

SIM7300-TH LONGITUDINAL

OZONE CLIMATE SIMULATOR

The Anseros Ozone Climate Simulator SIM7300-TH is equipped with a patented longitudinal airflow system. Two screens are located on top and at the bottom to distribute the ozone air longitudinally to the axle of the samples with high flow rates of 600 mm/s or with low flow rates down to 8 mm/s, in which case the ozone attack is 70% lower. (Patent DE 102011015476)

TESTING STANDARDS

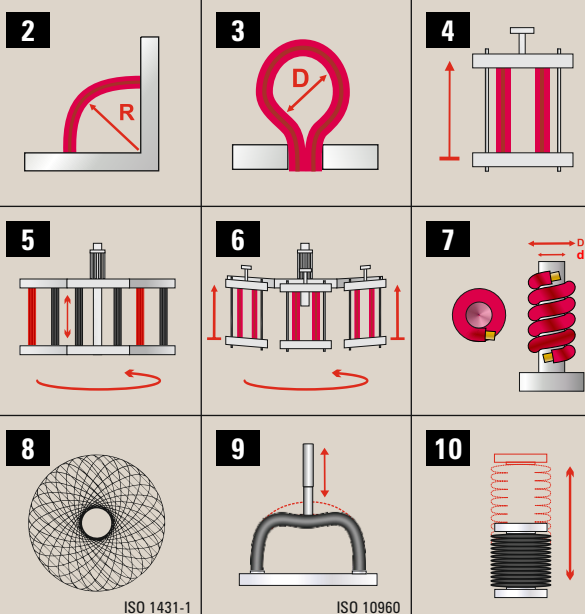
DIN ISO 1431-1	ISO 1431-1	IEC 60811-2-1
IEC 60092-351	VDE 0472 /A/B/C	EN 50396

Due to the high ozone air flow rate, the flow conditions are turbulent with a Reynolds factor far higher than 2300. The SIMtool 75049 has two wheels with a wide, flexibly PLC-controllable space range between them, allowing for ozone air to pass longitudinally on both sides of the sample.

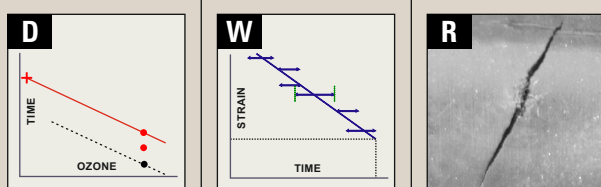
For static tests with carousel motion according to DIN ISO 1431-1 and ISO 1431-1, the SIM tool 75049 can be equipped with an extension set 75092 which includes 4 pieces of Clamp V for 16 samples altogether and optionally up to 288 samples in a chamber with a volume of 500 liters.

The carousel motion will be used in case of low air velocities (> 8 mm/s) to avoid the effect of a profile in ozone concentration, temperature and humidity. The SIM7300-TH is suitable to cover all related national and international standards.

TESTING PROCEDURE



EXPRESSION OF RESULTS



SPECIFICATION

OZONE CLIMATE SIMULATOR SIM7300-TH (LONGITUDINAL)

Flow direction	Longitudinal, vertical
Chamber volume	300 liters
Air velocity	< 600 mm/s, adjustable
Longitudinal airflow	100 ... 1000 Nm³/h
Reynolds profile	2500 < Re < 25000
Flow characteristic	Laminar ... turbulent, adjustable
Loading factor G	0.5 ... 12 s/m (ISO 1431-1)
Chamber size, inside	H52 x W68(-3) x D84 cm
Total chamber size	H181(+43) x W99 x D120(+10) cm
Total rack size	H181(38HU) x W60 x D60 cm



BASICS

SIM7300	Chamber SS 1.4301, welded
COM-ADM	Ozone generator
MP6060	Ozone monitor
75016	PLC SIMatic S7-300, 15" touch panel
	USB interface, USB stick
	Ozone controller PID-O ₃
	Humidity controller PID-H
	Temperature controller PID-T
75043	Safety lock, turbo rinsing, catalyst, alarm
72145	Carbon filter
74257	19" rack / 38 HU
75038	Humidity module with chiller
75037	Temperature module

SIMtool

75100	Clamp W, static stain	2
75006	Clamp B, static strain	3
75047	Clamp V, static strain, VDE 0472	4
75049	Static + dynamic rotation disc	5
75047	Clamp V (12 pcs.), static strain, VDE 0472	6
75052	Cable tool	7
75092+75047	Static test with carousel motion in accord. ISO 1431-1	8
75109	Dynamic hose test in accord. ISO 10960	9
75049+75103	Bumper extension set	10
75089	Mesh tray, SS	

DATA RECORDING

75101	Software AMACS 5.1 / 75049
75055	Extended ozone range, IEC 60811-2-1 (cable)
75015	Woehler software
75040	Digital camera

FURTHER INFORMATION

+ SIM catalog	
+ SIMtool brochure	
+ Ozone analyzer MP (leaflet)	
+ Application note APN-1	
+ Approval MP	
+ Manual SIM7300-TH, SIMatic S7-300	
+ Report D	D
+ Report W	W
+ Report R (prominent visibility by large window)	R

SPECIFICATION

Total weight	550 kg
Power supply	400 V / 3P / 50Hz
Pressure inside	Negative
Ozone range	0...300 pphmv, 0... 300 ppmv
Accuracy (displayed)	0.1 %
Humidity range	ISO 1431-1, IEC 60811-2-1
Temperature range	ISO 1431-1, IEC 60811-2-1