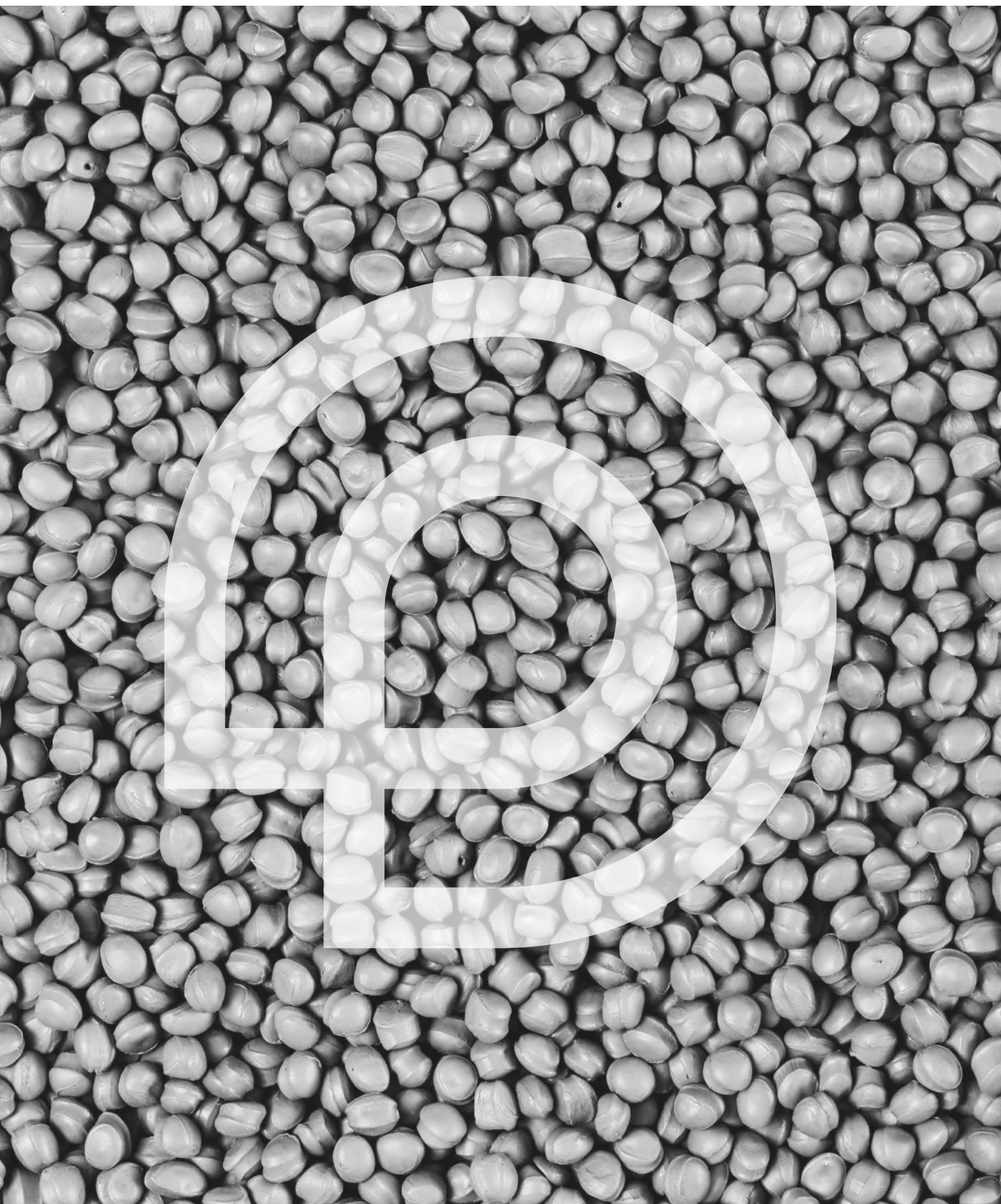


DRYING
English





THINKING BEYOND

Bringing Plastic in a new dimension



*“With more than 30 years of experience,
we design, manufacture,
and market machines for the storage,
transport, dehumidification, and dosing of
granules, flakes, and powders
used in plastic processing”*

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*For each product, features
and options will be available.*



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CHAPTER 1 – COMPRESSED AIR DRYING



DAC SERIES | AIR COMPRESSED DRYERS

The DAC Series dryers **enhance great performances in the treatment of hygroscopic engineering materials**, featuring two molecular sieve towers that alternate operation to ensure optimal treatment of hygroscopic polymers. The range includes 7 models with hoppers from 1 to 100 liters, supporting throughputs of up to 20 kg/h.

They use the combined effect of compressed air expansion at atmospheric pressure and molecular sieve treatment to achieve dew point values between -25°C and -50°C. Ideal for **injection molding machines in small to medium production settings and laboratory applications**.

TECHNICAL FEATURES:

- Microprocessor control with LCD display;
- Airflow regulation via modulating valve based on hourly consumption;
- Weekly programmer;
- ModBus RTU/TCP interface.
- Visual alarm;
- Manual slide gate;
- Safety filter for oil;
- External connections for dew point reading;
- Pyrex version available up to 2 liters.

COMPATIBLE ACCESSORIES:

- Integrated dew point sensor for DAC control;
- Portable dew point sensor;
- Granule loader with Venturi system;
- Pyrex base (DAC 6–50);
- Base with discharge outlet (DAC 30–100);
- Touchscreen;
- Inspection door.

ADDED VALUE:

- Facilitated programming;
- Up to 30% reduction in mold cycles;
- Automatic stress-relief system.



DAC SERIES | AIR COMPRESSED DRYERS

	DAC2 NV	DAC6 N	DAC15 N	DAC30 N	DAC50 N	Turbo-DAC75	Turbo-DAC100
Airflow (m ³ /h)	1-3	2-5	4-12	6-16	6-20	15-40	15-40
Process temperature (°C)	50-140	50-140	50-140	50-140	50-140	60-140	60-140
Total installed power (kW)	0.65	0.65	0.65	0.95	0.95	1	1
Hopper capacity (l)	1-2	6	15	30	50	75	100
Compressed air (bar)	6-8	6-8	6-8	6-8	6-8	6-8	6-8
Voltage (V) / Frequency (Hz)	230 / 50-60	230 / 50-60	230 / 50-60	230 / 50-60	230 / 50-60	230 / 50-60	230 / 50-60

CHAPTER 2 – ROTOR DRYING



DWH SERIES | ROTOR DRYERS

The DWH Series dryers, based on rotor technology, **ensure high performance** in the dehumidification process, combining maximum operational efficiency with versatile application.

The constant dew point can reach temperatures of **up to -40°C**, depending on operating conditions, with airflow rates up to 120 m³/h. The process temperature can be **set up to 140°C**, ensuring precise control even in the most demanding applications.

Compatible with a wide range of hoppers **from 15 to 200 liters**, enabling modular and flexible integration with production needs.

TECHNICAL FEATURES:

- Microprocessor control with color touchscreen;
- Modulating airflow based on production demand via brushless motor;
- Self-adjusting Dew Point control for process optimization;
- Regeneration temperature control based on required Dew Point;
- Dedicated blower for rotor cooling;
- Electronic PID control of process temperature;
- Daily/weekly scheduler;
- Material anti-stress function;
- Modular system;
- Standard/customizable material database;
- ModBus RTU/TCP interface.

COMPATIBLE ACCESSORIES:

- DWH trolley;
- Material bin.

ADDED VALUE:

- Dew Point stability;
- Energy efficiency;
- Production process consistency;
- Easy programming.
- Airflow control.

DWH SERIES | ROTOR DRYERS

	DWH25	DWH50	DWH80	DWH120
Max Airflow (m ³ /h)	25	50	80	120
Process temperature (°C)	Up to 140	Up to 140	Up to 140	Up to 140
Total installed power (kW)	2	3,5	9	9
Power Consumption 80° (W/kg)	60	60	60	60
Hopper capacity (l)	15/30/50	50/75/100	100/150/200	100/150/200
Voltage (V) / Frequency (Hz)	230 / 50	230 / 50	400 / 50	400 / 50



DWC SERIES | ROTOR DRYERS

The DWC Series dryers, based on rotor technology, offer airflow rates up to 300 m³/h, ensuring **optimal management** of both drying hopper loading and the processing machine.

Thanks to an advanced microprocessor control system and integrated weighing system, **the dehumidification process** is **extremely precise and reliable**. The user interface is intuitive and user-friendly, thanks to a full-color touchscreen.

The DWC series represents the ideal solution for all dehumidification needs, even in the **most specific and complex application context**.



TECHNICAL FEATURES:

- Microprocessor control;
- Touchscreen operator panel;
- Modulating airflow with inverter based on production demand;
- Self-regulating Dew Point control for process optimization;
- Electronic PID control of process temperature;
- Regeneration temperature control based on required Dew Point;
- Integrated hopper and processing machine loading;
- Standard/custom material database;
- Material level control with weighing system;
- Material anti-stress function;
- Daily/weekly scheduler;
- Modular system;
- ModBus RTU/TCP interface.

COMPATIBLE ACCESSORIES:

- Dew Point sensor device;
- Receivers for DWC systems.

ADDED VALUE:

- Energy efficiency;
- Continuous performance monitoring.

DWC SERIES | ROTOR DRYERS

	DWC120	DWC200	DWC300
Max Airflow (m ³ /h)	120	200	300
Process temperature (°C)	60-150	60-150	60-150
Total installed power (kW)	5,1	8,7	11,9
Hopper capacity (l)	150/200	300/400	600/800
Voltage (V) / Frequency (Hz)	400 / 50-60	400 / 50-60	400 / 50-60



DW SERIES | ROTOR DRYERS

The DW Series dryers, equipped with rotor technology, deliver **high-level performance** in dehumidification and ensure maximum efficiency and operational versatility.

The DW models maintain a **constant Dew Point value** between -25°C and -40°C depending on drying conditions, with airflow rates ranging from 40 m³/h to 1.000 m³/h. The process temperature can be set up to 150°C.

Compatible with a wide range of hoppers with capacities from 30 dm³ to 3.000 dm³. The features of this new series make it suitable for use in both **single-hopper and multi-hopper systems**.

The DW Series dryers are available with integrated heating chamber for medium-temperature applications (**MT version**) and for high-temperature applications (**HT version**).

For multi-hopper systems the dryers are supplied without heating chamber (**CS version**).



TECHNICAL FEATURES:

- Microprocessor control;
- Modulating airflow with inverter based on production demand;
- Self-regulating Dew Point control for process optimization;
- Electronic PID control of process temperature;
- Daily/weekly scheduler;
- Regeneration temperature control based on required Dew Point;
- Material anti-stress function;
- Standard/custom material database;
- ModBus RTU/TCP interface.

COMPATIBLE ACCESSORIES:

- Dew Point sensor;
- 7" color touchscreen.

ADDED VALUE:

- Energy efficiency;
- Continuous performance monitoring;
- Multi-hopper dehumidification.



DW SERIES DRYERS | ROTOR DRYERS

	DW120	DW200	DW250	DW300	DW400	DW600	DW1000
Airflow (m³/h)	40-120	70-200	80-250	100-300	130-400	200-600	300-1000
Process temperature (°C)	60-150	60-150	60-150	80-250	60-150	60-150	60-150
Total installed power CS (kW)*	3,1	5,2	5,4	6,9	14,5	16,0	19,0
Total installed power MT (kW)	5,1	8,7	10,4	11,9	22,0	31,0	41,5
Voltage (V) / Frequency (Hz)	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60

* External heating chamber to be integrated.



CHAPTER 3 – TWIN-TOWER DRYING



D AND DP SERIES | TWIN-TOWER DRYERS

The D series dryers, equipped with twin tower technology, include several models with **process airflow rates ranging from 80 m³/h to 1300 m³/h**, capable of meeting any production requirement. The DP version features a **dedicated blower for regeneration**, enhancing performance and allowing operation even in tropical environments, while ensuring a **dew point as low as -50°C**.

The adopted technological solutions and advanced control systems ensure maximum efficiency of the molecular sieves, optimizing dehumidification performance while **minimizing energy consumption**.

The D Series dryers are available in three versions: with an integrated heating chamber for medium-temperature applications (**MT version**), for high-temperature processing (**HT version**), or without a heating chamber (**CS version**), the ideal solution for multi-hopper systems.

TECHNICAL FEATURES:

- Microprocessor control;
- PLC control;
- Touchscreen operator panel;
- Self-regulating Dew Point control for process optimization;
- Regeneration temperature control based on required Dew Point;
- Electronic PID control of process temperature;
- ModBus RTU/TCP interface.

COMPATIBLE ACCESSORIES:

- 7" color touchscreen;
- Inverter;
- Dew Point sensor;
- Modulating airflow with inverter;
- OPC-UA interface;
- Profinet interface is available with PLC;
- Thermostatic valve for water control;
- Automatic modulation valve for process air;
- Load cells for hoppers.

ADDED VALUE:

- Energy efficiency;
- Continuous performance monitoring;
- Multi-hopper dehumidification.

D AND DP SERIES | TWIN TOWER DRYERS

	D800	D801	D802	D803	D805	D803P	D805P	D808P	D815P	D818P
Airflow (m³/h)	80	120	150	300	500	300	500	700	1100	1300
Process temperature (°C)	50-180	50-180	50-180	50-180	50-180	50-180	50-180	50-180	50-180	50-180
Total installed power MT (kW)	3,8	4,6	7,0	15,2	24,9	-	-	-	-	-
Total installed power HT (kW)	4,3	6,1	8,5	18,8	28,5	-	-	-	-	-
Total installed power CS (kW)	-	-	-	-	-	8,6	11,1	13,1	32,5	41,3
Voltage (V) / Frequency (Hz)	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60	400 / 50-60

* External heating chamber to be integrated.



DR.RE SERIES | TWIN-TOWER DRYERS

The **DR.RE dryer represents** the most efficient drying evolution of twin towers drying technology. Thanks to a completely redesigned structure, the system delivers **superior performance** in terms of energy efficiency, material quality, and ease of maintenance.

The new architecture features a dual filtration system, a newly patented fan configuration, and a simplified closed-loop circuit that ensures **a significant reduction in pressure losses and energy consumption.** The result is an intelligent, connected system optimized for the most advanced production requirements in technical plastic polymers and drying.



TECHNICAL FEATURES:

- Dual filtration system with 47% more capacity compared to previous models;
- Newly patented process fan design, positioned after the drying towers.
- 15% lower energy consumption on fans;
- Enlarged heat exchanger for 45% higher cooling capacity;
- Overall energy recovery increased by 25% thanks to the elimination of the oil condenser;
- Synchronized maintenance between machine and dryer;
- 50% reduction in maintenance time thanks to quicker and more accessible interventions;
- Optimized closed-loop circuit with 15% less pressure loss.

COMPATIBLE ACCESSORIES:

- Turbofan version available;
- Dew Point control instrument;
- Energy saving kit;
- Electrical panel air conditioner;
- Load cells for material weight reading in the hopper;
- Level sensor;
- Load cells for weight control of the drying towers;
- Electrical panel inverter.

ADDED VALUE:

- Energy efficiency;
- Advanced drying performance;
- Easy maintenance;
- Integrated connectivity;
- Sustainable solution.

DR.RE SERIES | TWIN TOWER DRYERS

	Voltage	DR.RE917	DR.RE920	DR.RE925	DR.RE935	DR.RE941
Maximum airflow rate (m ³ /h)	-	1700	2200	2400	3400	3700
Process temperature (°C)	-	50÷190	50÷190	50÷190	50÷190	50÷190
Dew Point (°C)	-	-60	-60	-60	-60	-60
Static pressure (mbar)	-	250	250	250	250	200
Process heaters (kW)	400/50 400/60 460/60	30	36	54	54	81
Regeneration heaters (kW)	400/50 400/60 460/60	12	12	18	18	24
Process blowers (kW)	400/50 400/60 460/60	5.5 6.5 6.5	7.5 9 9	12.5 17.5 17.5	15 18 18	12.5+12.5 17.3+17.3 17.3+17.3
Regeneration blower (kW)	400/50 400/60 460/60	0.85 0.95 0.95	0.85 0.95 0.95	1.6 2.05 2.05	1.6 2.05 2.05	4 4.8 4.8
Hopper capacity (dm ³)	-	2000÷ 12000	2000÷ 12000	2000÷ 12000	2000÷ 12000	2000÷ 12000
Noise level (dBA)	-	<80	<80	<80	<80	<80



CHAPTER 4 – HOT AIR DRYING



HAD SERIES DRYERS

The hot-air dryers of the **HAD Series** have been specifically engineered for the efficient drying of non-hygroscopic plastic granules. Non-hygroscopic plastics are polymers that retain only minimal amounts of surface moisture, typically in very small percentages. Nonetheless, even this small amount of **humidity** can adversely affect the processing of the material, potentially compromising both the efficiency of the process and the quality of the finished product.

The HAD series of hot-air dryers is divided into two distinct ranges to **accommodate different production requirements**.

The first range, HAD30 to HAD200, offers **airflow rates from 70 to 200 m³/h** and is designed for direct installation on injection molding machines or extruders, providing a compact and efficient drying solution. The second range, HAD300 to HAD2500, delivers higher airflow rates **from 400 to 1350 m³/h** and is installed on a dedicated support structure, making it ideal for larger-scale operations requiring enhanced drying capacity.

All HAD dryers are designed to ensure uniform drying, energy efficiency, and optimal process reliability, enabling manufacturers to **maintain high-quality standards** in their production lines while minimizing downtime and material waste.

TECHNICAL FEATURES:

- Microprocessor control;
- Electronic PID control of process temperature;
- Daily/weekly scheduler;
- Inspection hatch from model HAD100;
- Insulated hopper;
- Suction box;
- Fix frame or trolley;
- External heating chamber.

ADDED VALUE:

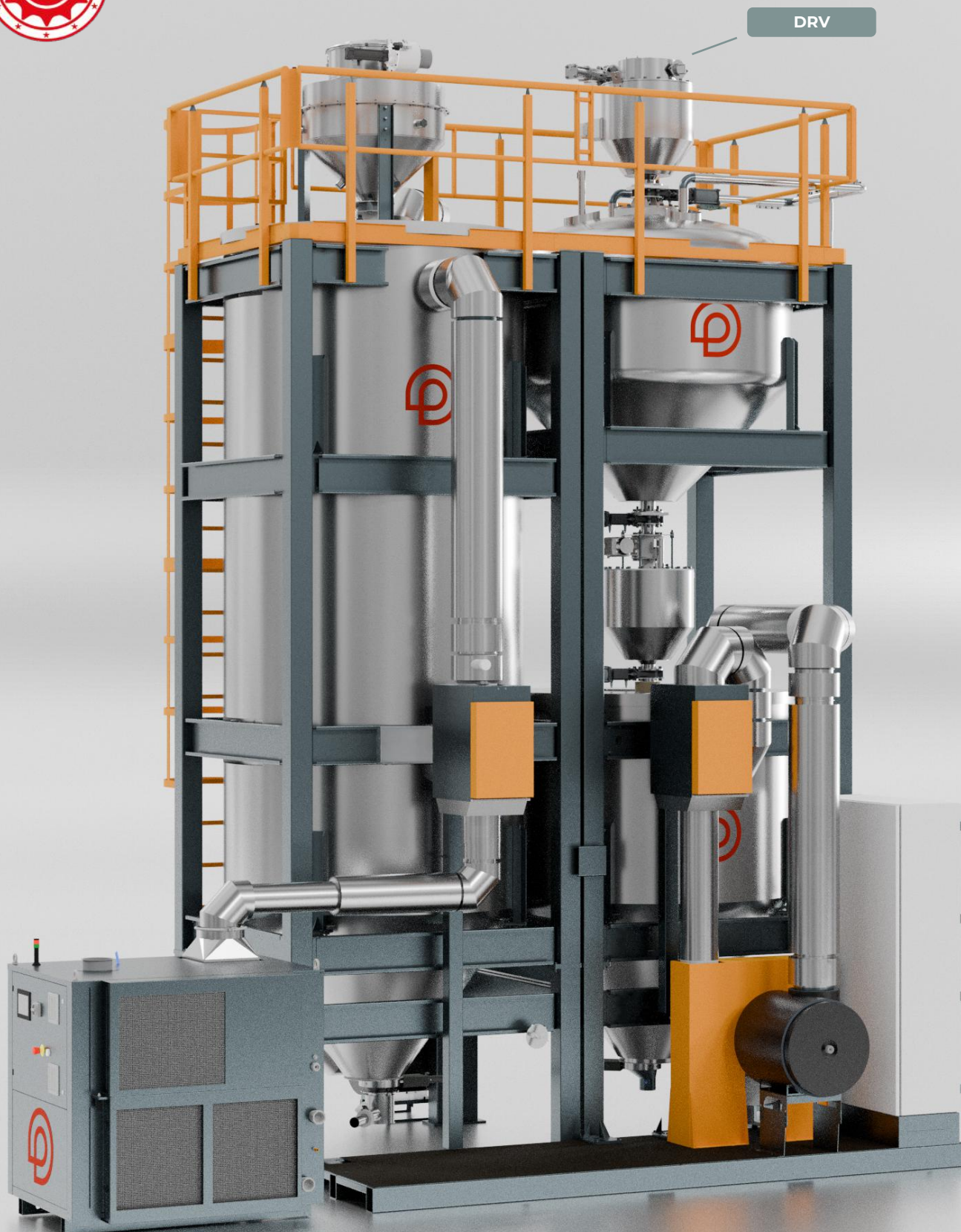
- Design for flakes;
- Load cell application;
- High-temperature application;
- Integrable with vertical mixers.

HAD SERIES | HOT AIR DRYERS

	HAD 30	HAD 50	HAD 75	HAD 100	HAD 150	HAD 200	HAD 300	HAD 400	HAD 600	HAD 800	HAD 1200	HAD 1500	HAD 2000	HAD 2500
Max process airflow (m ³ /h)	70	70	100	100	200	200	200	400	600	600	600	750	1000	1350
Process temperature (°C)	140	140	140	140	140	140	140	140	140	140	140	140	140	140
Total power (kW)	1.68	1.68	2.58	2.58	3.97	3.97	3.97	10.35	13.1	13.1	13.1	34.5	34.5	51.5
Hopper capacity (l)	30	50	75	100	150	200	300	400	600	800	1200	1500	2000	2500
Voltage/Frequency (V/Hz)	230/50-60		400/50-60											



CHAPTER 5 – VACUUM DRYING



DRV SERIES CONTINUOUS VACUUM DRYERS

The **DRV Series** represents the most innovative and advanced drying system available on the market, featuring **multiple patented technologies**. It has been specifically designed for recycled materials while also delivering excellent performance with virgin materials.

Thanks to its vacuum process technology, the DRV Series efficiently **removes VOC contaminants** (Volatile Organic Compounds) such as Benzene, Limonene, and other volatile substances generated by the presence of foreign materials including metal, glass, paper, additives, and immiscible polymers such as PVC and PP.

The advanced vacuum technology **eliminates the need for molecular sieves** and makes oil condensers obsolete, as VOC contaminants are removed directly during the drying process.

The DRV range covers PET granules production capacities **from 500 up to 1500 kg/h**, achieving a final residual moisture content below 40 ppm.

A version with integrated **Crystallizer** is also available.

TECHNICAL FEATURES:

- Microprocessor control with 7" TOUCH display and easy programming (material type selectable from database and consumption per hour);
- PLC control;
- 4 hoppers for 4 drying phases (pre-heating, heating, vacuum & maintenance);
- Liquid ring vacuum pump;
- Temperature control and management during the drying phases;
- Level sensors for residence time monitoring;
- Temperature sensors for process management;
- Automatic shutdown to prevent pellet degradation;
- RS485 Modbus interface.

ADDED VALUE:

- The DRV Series technology reduces material changeover and system startup time by up to 65%, cutting the process from 6 hours with standard drying systems to approximately 2 hours with vacuum drying.
- The vacuum system ensures energy consumption between 70 and 80 W/kg depending on the application, while traditional drying systems can consume up to 120 W/kg.
- Maintenance is minimized and limited to simple filter cleaning, with no need for traditional heat exchangers or molecular sieves as required in conventional drying systems.
- The multilingual digital display and keypad user interface allow continuous machine monitoring, displaying key operating parameters such as temperature, material level inside the hopper, vacuum level, and more.
- The system requires only electrical and pneumatic connections, eliminating the need for HTC network connections.
- The vacuum technology enables effective removal of residual oil contaminants from the process air generated during recycled plastic material processing.



CHAPTER 6 – CRYSTALLIZING



CRN SERIES CRYSTALLIZERS

The **CRN Crystallizer** is engineered to optimize the pre-drying and crystallization of plastic flakes or granules, ensuring high efficiency and consistent polymer quality.

Its low-speed vertical agitation system minimizes dust while promoting uniform material flow, and temperature is **precisely controlled via a PLC with PID control**. The insulated design reduces heat loss, improving energy efficiency and lowering operational costs.

The CRN can handle challenging materials such as regrind or flakes without blockages, while its high-flow ventilation accelerates crystallization and **reduces moisture content to below 800 ppm**. Maintenance is simplified thanks to a large hinged, insulated door, and the machine is available in capacities ranging from 50 to over 7000 liters, making it adaptable to various production needs.

Suitable for a wide range of applications, from recycled plastic production to complex industrial processes, the **CRN ensures a continuous supply of clean material** through its rotary valve feeder and integrated dedusting and condensation system.

TECHNICAL FEATURES:

- PLC control;
- Touchscreen operator panel;
- Stainless steel hopper equipped with a vertical mixer;
- High-efficiency sound-proofed fan;
- Electrical heating chamber;
- Cyclone installed on the return pipe of the process air.

COMPATIBLE ACCESSORIES:

- Rotary valves for loading and unloading materials;
- Pneumatic feeding and extraction system;
- Oil-condensation system.

ADDED VALUE:

- Uniform crystallization;
- No degradation;
- Volatiles condensation.

CRN SERIES CRYSTALLIZERS

	CRN50		CRN300		CRN600		CRN1000		CRN1500		CRN2000		CRN3000		CRN4000		CRN7000	
Material shape	GR	FL	GR	FL	GR	FL	GR	FL	GR	FL	GR	FL	GR	FL	GR	FL	GR	FL
Throughput (kg/h)	25	15	125	80	250	160	400	270	600	400	800	550	1200	800	1600	1000	2800	1800
Airflow rate (m ³ /h)	60		300		600		1000		1500		1500		2500		3200		5600	
Heating power (kW)	3.5		14.4		14.4		27		54		54		81		108		135/162	
Gearmotor power (kW)	0.25		1.5		1.5		1.5		2.2		2.2		4		4		7.5	
Installed power (kW)	4.5		23		23		35.1		72.3		72.3		109.2		136.2		182/209	



CENTRALIZED DRYING SYSTEM





PEGASO INDUSTRIES GLOBAL BRANCHES



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