



DRYING

VISMEC DRYPLUS and DRYWELL

GIVE IT A DRY!!



FEEDING



DOSING



STORAGE





DRYING

VISMEC Give It a Dry !!



FEEDING

“ WE recently installed two of VISMEC’s rotor wheel driers alongside our existing Twin-bed dessicant driers. We have found through our own analysis, that as well as not requiring chilled water or compressed air, that VISMEC’s rotor wheel drier uses 45% less energy”

Simon Smith, UK Purchase Manager



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VISMEC Dryer range

Vismec today with more than 700 dehumidifier dryers produced per year and more than 4000 dehumidifier dryers working in the field is the biggest producer of honeycomb dryers in Europe.



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VISMEC dryers in all different versions can successfully cover all kind of applications from the smallest dryer in word the DP014 normally used for technical application capable of production down to 2 Kg/h to the DP3500 capable of a production of 2400 Kg/h.



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VISMEC dryers can be divided in 4 different application categories:

1. Standard Injection moulding **DP and DW series**
2. PET Applications for preform and extrusion **VISPET series**
3. Medical and Pharmaceutical division **VISMED series**
4. Bioplastic application **VISBIO series**



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Bioplastics are plastics derived from renewable biomass sources, such as vegetable fats and oils, corn starch, or microbiota. Bioplastic can be made from agricultural byproducts and also from used plastic bottles and other containers using microorganisms. Bioplastics can be composed of starches, cellulose, biopolymers, and a variety of other materials.

All the bioplastic or biopolymer in general has one common characteristic, are hygroscopic and require a low processing temperature.

VISMEC VISBIO dryers are specifically designed to be suitable for these materials the minimum processing air process is 10 °C above the ambient temperature and are totally chilled water free



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VISMEC VISMED dryer are designed to work inside cleaning room ISO 7. Today no dryer in the market is capable to this, normally competitors have to install the dryers outside and convey the dried material inside.

VISMED advantages

1. Cheaper solution no double conveying it is required
2. Drying on the machine guarantees better performance on the material, no heat loss and no contamination
3. Reduced contamination on the material
4. Easier sanitation process, the machine has been tested with all the sanitation products
5. All the components including flexible hoses are in stainless steel

VISMED dryers are available in a range from 14 cm/h to 250 cm/h



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VISMED cleaning room test



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Material	Dryer Location	Dry Temp	Date and time	PPM Test Locations and results					
				Front	Right	Back	Left	Top	Exhaust
Empty	Non-Clean room production Floor High Traffic	0	10-29 10:00am	22300	21940	21940	23120	23120	71480
Clear Poly Carb		120	10-29 10:27am	36380	34240	65130	329970	471550	329800
Clear Poly Carb		120	10-29 12:49am	26090	26610	25350	26970	46270	58100
Clear Poly Carb		120	10-29 2:16am	125660	117190	107960	96920	96120	8520
Empty	Non Clean room Utility Hallway for the Clean room 0-no traffic	0	11-3 7:30am	7540	6850	7720	7810	9810	9820
Clear Poly Carb		0	11-3 7:50am	While Loading Dryer With Material 12360ppm					
Clear Poly Carb		120	11-3 8:20am	7480	6680	8360	8900	8530	7280
Clear Poly Carb		120	11-3 11:21am	9580	10220	9300	8920	8710	10220
Clear Poly Carb		120	11-3 12:52pm	11160	11990	12400	12280	11860	11790
Clear Poly Carb		120	11-3 2:20pm	16770	16810	17410	16340	17270	15400
Empty		0	11-4 7:14am	4820	4940	6470	5430	5370	6440
Santoprene		80	11-4 8:15am	4720	5710	6160	7680	5900	6230
Santoprene		80	11-4 12:50am	12180	12750	11050	9610	10620	7510
Empty		0	11-10 10:44am	10640	10810	11420	9910	10460	11930
Ultem	Clean Room Equipment Transfer Room Low traffic		11-10 11:31am	12170	13040	12760	11970	11400	10180
Ultem		150	11-10 2:01pm	10370	10720	11140	10790	9200	10100
Empty		0	11-17 7:30am	3020	1740	3430	1910	4030	2900
Clear Poly Carb		120	11-17 8:02am	2000	3650	2030	3090	4630	1630
Clear Poly Carb		120	11-17 11:00am	4180	7160	7170	5520	6430	4070
Clear Poly Carb		120	11:17 1:20pm	1150	1940	1040	740	2550	580

- 1) Customer 1 did actual particulate generation study as how much the dryer creates particulate in cleanroom environment and the data came back excellent showing on several resins that the dryer function well within the ISO 7 environment!
- 2) Customer 2 has done a comparison on Energy consumption against a competitor's dryer and has proven better both on energy and cleanability than that other dryer as well
- 3) Customer 3 then compared the dry for the ability to dry resin compared to a compressed dryer and beat it by 45 minutes on up-time drying the resin 45 minutes faster than the competitor.



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VISAEC
leading innovation | MED + OPT



VISAEC
leading innovation | MED + OPT

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leading innovation | MED + OPT

VISAEC
Leading Innovation



DRYING

VISPET

VISPET dryers are equipment specifically developed to produce PET preform.

These machines have outstanding performance in terms of energy savings, we can guarantee an energy consumption of 72 w/Kg of dried material. The exclusive system which automatically adjusts the process air on the material consumption guarantees always the best process optimization

VISPET advantages:

1. Automatic air flow regulation based on the real time material consumption
2. Antistress to protect the dried material
3. Low energy consumption 72 w/Kg of dried material
4. Flat and constant dew point
5. Adjustable dew point on the fly
6. Chilled water and compressed air free
7. Production lot control



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PET adapting system



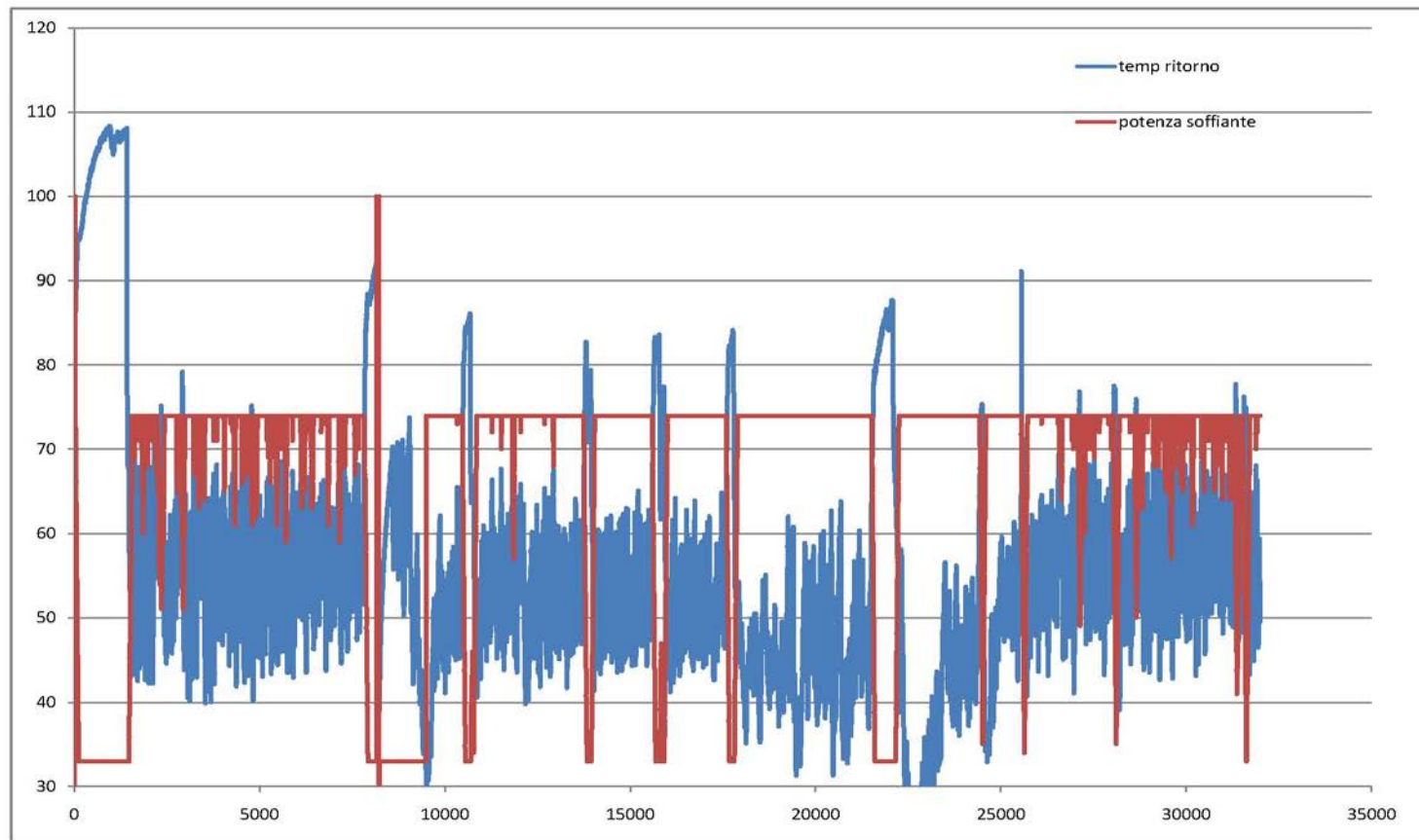
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Application flexibility, less dust, energy-efficient



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Designed for flexibility, the VISMEC Dryer can be used with a large variety of materials, with a delivery air temperature range of 55 - 180° C (131 - 356° F). The delivery air blower automatically adjusts airflow based on application throughput, which saves energy and makes drying more efficient. In addition to being more energy-efficient than compressed air and twin-tower dryers, the VISMEC does not create the dust that twin-tower desiccant beds produce. This makes the VISMEC Dryer perfect for medical and applications that require clean operation.



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Easy setup with built-in material database

Changing from one mold or production setup to another is quick and easy.



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The VISMEC Dryer has a built in material database. Simply select the material type from the list, set your desired rate, and the dryer performs all the necessary calculations for optimum dryer settings.



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In addition to the up to 30 pre-set materials, user material settings can be saved as well.



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DRYING

Easy to maintain

The DP and DW Series requires no cooling water or compressed air.



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Gaining access to the interior of the dryer is quick.



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Filters are easily maintained and the reliable gear drive of the desiccant rotor is maintenance free.



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Unique drier for small technical production



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Previously, small drying jobs would require a dryer and hopper that were oversized for the processing machine, using excess energy and wasting material or hopper space.



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Some small drying solutions were previously offered only with twin-tower drying or compressed air. VISMEC continued success with reliable desiccant wheel drying led to this new, better solution.

In comparison with twin-tower drying, the VISMEC Dryer dryer can provide 40% energy savings.



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The VISMEC Dryer dryer features a four-stage circuit for lower, and adjustable dewpoint. Each dryer can be configured with a hopper sized to best fit your application. The DP014 models are available with 6 – 30 l hoppers. The DP025 models are available with 30 - 60 l hoppers.

Those solution are unic in the market



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VISMEC exclusive 4 stage circuit

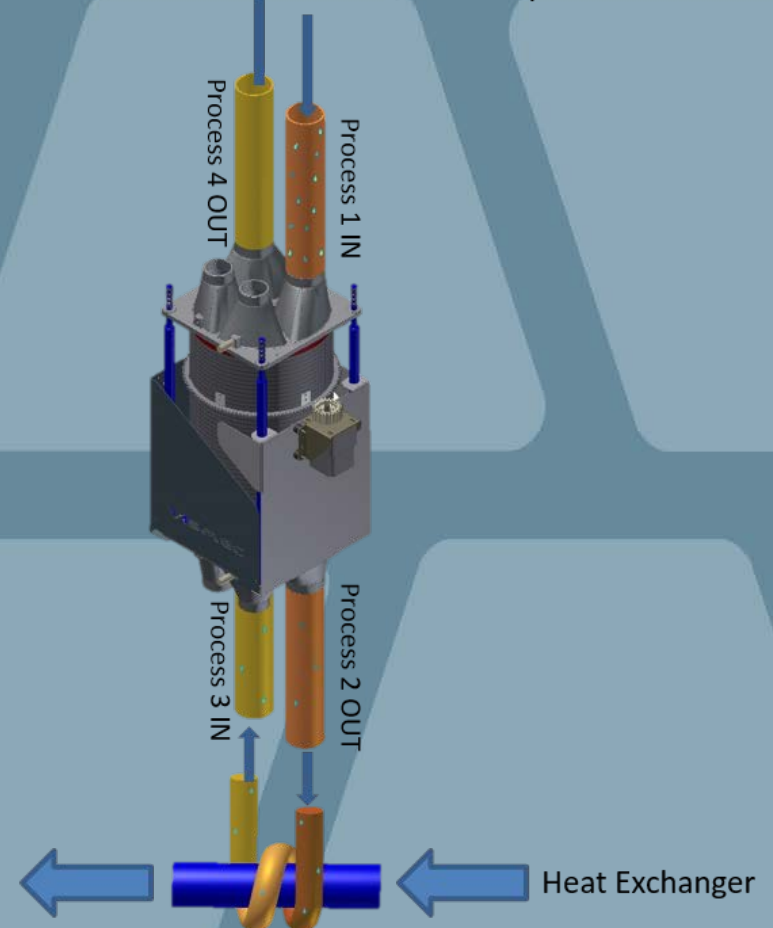
The exclusive patented 4 stage circuit gives the following advantage.

1. Lower Dew point
2. More energy optimization
3. Less thermal stress on the desiccants
4. 5 years warranties

The exclusive 4 stage circuit it is available from the 50 cm/h dryer up.

Dry air going back to the material

Wet air from the process material





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Adjustable airflow control



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VISMEC dryers in all range are equipped with an adjustable air flow control for the process air this can be done in two ways:

1. By switching the control mode in manual
2. By switching the control mode in advanced



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1- Manual mode

In this mode the operator manually set up all the main drying parameters like:

- Process air temperature
- Dew point
- Drying time (Safety loading system SLS)
- Process airflow



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It's recommended for new material production and laboratory tests because the operator can control all the process parameters



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Manual mode setting



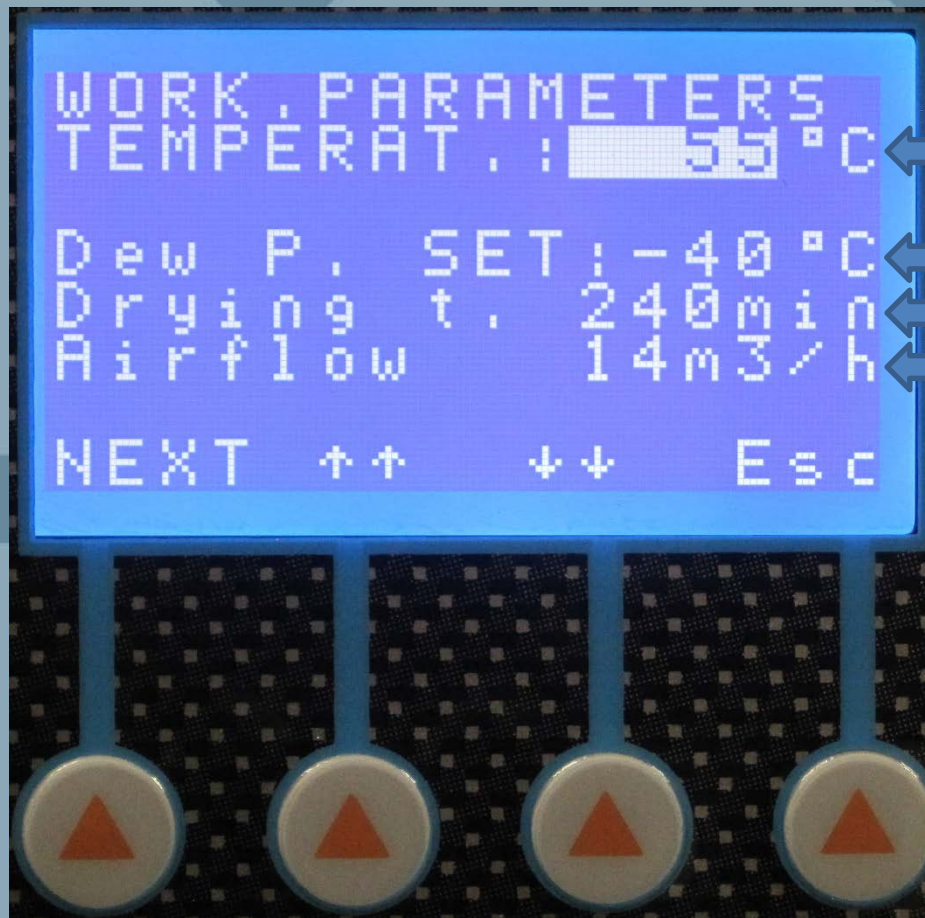
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Air temperature

Dewpoint set

Drying time

Airflow



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2- Advanced mode



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In this modality the operator can use one of the preset material drying recipes or building his own recipe according with the resin supplier.



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Either way once selected the desired material the operator only needs to set the material consumption and the VISMEC dryer set all the process parameter by himself

It's recommended for routine drying operation and with strict material drying specification



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Advanced mode setting



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Material recipe number

Recipe name

Drying time

Material consumption



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Smart Mode

Built-in intelligence to protect your material

VISMEC Dryer incorporates intelligent processing technology. The dryer features a SMART MODE system which detects when material is not being used and places the dryer in a stand-by mode, reducing the delivery air temperature until material demand is sensed.



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How Smart Mode works



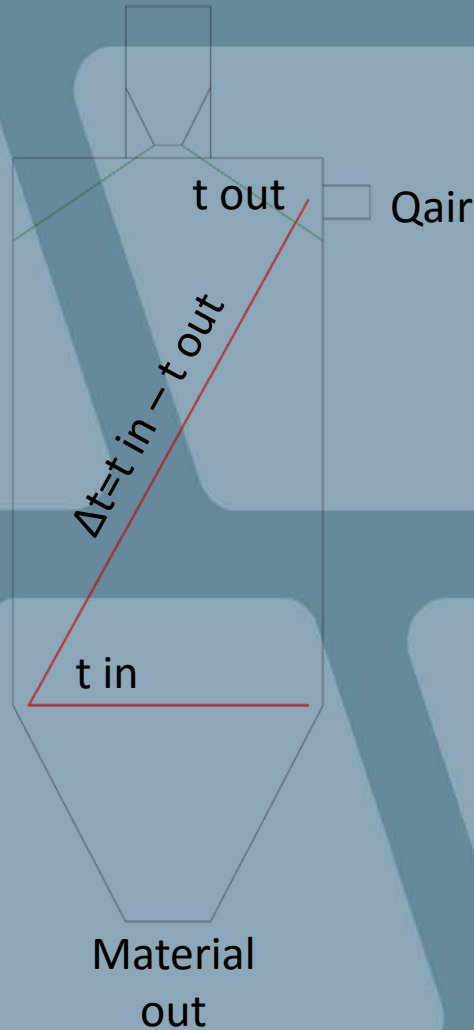
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VISMEC dryer keeps monitoring those processing parameters

1. Quantity of process air
2. Process air temperature
3. Return air temperature

The algorithm adjusts those parameters to keep the Δt constant.

If for any reason the material consumption increases, t_{out} will be reduced therefore a raise of process air Q_{air} will compensate the material consumption addition

Opposite if there is a decrease of material consumption consequently T_{out} will raise therefore a reduction of process air Q_{air} will compensate the material consumption reduction



DRYING

Smart Mode + Antistres

What is happening when the dryer is left on working with no material consumption?

What is happening if the IMM or the extruder going in maintenance and the dryer still running?

This is what will happen



Material after normal drying time



Material burns or oxidates due to an over drying



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Smart Mode + Antistress

With VISMEC dryers no more material scrap due to over drying, the VISMEC SMART MODE will kick in in time and preserve the material



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Material after the drying time



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Material burns or oxidates
due to an over drying



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Safety loading System SLS



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Safety Loading System SLS



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The safety loading system SLS basically prevents to use undried material.

The control knows how many hours the material need to be dried. When a new material starting the drying process a countdown showing on the dryer display how many minutes before the material it is ready.

When the drying time has expired the dryer if equipped with pneumatic slide gate releases the material.



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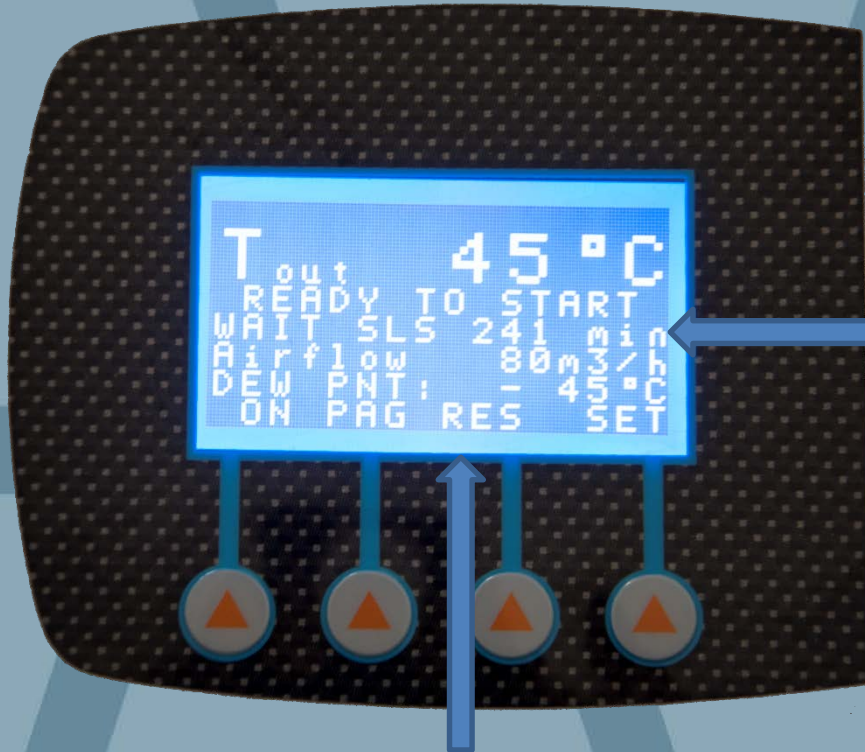


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Safety Loading System SLS in action



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Time before the material is dried



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The supervisor with his password
can reset the SLS



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Dew Point control



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VISMEC dryers in all range have the possibility to adjust the dew point level but why?

1. **Energy reason:** a dew point of $-50\text{ }^{\circ}\text{C}$ cost 3 times more that a dew point of $-40\text{ }^{\circ}\text{C}$
2. **Chemical reason:** Drying the material to the extreme creates some stress on the polymer molecular bonds
3. **Process reason:** Some ppm of moisture left on the polymers works as a lubricant during the injection process



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Dew point stability

Another fundamental advantage by using VISMEC Dryer is the DEW POINT stability.

Typically all the competitor's dehumidifiers based on twin tower technology has variations of dew point during the process and cannot be avoided.

Variations of DEW POINT give to the material variation of finally moisture left on the material treated, therefore the transforming process can't rely on constant and standard performances this can create inconstant production condition.

Some of the competitors solve this by mixing ambient air with the process air in order to flat down the dew point.

Only with VISMEC driers the customer can rely on constant and flat DEW POINT which can guarantee constant production conditions



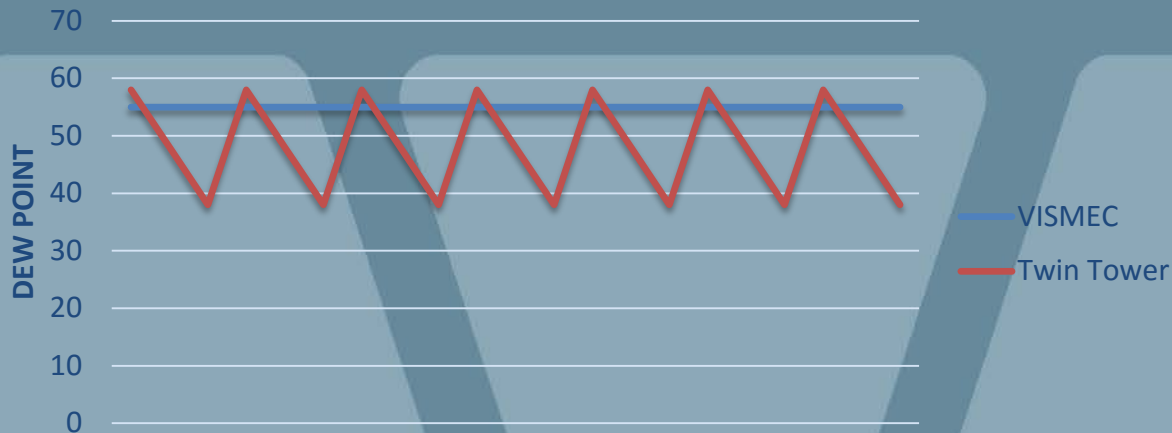
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Pay Back



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All ranges of VISMEC dryers have a notorious quick payback.



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During normal operations Vismec Dryers are between 35% and 40% cheaper in terms of energy consumption this makes the VISMEC system great.

BUT.....



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Extra Pay Back

What about if on the top of it we try to estimate the benefit that you have by considering:

1. The energy saved during the normally drying process
2. The energy saved when the smart mode kick in
3. The energy saved because of the dew point optimization



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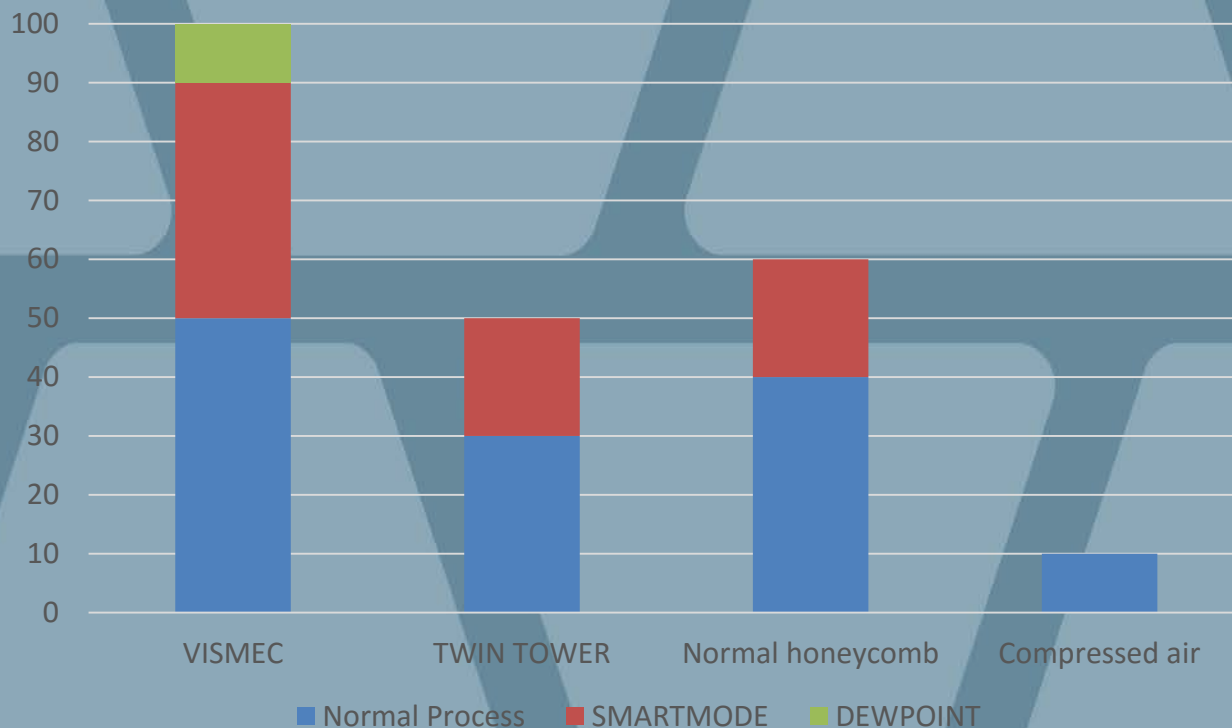


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Energy optimization





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Energy Monitoring

Because of the extraordinary energy saving VISMEC is the only dryer producer which as a standard feature has the energy consumption monitoring.

This feature allows the customers to track the energy cost and see in real time the energy consumption of all the single dryer parts.



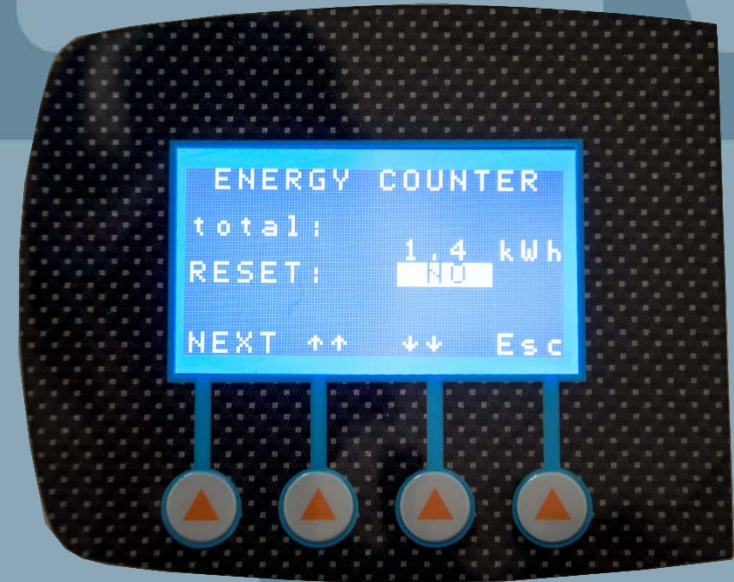
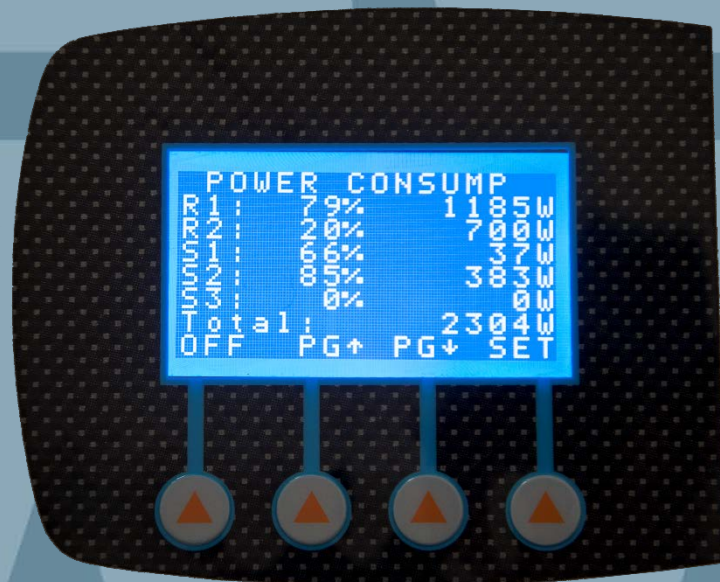
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Dryer remote control

All VISMEC devices and in particular the dehumidifiers can be fully controlled remotely through the VISMEC webserver.

With this technology will be created a network of dehumidifiers all linked together. The system in background memorizes every second all the process parameters and store in a Microsoft SQL database.



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ADVANTAGES

1. No software has to be installed anywhere
2. Compatibility with IOS, Android, Windows basically any web browser html 5.0 higher
3. Open sharing data, all the data are accessible from external MRP
4. All the data can be selected, filtered and immediately ready in excel file format
5. Every configuration used in the past can be recalled for quality analysis



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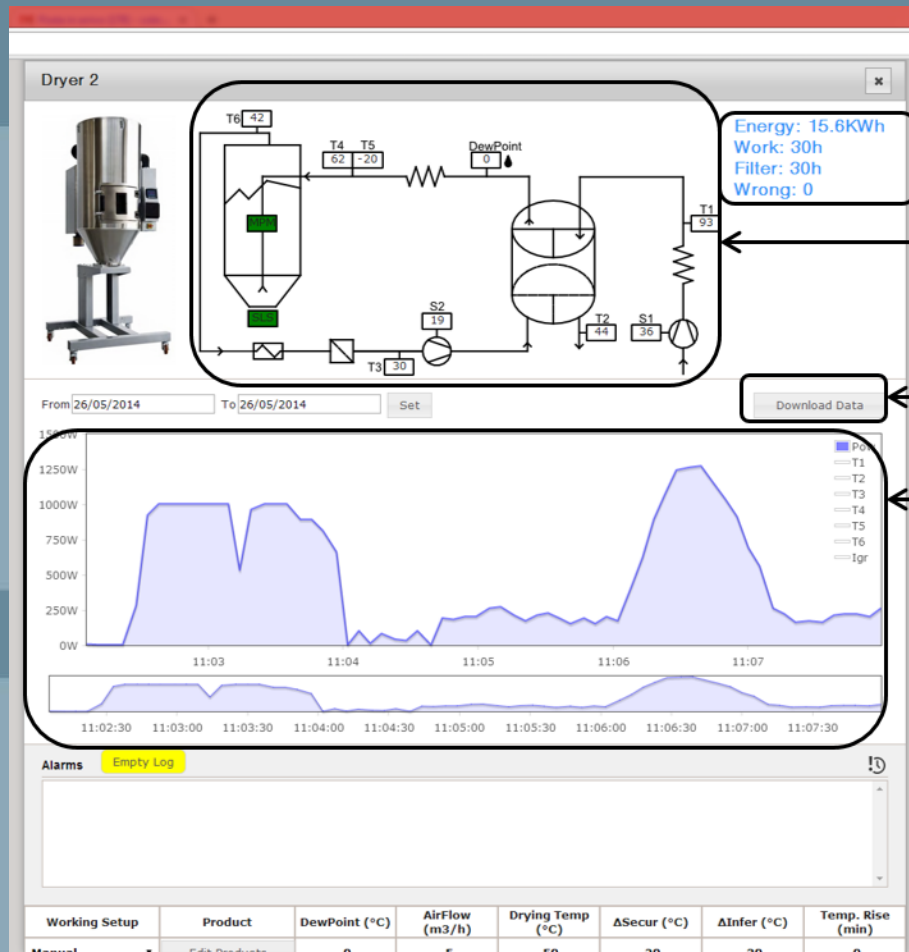
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Machine counter menu

All the main parameter of the process are shown on here

Button for data download

Graph part, all the main data can be quickly analyzed can be shown Process temperature, energy consumption and dew point



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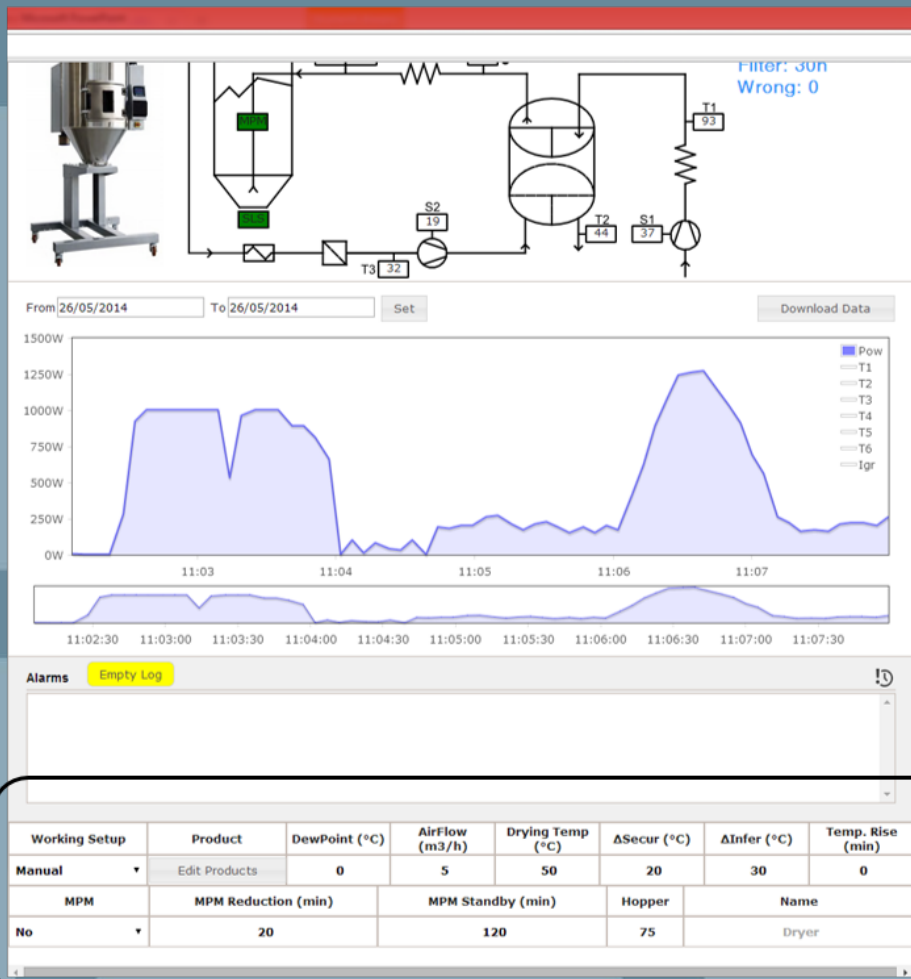
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← In here it is possible to modify the dryer working parameters



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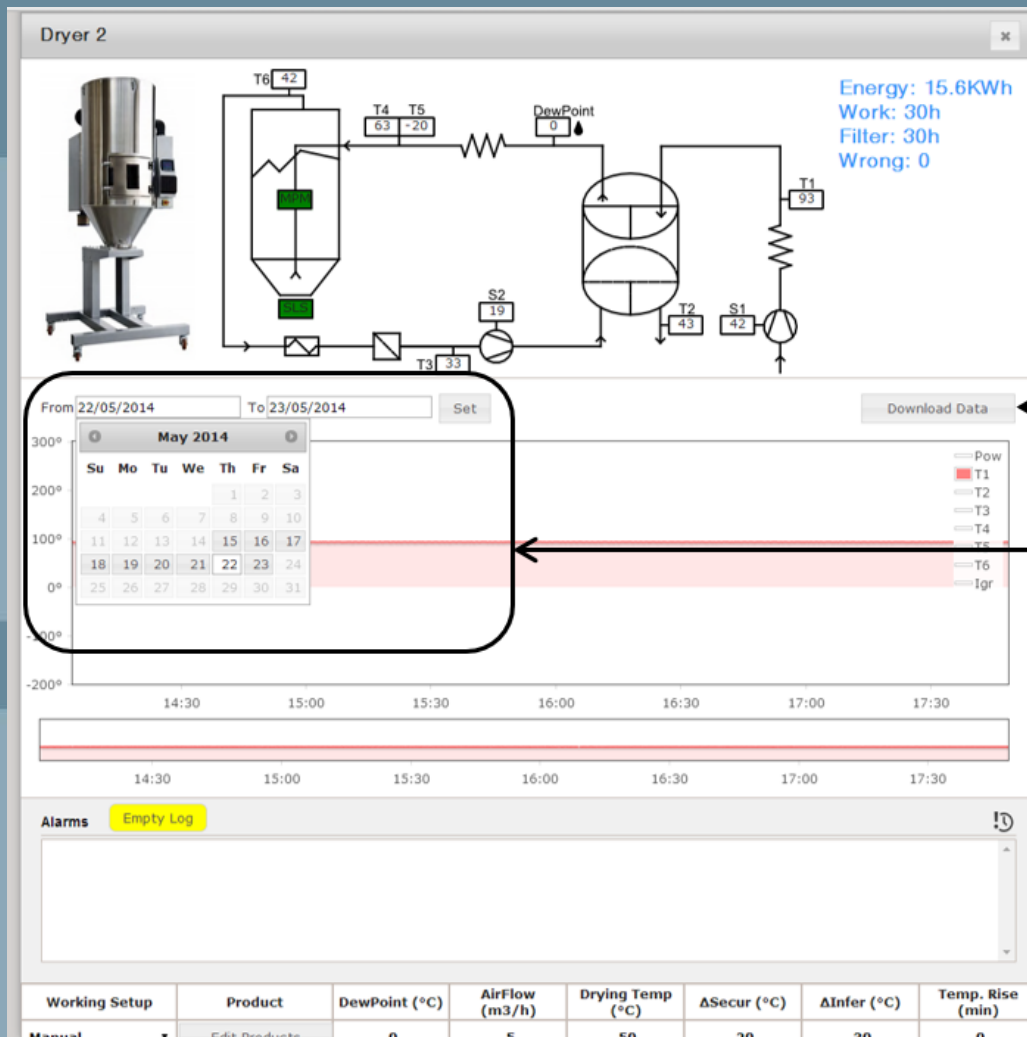
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Data download button

Data range selection



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Dehumidifier Sizing

Data for sizing:



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Type of plastic granules;

- Hygroscopic or not hygroscopic (Dehumidifying dryer or Hot air dryer?)
- Attention to materials that release vapours or fumes (e.g. acetalics), dusty or charged
- Processing machine throughput (kg/h);
- Initial and final humidity (conditions of raw material supply); necessary/required Dew Point to dry material;
- Type of application required (directly onto or by the processing machine);
- % of Regrind material;
- Type of final product;
- Voltage and frequency;
- Ambient conditions.



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Sizing the Dehumidifying/Hot air dryer:

Main data:

- Hourly throughput of the processing machine (kg/h)
 - *Type of raw material
 - *Drying temperature
 - *K factor (m^3/kg) referred to the material

processed

** see materials technical chart*

Estimate of the necessary process airflow:

Dryer's throughput (m^3/h) = $\text{kg/h} \times \text{K factor}$ (m^3/kg).

Drying temperature:

Dryer in the

MT version up to 150°C.

HT version up to 200°C.

To select the model see the dryer technical chart



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Sizing Example

Customer requirement

Hourly throughput of the processing machine 65 (kg/h)

Material: Polycarbonate PC

PC “K” factor 2 m³/kg

Drying temperature 120 °C

Calculation

Production kg/h x “K” 65 x 2 = 130 m³/h

The correct Dryer is **DP or DW 160**



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Hopper's Sizing

2 – Sizing the Drying hopper:



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Main data:

- Type of plastic granules;
- Bulk density PSA(kg/dm³);
- *Material drying/residence time (h)

** see materials technical chart*



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**Drying hopper (volume dm³/litre) = kg/h x Residence Time (h) /
PSA bulk density (kg/dm³)**

To select the model see the hopper technical chart.

(Independently from the result, please check that the dryer-hopper coupling is correct).



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Hopper's Sizing



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Throughput of the processing machine (kg/h Material: Polycarbonate 65 PC

Bulk density (PSA) of the PC: 0,65 kg/dm³

Drying time: 2÷3 hours



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Calculation:

Throughput x Drying time/ PSA = $65 \times 3 / 0.65 = 300$ dm³

The choice will be: Hopper **H300**



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Other important notes:



Consider the type of application required (directly onto/by the processing machine);

Dried material transport etc...

We also recommend:

For the hopper onto the processing machine, check that there is one unloading device or include one of our discharge bases.

For the hopper beside the processing machine, check if it is necessary:

- Frame?
- Suction valve?
- Residence hopper to be installed onto the machine feeding inlet?
- Pipe cleaning valve?
- Closed loop transport system?



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Range of dehumidifier for standard application



VISMEC DRYERS		DP014	DP025	DP050	DP080	DP160	DP250	DW050	DW080	DW160	DW250	DP400	DP630	DP900	DP1200	DP1700	DP2500	DP3500
Process air flow	Min cm/h	3	6	20	30	75	120	20	30	75	120	180	300	340	450	900	1200	1800
	Max cm/h	14	25	50	80	160	250	50	80	160	250	400	630	900	1200	1700	2500	3500
Regeneration air flow	Min cm/h	1,5	3	5	10	10	10	5	10	10	10	60	80	70	70	240		
	Max cm/h	5	10	15	60	60	90	15	60	60	90	150	240	340	450	600		
Min Processing Temperature	°C	50	50	50	55	55	55	55	55	55	55	55	55	55	55	55	55	55
MAX Processing Temperature Standard	°C	185	185	185	185	185	150	185	185	185	150	150	150	150	120	120	120	120
Temperature HT	°C	*	*	*	*	*	185	*	*	*	185	185	185	185	185	185	185	185
DEWPOINT	°C	-40	-40	-50	-50	-55	-55	-55	-55	-55	-55	-60	-60	-60	-60	-60	-60	-60
Process power heat MT	KW	0,45	1	2,5	3,5	7	7	2,5	3,5	7	7	14	21	35	42	56		
Process power heat HT	KW	0,45	1	2,5	3,5	7	14	2,5	3,5	7	14	21	35	42	56	77		
Regeneration power heat	KW	0,45	1	1,5	1,5	3,5	3,5	1,5	1,5	3,5	3,5	7	10,5	14	21	28		
Blowers and power supply power	kW	0,05	0,07	0,21	0,52	1,62	2,41	0,21	0,52	1,62	2,41	3,91	6,78	9,7	14,9	22,2		
Total installed power MT	kW	0,95	2,07	4,2	5,5	12,1	12,9	4,2	5,5	12,1	12,9	24,9	38,3	58,7	77,9	106,2		
Total installed power HT	kW	0,95	2,07	4,2	5,5	12,1	19,9	4,2	5,5	12,1	19,9	31,9	52,3	65,7	91,9	127,2		
Voltage		1 phase 240V 50/60 Hz	1 phase 240V 50/60 Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3 phase 400V 50/60Hz	3 phase 400V 50/60Hz	3 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz
Amperage MT	A	4,2	9,1	10,42	11,3	32	24,7	10,42	11,3	32	24,7	46,22	69,7	113	153,6	214,7		
Amperage HT	A	4,2	9,1	10,42	11,3	32	35,3	10,42	11,3	32	35,3	56,86	91	123,6	175	246,6		
Dimensions	A [mm]	205	305	345	345	555	555	535	535	790	790	650	650	1100	1100	1165		
	B [mm]	560	660	690	690	950	950	375	420	530	530	1200	1200	1715	1715	2090		
	H [mm]	370	450	760	760	1185	1185	805	805	1170	1170	1575	1575	2200	2200	2245		
Inlet / Outlet hose	[mm]	50/38	38	50	50	63,5	63,5	50	50	63,5	63,5	114	114	159	159	220		
regeneration diameter	[mm]	38	38	38	38	50	50	35	38	50	50	63,5	63,5	2x63,5	2x63,5	3x63,5		
Weight	KG	15	27	46	47	137	145	52	55	119	152,5	271	276	604	659	945		



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Range of dehumidifier for PET application



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VISMEC DRYERS		VISPET 630	VISPET 900	VISPET 1200	VISPET 1700	VISPET 2500	VISPET 3500
Process air flow	Min cm/h	300	340	450	900	1200	1800
	Max cm/h	630	900	1200	1700	2500	3500
Regeneration air flow	Min cm/h	80	70	70	240	320	500
	Max cm/h	240	340	450	600	800	1200
Min Processing Temperature		80	80	80	80	80	80
MAX Processing Temperature Standard	°C	190	190	190	190	190	190
Temperature HT		*	*	*	*	*	*
DEWPOINT	°C	-60	-60	-60	-60	-60	-60
Process power heat MT	KW						
Process power heat HT	KW	35	42	56	84		
Regeneration power heat	KW	10,5	14	21	28	119	168
Blowers and power supply power	kW						
Total installed power MT	kW						
Total installed power HT	kW	55	68	95	132	195	264
Voltage		3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz
Amperage MT	A						
Amperage HT	A						
Dimensions	A [mm]						
	B [mm]						
	H [mm]						
Inlet / Outlet hose	[mm]						
regeneration diameter	[mm]						
Weight	KG	330	720	720	1000	1350	1600



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Range of dehumidifier for special applications



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VISMEC DRYERS		DP0300D	VISBIO 014	VISBIO 025	VISBIO 050	VISBIO 080	VISBIO 160
Process air flow	Min cm/h	6	3	6	20	30	75
	Max cm/h	30	14	25	50	80	160
Regeneration air flow	Min cm/h	3	1,5	3	5	10	10
	Max cm/h	10	5	10	15	60	60
Min Processing Temperature		55	35	35	35	35	35
MAX Processing Temperature							
Standard	°C	185	90	90	90	90	90
Temperature HT		*	*	*	*	*	*
DEWPOINT	°C	-55	-40	-40	-50	-50	-55
Process power heat MT	KW	1	0,45	1	2,5	3,5	7
Process power heat HT	KW	1	0,45	1	2,5	3,5	7
Regeneration power heat	KW	1	0,45	1	1,5	1,5	3,5
Blowers and power supply power	kW	0,07	0,05	0,07	0,21	0,52	1,62
Total installed power MT	kW	2,1	0,95	2,07	4,2	5,5	12,1
Total installed power HT	kW	2,1	0,95	2,07	4,2	5,5	12,1
Voltage		2 phase 240V 50/60 Hz	2 phase 240V 50/60 Hz	2 phase 240V 50/60 Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz	3+1 phase 400V 50/60Hz
Amperage MT	A	9,1	4,2	9,1	10,42	11,3	32
Amperage HT	A	9,1	4,2	9,1	10,42	11,3	32
Dimensions	A [mm]	305	205	305	345	345	555
	B [mm]	690	560	660	890	890	1150
	H [mm]	640	465	655	760	760	1185
Inlet / Outlet hose	[mm]	38	50/38	38	50	50	63,5
regeneration diameter	[mm]	38	38	38	38	38	50
Weight	KG						



DRYING

HALO



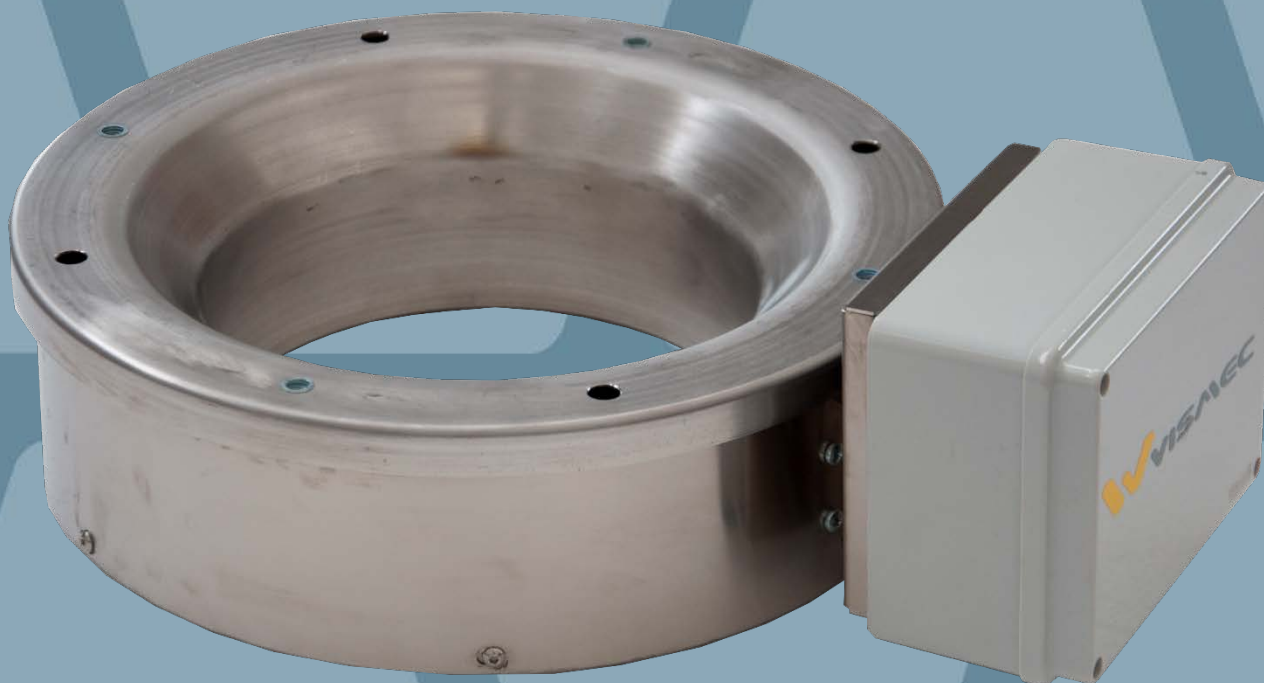
FEEDING



DOSING



STORAGE





DRYING

VISMEC HALO

The new Vismec **HALO** consists in a device installed under the receiver which measures all the material that is passing through.

Main features:

1. Counting the quantity of material the receiver is conveying:

Through the supervisor it is graphically possible to see how many kg or tons of material has been conveyed through the receiver, the quantity it is stored in a Microsoft SQL database: therefore it can be selected all the production for every receiver, for example the plant manager can check how much material has been used in a certain shift or production lot back to 6 months before. We give the full control of the material. The data can be exported in excel file.

2. Production control:

The system determinates in real time the consumption of every receiver therefore if the receiver is feeding the dryer's hopper it can be set the maximum drying capacity of the dryer and if for any reason the system detects that I'm using more material than the drying capacity a warning will appear . No more undried material will be processed again.

3. Totalizer:

A quantity of material can be set, for example the customer wants to produce 2 tons of material and then stop, this value can be set on the system and the receiver after having conveyed 2 tons of material will stop, a countdown and a graphic bar are showing how much material is left before stopping and show how many minutes before to reach the target of 2 tons . The hopper or the bin will be already empty so no more time for material drainage. If connected with the automatic manifold the changing between polymers will be automatically.

4. Dryer control

HALO when installed on the hopper loader constantly monitors the material consumption and adjusts the dryer airflow accordingly. The system also monitors that it's not used more material than the dryer maximum capacity. NO MORE UNDRYED MATERIAL WILL BE USED

Halo can be integrated in the VISMEC Visnet system for a complete material handling; all the data are stored in a Microsoft SQL database and recalled for future quality report or data analysis. The fully production history will be available any time.



FEEDING



DOSING



STORAGE



DRYING

HALO operation



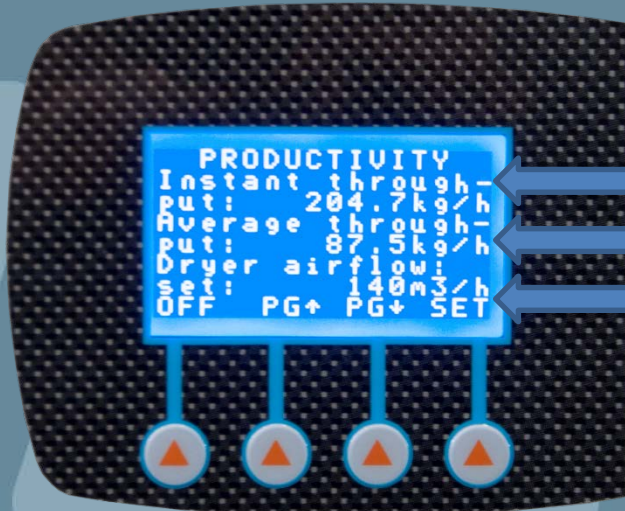
FEEDING



This display the running HALO operation



DOSING



Real time material consumption

Average material consumption

Dryer airflow set



STORAGE



HALO Vs. Hopper load cell

Advantages:

1. Accuracy: the data accuracy it's 60% higher
2. More flexibility: HALO can be retrofitted to existing system
3. Data sharing: When connected in a VISNET network flux sharing the data with the central material database
4. HALO can be connected to existing central feeding system without any issue





DRYING

TTY interface

TTY interface allow the drier to be controlled by the IMM control panel

- 1. Turning ON an OFF the dryer using the IMM control
- 2. Setting of Drying temperature from the IMM to the dryer
- 3. Feedback of actual drying temperature from the dryer to the IMM
- 4. Setting of desired drying time from the IMM to the dryer (SLS?).
- 5. Feedback (display) of remaining drying time from the dryer to the IMM
- 6. Alarm signals from dryer to the IMM
- 7. Setback temperature (similar MPM), that means when machine is not running, dryer goes to a reduced temperature which can be set at the control of IMM



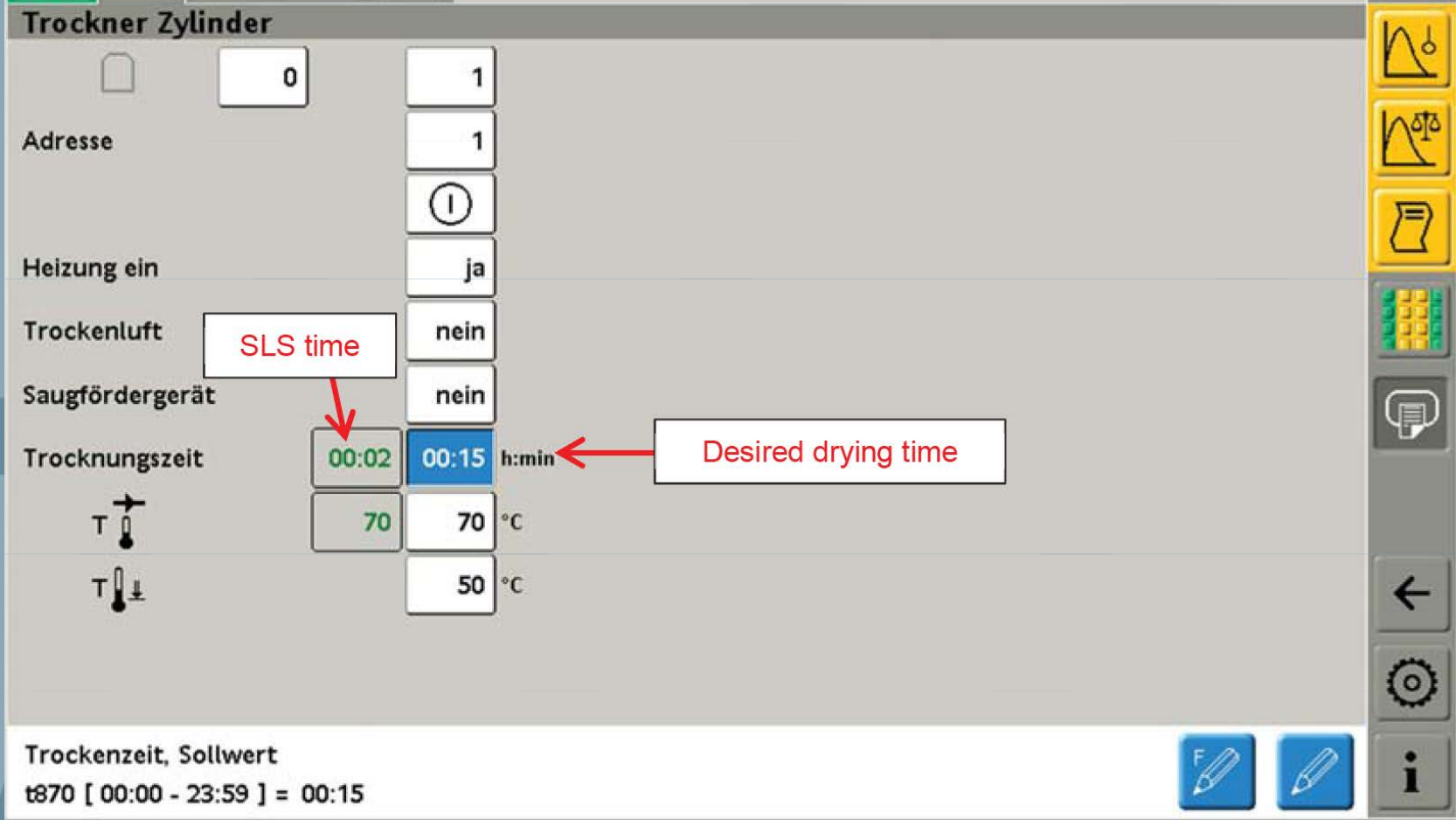
FEEDING



DOSING



STORAGE





ARBURG

25.753 cm³ 0.000 cm³ 0 bar 0.00 s

Trockner Zylinder

Adresse	0	1	1
Heizung ein		ja	
Trockenluft		nein	
Saugfördergerät		nein	
Trocknungszeit	00:04	00:20	h:min
T	60	70	°C
T		60	°C

Actual reduced temperature

Desired setback temperaturer

Heizung ein
f8502 [nein / ja] = ja

08.05.2015 10:52:45 Programmname=nocool abs

DRYING

ARBURG

f9397 Trockner t870 Trocknungszeit noch aktiv

25.753 cm³ 0.000 cm³ 0 bar 0.00 s

FEEDING

DOSING

Meldungen

4.110.19258.19271
f9397 Trockner t870 Trocknungszeit noch aktiv

4.129.19258
f9397 Trockner, falsche Betriebsart

STORAGE

(c) ARBURG GmbH + Co KG 2015 Maschinenummer=226001



DRYING



FEEDING



DOSING



STORAGE

08.05.2015 10:52:34 Programmname=nocool abs

ARBURG

f9397 Trockner t870 Trocknungszeit noch aktiv

25.753 cm³ 0.000 cm³ 0 bar 0.00 s

Trockner Zylinder

Adresse 1

Heizung ein ja

Trockenluft nein

Saugfördergerät nein

Trocknungszeit 00:20 00:20 h:min

T 534 70 °C

T 60 °C

Auswahl Trocknernummer

f9397 [0 - 2] = 1

(c) ARBURG GmbH + Co KG 2015 Maschinenummer=226001



DRYING

TTY infrastructure



FEEDING



DOSING



STORAGE

