



# MFD SERIES NON-CYCLING REFRIGERATED AIR DRYERS

10 through 250 SCFM





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### SIMPLY DRY COMPRESSED AIR

MFD Series non-cycling refrigerated air dryers wring the moisture out of compressed air to maximize your productivity. No-nonsense design makes sure your get reliable performance and great value in a compact space-saving package. The advanced drying circuit delivers dry air across the entire flow range along with super low pressure drop to save you even more money. MFD Series solves your moisture problem with sizes from 10 scfm through 250 scfm and pressures to 203 psi.



### **LESS IS MORE**

Want more money in your pocket? Waste less air pressure. How? Mattei dryers and filters waste less pressure to save you more energy. Consider, every 2 psi decrease in system pressure saves you 1% in energy. MFD Series averages 1.45 psi pressure drop compared to 5 psi or more on many competitive dryers saving you over \$100 in energy for every 10 HP worth of air compressor.

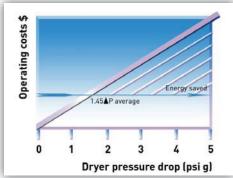
Our heavily-insulated heat exchangers feature oversized cooling channels and environmentally friendly refrigerant to deliver stable dew points at all flow rates. Automatic solenoid drains wring out the troublesome moisture to keep airlines dry. Oversized condensers keep it running in ambient conditions to 122°F. Get MFD Series for dry compressed air with less energy and more savings!



# **ENERGY EFFICIENT**

Poorly constructed heat exchangers and liquid separators create a high pressure differential pressure across the dryer which leads to high operational costs and poor dew point performance.

The MFD Series utilizes advanced heat exchanger and demister separation technology and delivers uncompromising performance at the lowest cost of ownership.



### **WASTE NOT**

MFD Series refrigerated air dryers can save you hundreds of dollars per year in energy. At 10 cents per kilowatt hour, you could save over \$100 in energy for every 10 HP worth of air compressor you run.

### **RUGGED CONSTRUCTION**

Durable aluminum heat exchangers are encased in thick insulation to keep the cold in and the heat out. Reliable reciprocating refrigeration compressors combine with oversized condensers to keep it running even on the hottest days. MFD Series comes ready to run, just pipe it in and turn it on. Timer solenoid drain is standard and is easily accessible. MFD Series is designed for your peace of mind.

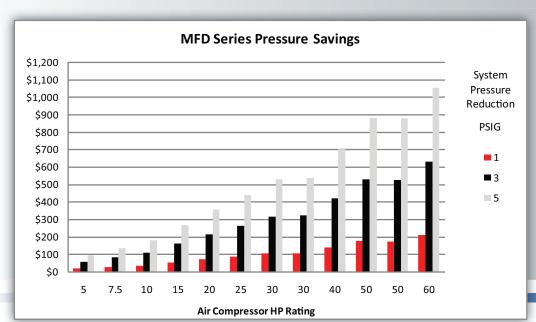


Figure 1:
Assumes 8760 hours/year, 10 cents/kWh,
EPAct motor efficiencies. \*Pounds per
square inch differential



### Standard features include:

- · Lighted compressor on/off switch
- · Dew point indicator
- Environmentally friendly refrigerant
- Reciprocating compressors
- Oversized condensers for ambient up to 122°F
- Automatic timed solenoid drains
- 115 volt operation and grounded 6 foot power cord (MFD-10 through MFD-125)







WHY MATTEI<sup>®</sup>
IS YOUR BEST CHOICE

### **TECHNICAL FEATURES**

Model	Pipe Size		Nominal Flow		Voltages	Dimensions (inches)	Wt. (net)
		scfm	Nm3/hr	Nm3/min		LxWxH	lbs.
MFD-10	½" NPT-F	10	17	0.3	115V/1Ph/60Hz	18 x 9 x 17	42
MFD-15	½" NPT-F	15	26	0.4	115V/1Ph/60Hz	18 x 9 x 17	42
MFD-25	½" NPT-F	25	43	0.7	115V/1Ph/60Hz	20 x 9 x 20	52
MFD-35	½" NPT-F	35	60	1.0	115V/1Ph/60Hz	20 x 9 x 20	52
MFD-50	34" NPT-F	50	85	1.4	115V/1Ph/60Hz	21 x 9 x 23	58
MFD-75	34" NPT-F	75	127	2.1	115V/1Ph/60Hz	21 x 9 x 23	68
MFD-100	34" NPT-F	100	170	2.8	115V/1Ph/60Hz	21 x 9 x 23	77
MFD-125	1½" NPT-F	125	212	3.5	115V/1Ph/60Hz & 230V/1Ph/60Hz	22 x 17 x 24	115
MFD-150	1½" NPT-F	150	255	4.2	115V/1Ph/60Hz & 230V/1Ph/60Hz	22 x 17 x 24	128
MFD-175	1½" NPT-F	175	297	5.0	230V/1Ph/60Hz	22 x 17 x 24	132
MFD-200	1½" NPT-F	200	340	5.7	230V/1Ph/60Hz	22 x 28 x 37	183
MFD-250	1½" NPT-F	250	425	7.1	230V/3Ph/60Hz & 460V/3Ph/60Hz	41 x 28 x 42	287

<sup>\*</sup>Capacities are based upon: ambient temperature 100°F, inlet temperature 100°F and working pressure 100 psi g.

Max. ambient temperature

41°F

Max. inlet pressure

Models MFD-10 - MFD-175: 232 psi g

Max. inlet temperature

Min. ambient temperature

Models MFD-10 - MFD-175: 149°F Models MFD200 - MFD-250: 140°F

Models MFD-200 - MFD-250: 203 psi g Models MFD-10 - MFD-175: R134a

Refrigerant

Models MFD-200- MFD-250: R407C

### Air Flow Correction Factors

Capacity correction factors to be used when operating conditions differ from those shown above. To obtain dryer capacity at new conditions, multiply nominal capacity\* x C1 x C2 x C3.

### Models MFD-10 through MFD-175

### Ambient Temperature (C1)

°F	60	70	80	89	100	110	120
Factor	1.34	1.26	1.17	1.09	1.00	0.91	0.82

### Inlet Temperature (C2)

°F	90	100	110	120	140	149
Factor	1.24	1.00	0.81	0.67	0.45	0.43

### Inlet Pressure (C3)

psi g	60	80	100	125	150	175	200	230
Factor	0.83	0.93	1.00	1.07	1.12	1.16	1.19	1.22

### Models MFD-200 through MFD-250

### Ambient Temperature (C1)

°F	70	80	90	100	110	120	122
Factor	1.22	1.15	1.05	1.00	0.94	0.79	0.71

### Inlet Temperature (C2)

°F	90	100	110	120	130	140
Factor	1.24	1.00	0.82	0.68	0.56	0.46

### Inlet Pressure (C3)

psi g							
Factor	0.77	0.93	1.00	1.07	1.12	1.15	1.18

Mattei Compressors, Inc. reserves the right to change or replace the data contained in this publication, without notice.



### COMPANY WITH QUALITY MANAGEMENT SYSTEM CERTIFIED BY DNV

= ISO 9001 : 2001 =

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