

 TFT
DRYING
SOLUTIONS



About us

Who we are

TFT Dry Air Solutions is a branch of Tecnofrigo Tuscany Group, specializing in Industrial Dehumidification. Tecnofrigo is a company that has been dealing with Air Quality Control for industrial and commercial buildings worldwide for over 45 years. Founded as a repair and technical assistance company for industrial climate control, Tecnofrigo Tuscany has acquired the skills and know-how over the years to successfully design and build machines with its own TFT brand. Nowadays, TFT is a new player in the Dehumidification market able to provide the quality and reliability of a long-term experienced company.

Unlike other manufacturers, TFT Dry Air Solutions offers maximum flexibility by providing both a standard range and customized solutions that meet the needs of the most demanding customers in a wide range of applications: from the pharmaceutical to food industry, from chemical to transport, from energy to defense. This ability to customize is the trademark of TFT Dry Air Solutions.

Our Mission

TFT Dry Air Solutions offers tailor-made technological solutions to solve humidity issues in the industrial and commercial fields utilizing machines designed to meet any customer's requirements.

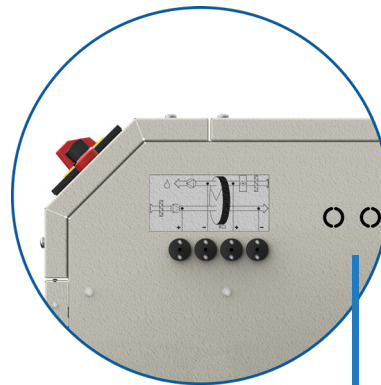
Our Technology

We design and supply reliable and efficient desiccant dehumidifiers to better satisfy the requirements of our customers. Our technical expertise is focused on improving the user experience, reducing maintenance time and costs.

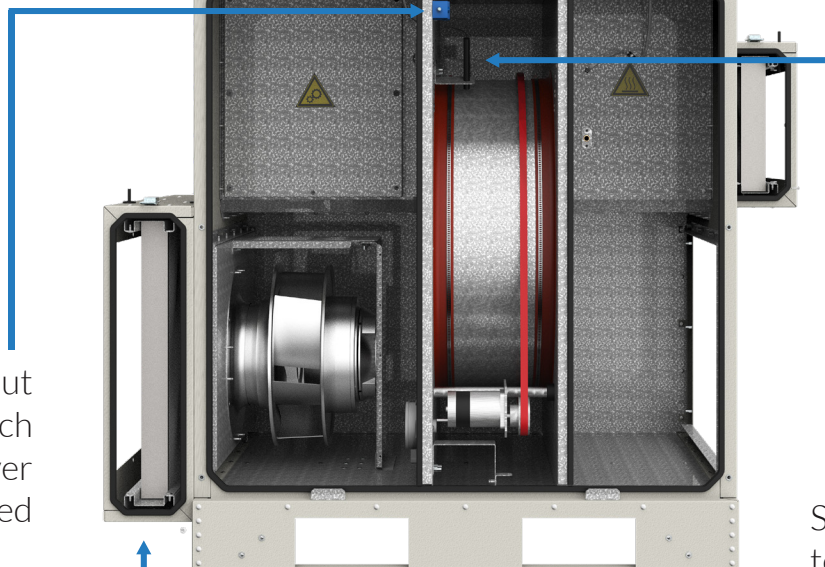
PLC with HMI touch Screen



Pressure points for measuring rotor ΔP , for both process and regeneration air-flows.



Safety cut-out by micro switch when cover removed



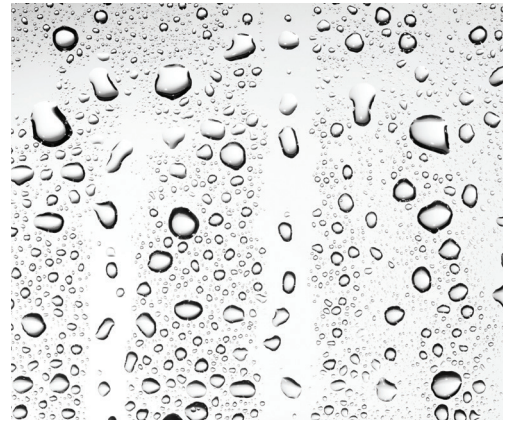
Inspection of process and regeneration filters while the machine is running.

Swedish rotor technology with standard Rotor-Stop device to detect rotation fault.

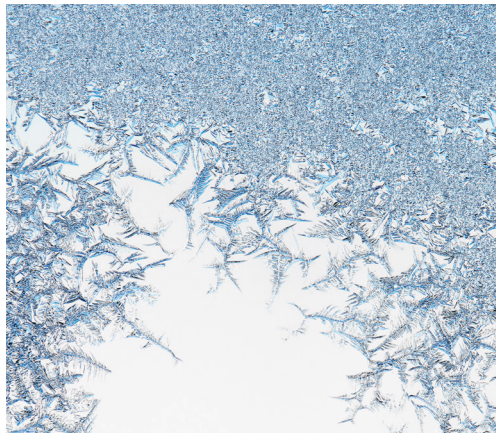
Global Solutions For Modern Industry



CORROSION



CONDENSATION



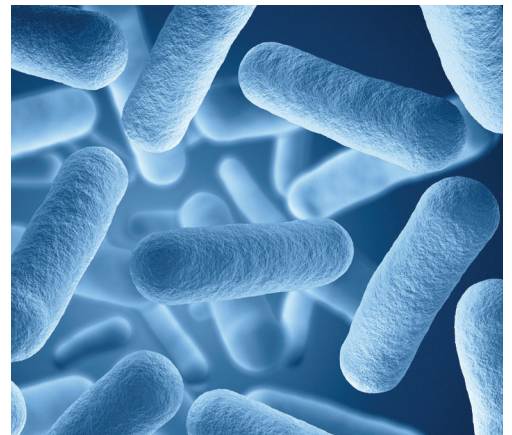
ICE



HYGROSCOPIC MATERIAL



FUNGUS AND MOULD



BACTERIA



ODOURS



HUMIDITY CONTROL



FOOD



PHARMACEUTICAL



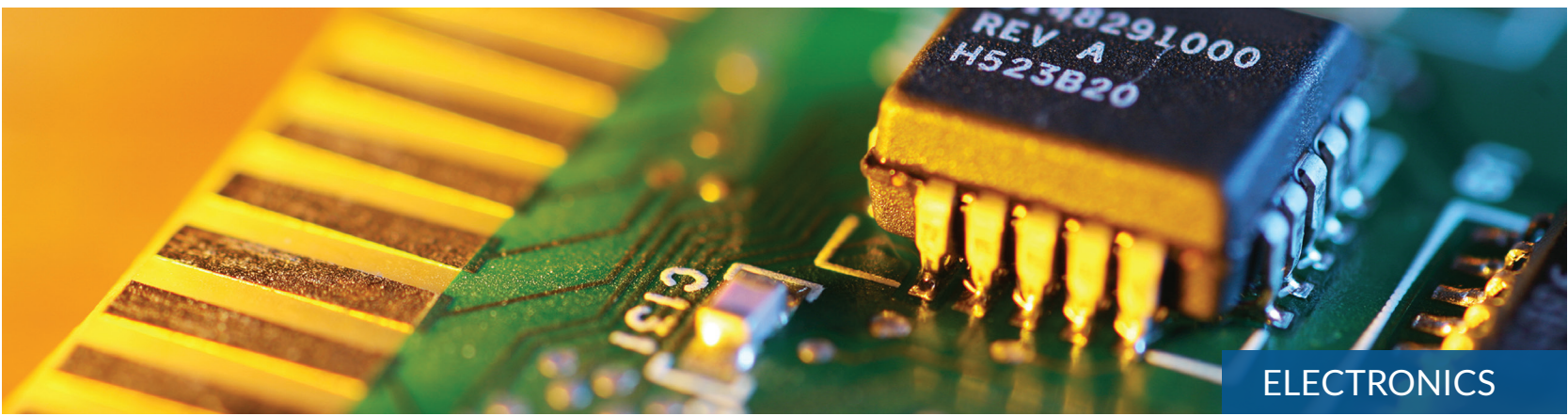
CHEMICALS



STORAGE



AUTOMOTIVE



ELECTRONICS



POWER



OIL & GAS



PUBLIC AND CIVIL BUILDINGS



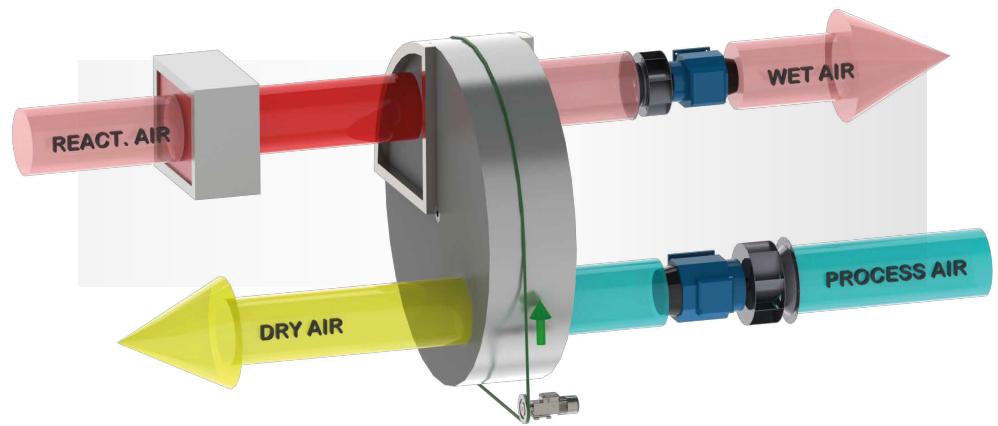
RAW MATERIALS AND RECYCLABLE



DEFENSE

Products

Adsorption Dehumidifiers



Adsorption dehumidifier technology is based on the use of naturally occurring desiccant materials (i.e. with a high level of chemical/physical affinity with water vapour), such as silica gel.

This technology makes TFT dehumidifiers suitable for use in environments where constant humidity values are required, even temperatures below 0°C, and for very low dew-point values down to -60°C dpt.

TFT Dry Air Solutions has developed the AD (Air Dry) models to satisfy all needs for dehumidification across a broad range of conditions. Highly efficient energy recovery solutions can also be integrated throughout all our product ranges.



Products

TECHNICAL DATA

ADS150-300

AD100-1250



MODEL	ADS	150	300
Capacity at 20°C - 60% RH	Kg/h	0,57	1,1
Process air flow	m³/h	150	300
Process Static pressure	Pa	100	150
Regeneration air flow	m³/h	50	100
Regeneration Static pressure	Pa	100	150
Regeneration type		Electric	Electric
Power supply	Volt/Ph/Hz	230/1+N/50 ±5%	230/1+N/50 ±5%
Maximum absorbed power	KW	0,76	1,51
Maximum absorbed current	A	4	7
L x W x H	mm	345 x 330 x 365	425 x 380 x 445
Empty weight	Kg	12	16
Process air inlet	mm	130 x 130	130 x 130
Dry air outlet	mm	Ø 100	Ø 160
Wet air outlet	mm	Ø 63	Ø 80

MODEL	AD	100	270	420	550	700	820	1250
Capacity at 20°C - 60% RH	Kg/h	0,59	0,99	1,95	2,67	2,71	4,78	6,74
Process air flow	m³/h	100	270	420	550	700	820	1250
Process Static pressure	Pa	180	210	300	270	180	160	400
Regeneration air flow	m³/h	30	50	90	120	135	210	270
Regeneration Static pressure	Pa	210	190	320	280	260	250	180
Regeneration type		Electric	Electric	Electric	Electric	Electric	Electric	Electric
Power supply	Volt/Ph/Hz	230/1/50 ±5%	230/1/50 ±5%	230/1/50 ±5%	230/1/50 ±5%	230/1/50 ±5%	400/3+N/50 ±5%	400/3+N/50 ±5%
Maximum absorbed power	KW	1,04	1,49	2,94	3,84	3,84	6,95	10,58
Maximum absorbed current	A	4,52	6,48	14,03	17,92	17,93	12,33	17,95
L x W x H	mm	435 x 500 x 436		490 x 640 x 490			611 x 680 x 720	
Empty weight	Kg	25	26	31,5	31,5	33	57	62
Process air inlet	mm	Ø 160	Ø 160	Ø 200	Ø 200	Ø 200	Ø 250	Ø 250
Dry air outlet	mm	Ø 125	Ø 125	Ø 200	Ø 200	Ø 200	Ø 200	Ø 200
Regeneration air inlet	mm	Ø 125	Ø 125	Ø 160	Ø 160	Ø 160	Ø 160	Ø 160
Wet air outlet	mm	Ø 80	Ø 80	Ø 125	Ø 125	Ø 125	Ø 160	Ø 160

Products

TECHNICAL
DATA

AD800-1100

AD1000-3100



MODEL	AD	800	1100T
Capacity at 20°C - 60% RH	Kg/h	4,8	5,0
Process air flow	m³/h	800	1100
Process Static pressure	Pa	200	300
Regeneration air flow	m³/h	250	250
Regeneration Static pressure	Pa	180	180
Regeneration type		Electric/Steam	Electric/Steam
Power supply	Volt/Ph/Hz	400/3/50 ±5%	400/3/50 ±5%
Maximum absorbed power	KW	7,0	7,1
Maximum absorbed current	A	11,2	11,6
L x W x H	mm	1000 x 600 x 1000	1000 x 600 x 1000
Empty weight	Kg	145	150
Process air inlet	mm	Ø 250	Ø 250
Dry air outlet	mm	Ø 200	Ø 200
Regeneration air inlet	mm	Ø 160	Ø 160
Wet air outlet	mm	Ø 160	Ø 160

MODEL	AD	1000	1500	2000T	2000	2500	3100T
Capacity at 20°C - 60% RH	Kg/h	8,8	12,7	10,8	15,8	18,9	11,5
Process air flow	m³/h	1000	1500	2000	2000	2500	3100
Process Static pressure	Pa	300	200	250	250	300	250
Regeneration air flow	m³/h	350	500	450	680	820	450
Regeneration Static pressure	Pa	180	250	280	180	250	250
Regeneration type		Electric/Steam	Electric/Steam	Electric/Steam	Electric/Steam	Electric/Steam	Electric/Steam
Power supply	Volt/Ph/Hz	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%
Maximum absorbed power	KW	12,6	18,9	16,1	23,9	29,0	16,6
Maximum absorbed current	A	18,4	27,5	23,8	34,8	42,5	24,3
L x W x H	mm	1285 x 845 x 1255	1285 x 845 x 1255	1285 x 845 x 1255	1285 x 845 x 1255	1285 x 845 x 1255	1285 x 845 x 1255
Empty weight	Kg	205	210	224	215	220	230
Process air inlet	mm	420 x 615	420 x 615	420 x 615	420 x 615	420 x 615	420 x 615
Dry air outlet	mm	420 x 615	420 x 615	420 x 615	420 x 615	420 x 615	420 x 615
Regeneration air inlet	mm	220 x 350	220 x 350	220 x 350	220 x 350	220 x 350	220 x 350
Wet air outlet	mm	Ø 250	Ø 250	Ø 250	Ø 250	Ø 250	Ø 250

Products

TECHNICAL
DATA

AD3000-6500 / AD7000-25000



MODEL	AD	3000	3500	4500T	4000	5000	6500T
Capacity at 20°C - 60% RH	Kg/h	23	27,3	21,1	31,7	37,2	27,1
Process air flow	m³/h	3000	3500	4500	4000	5000	6500
Process Static pressure	Pa	400	350	300	400	400	400
Regeneration air flow	m³/h	900	1100	900	1350	1600	1100
Regeneration Static pressure	Pa	200	300	300	400	350	400
Regeneration type		Electric/Steam	Electric/Steam	Electric/Steam	Electric/Steam	Electric/Steam	Electric/Steam
Power supply	Volt/Ph/Hz	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%
Maximum absorbed power	KW	32,3	38,5	30,3	48,1	57,5	40,9
Maximum absorbed current	A	46,7	55,8	43,7	69,5	83,1	60,8
L x W x H	mm	1500 x 1020 x 1395	1500 x 1020 x 1395	1500 x 1020 x 1395	1895 x 1115 x 1500	1895 x 1115 x 1500	1895 x 1115 x 1500
Empty weight	Kg	350	360	360	490	530	545
Process air inlet	mm	825 x 500	825 x 500	825 x 500	800 x 520	800 x 520	800 x 520
Dry air outlet	mm	825 x 500	825 x 500	825 x 500	800 x 520	800 x 520	800 x 520
Regeneration air inlet	mm	355 x 290	355 x 290	355 x 290	415 x 350	415 x 350	415 x 350
Wet air outlet	mm	Ø 280	Ø 280	Ø 280	Ø 315	Ø 315	Ø 315

MODEL	AD	7000	9000	12000T	11000	13000	15000T	19000	25000
Capacity at 20°C - 60% RH	Kg/h	52,9	63,7	54,7	81,8	92,0	66	131,1	162,0
Process air flow	m³/h	7000	9000	12000	11000	13000	15000	19000	25000
Process Static pressure	Pa	400	400	400	400	400	400	400	400
Regeneration air flow	m³/h	2300	2700	2300	3670	4300	2700	5500	7900
Regeneration Static pressure	Pa	400	400	400	400	400	400	400	400
Regeneration type		Electric/Steam							
Power supply	Volt/Ph/Hz	400/3/50 ±5%							
Maximum absorbed power	KW	81,4	98,7	91,7	130,7	154,7	104,2	195,2	272,7
Maximum absorbed current	A	123,5	158,6	135,5	204,3	240,8	156,4	303,2	424,5
L x W x H	mm	2350 x 1350 x 1750			3050 x 1600 x 1850			3850 x 1950 x 2150	
Empty weight	Kg	680	700	1060	1350	1390	1385	1980	2150
Process air inlet	mm	1155 x 560	1155 x 560	1155 x 560	1250 x 600	1250 x 600	1250 x 600	1500 x 800	1500 x 900
Dry air outlet	mm	1155 x 560	1155 x 560	1155 x 560	1250 x 600	1250 x 600	1250 x 600	1500 x 800	1500 x 900
Regeneration air inlet	mm	560 x 460	560 x 460	560 x 460	600 x 600	600 x 600	600 x 600	800 x 800	800 x 800
Wet air outlet	mm	Ø 350	Ø 350	Ø 350	Ø 400	Ø 400	Ø 400	Ø 500	Ø 630

Products

TECHNICAL DATA

ADP2000-9500 / ADP2002-9502



MODEL	ADP	2000	3500	5000	6500	8000	9500
Capacity at 20°C - 60% RH	Kg/h	18,6	31,1	42,5	55,9	66,0	77,1
Process air flow	m³/h	2000	3500	5000	6500	8000	9500
Process Static pressure	Pa	400	400	400	400	400	400
Regeneration air flow	m³/h	700	1200	1700	2200	2600	3100
Regeneration Static pressure	Pa	400	400	400	400	350	350
Regeneration type		Electric/Steam/Gas	Electric/Steam/Gas	Electric/Steam/Gas	Electric/Steam/Gas	Electric/Steam/Gas	Electric/Steam/Gas
Power supply	Volt/Ph/Hz	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%
Maximum absorbed power	KW	27,4	41,9	59,4	78,1	92,8	108,7
Maximum absorbed current	A	43,9	66,8	93,9	121,8	145,7	172,3
L x W x H	mm	1610 x 1000 x 1875	1710 x 1100 x 1975	1710 x 1100 x 1975	1810 x 1200 x 2075	1810 x 1200 x 2075	1810 x 1200 x 2075
Empty weight	Kg	490	550	590	690	710	730
Process air inlet	mm	850 x 500	950 x 600	950 x 600	1000 x 600	1000 x 600	1000 x 600
Dry air outlet	mm	850 x 500	950 x 600	950 x 600	1000 x 600	1000 x 600	1000 x 600
Regeneration air inlet	mm	600 x 400	600 x 400	600 x 400	600 x 400	600 x 400	600 x 400
Wet air outlet	mm	370 x 200	370 x 200	370 x 200	370 x 200	370 x 200	370 x 200

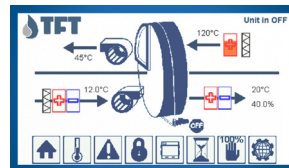
MODEL	ADP	2002	3502	5002	6502	8002	9502
Capacity at 20°C - 60% RH	Kg/h	16,0	28,7	38,2	50,7	58,8	66,9
Process air flow	m³/h	2000	3500	5000	6500	8000	9500
Process Static pressure	Pa	400	400	400	400	400	400
Regeneration air flow	m³/h	700	1200	1700	2200	2600	3100
Regeneration Static pressure	Pa	400	400	400	400	400	400
Regeneration type		Electric/Steam/Gas	Electric/Steam/Gas	Electric/Steam/Gas	Electric/Steam/Gas	Electric/Steam/Gas	Electric/Steam/Gas
Power supply	Volt/Ph/Hz	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%
Maximum absorbed power	KW	25,9	45	64,1	77,1	97	114,7
Maximum absorbed current	A	38,7	71,4	94,4	113,4	142,5	169,4
L x W x H	mm	1650 x 1000 x 1875	1750 x 1150 x 1975	1750 x 1150 x 1975	1850 x 1250 x 2075	1850 x 1250 x 2075	1850 x 1250 x 2075
Empty weight	Kg	470	530	570	670	690	710
Process air inlet	mm	850 x 500	950 x 600	950 x 600	1000 x 600	1000 x 600	1000 x 600
Dry air outlet	mm	850 x 500	950 x 600	950 x 600	1000 x 600	1000 x 600	1000 x 600
Regeneration air inlet	mm	600 x 400	600 x 400	600 x 400	600 x 400	600 x 400	600 x 400
Wet air outlet	mm	370 x 200	370 x 200	370 x 200	370 x 200	370 x 200	370 x 200

One PLC for any applications

Our units can be manufactured in different configurations to fully satisfy our customer's needs. Thanks to the modular nature of our pre and post treatment sections, we can achieve many different combinations, all of which are controlled and operated by our on-board PLC (HMI).

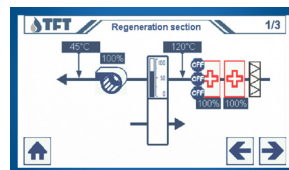


Standard Unit



HOME

The homepage shows the general operating status of the unit. Inlet and outlet for both process and regeneration airflow, filter status and alarms. The humidity of the process air is controlled by the PLC and displayed as either Relative Humidity (RH%), Absolute Humidity (g/Kg) or Dew-Point (Tdp°C).

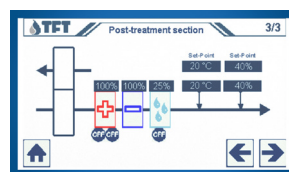


REGENERATION SECTION

A section dedicated to the regeneration air. The HMI shows information such as regeneration temperature, wet air outlet temperature and power utilization rate.



Unit with Post-Treatment

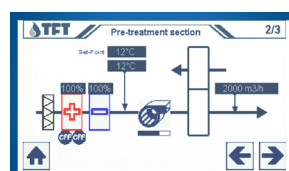


POST-TREATMENT SECTION

A section dedicated to the post-treatment of the process air. The HMI shows the configuration of the unit according with the installed accessories, such as cooling, heating and humidification, with more options available on request.



Unit with Pre and Post-Treatment



PRE-TREATMENT SECTION

A section dedicated to the pre-treatment of the process air. The HMI shows the configuration of the unit according with the installed accessories, such as cooling, heating, different air volumes, or others on request.



TECNOFRIGO TUSCANY s.r.l.

Via J.F.Kennedy, 25/27/29
Z.Ind. "Fontanelle" Capanne
56020 Montopoli Val D'Arno (PI) - Italy

Phone: + 39 0571 467351

Fax: +39 0571 469217

Email: info@tftdryair.com

www.tftdryair.com