contamination
- ✗ Clogged valves, product spoilage
- ✗ Corrosion and bacterial growth in lines
- ✗ Energy loss across system
- ✗ ISO compliance failure – production halt

SUPA-AIR SOLUTION

- ✓ 16 bar plate-type dryer + water separator
- ✓ Multi-stage coalescing & carbon filtration
- ✓ Automatic drains on every stage
- ✓ Low restriction filter and piping design
- ✓ ISO 8573-1 compliant air quality

OEM-OWNED. OEM-PROUD.

Every Supa-Air compressor and air treatment system – from 7.5kW to 355kW – is designed, built, and backed by us. We stand behind our products with conviction.

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