# **DRYFOG**Controlled Humidity







**Superior Solutions for Controlled Humidity** 

# DryFog saves costs by reducing wine evaporation

- Dry fog system Quality high-end technology
- Increasing humidity without wetness
- Reduces wine evaporation
- Saves "topping" and "angle share" costs

# **Superior Quality**

The DryFog controlled humidity system is outstanding in both performance and dramatic cost savings. The patented dry fog solution creates and controls high humidity conditions without wetting. As a result, wine evaporation is reduced, saving on major "topping" and "angels' share" costs.

# **Patented Technology**

DryFog's cutting edge solution includes the Tabor Atomizer – a uniform dry fog technology that combines low-pressure compressed air with water at atmospheric pressure to create vaporizing microdroplets, ranging in 2-10 microns in diameter. The uniform dry fog immediately evaporates into the air - increasing humidity without wetness. The large atomizer orifice (1.5 mm in diameter) significantly reduces clogging for very low system maintenance and operation costs.

## **Optimum Performance**

DryFog's sensors operate where other RH meters fail; it operates at relative humidity up to 98%.

### **Cost Savings**

Wine ageing in barrels for 3 years can lose up to

14% of its volume when stored at 60% RH. **DryFog** increases RH and is able to maintain it at higher levels up to 95%, which results in reduced losses by 80%.

#### **Return on Investment**

DryFog's record and performance demonstrate a high return on investment, showing results and profits within the same year. The system is modular and easy to maintain, with low operational costs.

#### **Proven Results**

With over 800 installations around the world, DryFog's solution provides continual humidity control to leading wineries. For client references please contact us.

#### **Benefits**

- Proprietary dry fog system
- Increased humidity without wetness
- Minimizes clogging
- Immediate evaporation into the air
- Fully automated control
- Modular system, for a wide range of applications and volumes

# Estimation of Evaporative Loss From Barrels (% per Year)

Temperature		Relative Humidity											
°C	°F	40	45	50	55	60	65	70	75	80	85	90	95
10.0	50.0	4.78	4.42	4.04	3.85	3.28	2.90	2.52	2.15	1.77	1.39	1.01	0.63
11.0	51.8	5.12	4.72	4.31	3.91	3.51	3.10	2.70	2.29	1.89	1.48	1.08	0.68
12.0	53.6	5.47	5.04	4.51	4.18	3.74	3.31	2.88	2.45	2.02	1.58	1.15	0.72
13.0	55.4	5.84	5.38	4.92	4.40	4.00	3.53	3.07	2.61	2.15	1.69	1.23	0.77
14.0	57.2	6.23	5.74	5.25	4.76	4.26	3.77	3.28	2.79	2.29	1.80	1.31	0.82
15.0	59.0	6.65	6.12	5.60	5.07	4.55	4.02	3.50	2.97	2.44	1.92	1.39	0.87
16.0	60.8	7.06	6.52	5.96	5.40	4.84	4.28	3.72	3.18	2.60	2.04	1.48	0.92
17.0	62.6	7.55	6.95	6.35	5.76	5.16	4.56	3.97	3.37	2.77	2.18	1.58	0.98
18.0	64.4	8.04	7.40	6.77	6.13	5.50	4.86	4.22	3.59	2.95	2.32	1.68	1.05
19.0	66.2	8.56	7.88	7.20	6.53	5.85	5.17	4.43	3.82	3.14	2.40	1.79	1.11
20.0	68.0	9.10	8.38	7.66	6.94	6.22	5.50	4.78	4.06	3.34	2.52	1.90	1.18

This table is useful for estimating the % wine loss per year under various temperature and humidity conditions. The table only applies to conditions close to Sterling's: table wine stored in tight-grained, 225 lit. Chateau (thin-staved) barrels in non-windy areas, etc.

# **Technical Specifications:**

Tabor Atomizer	DryFog Sensors
Water inlet pressure: Atmospheric (or 1 Bar pressure)	Electrical Input: 12 V DC.
Water flow rate: 4 - 6 liters per hour	Sensor Output: 4-20 mA
Droplet size: 2 - 10 microns	Communication: RS 232 /485
Vacuum level: 6 - 7 m water column	Temperature Operating Range: -2o C to +50o C
Nozzle orifice: 1.5 mm	Relative Humidity Range: up to 98%
Airflow rate: 55 - 60 liter per min	
Air inlet pressure: 6 bars.	



