Product Overview

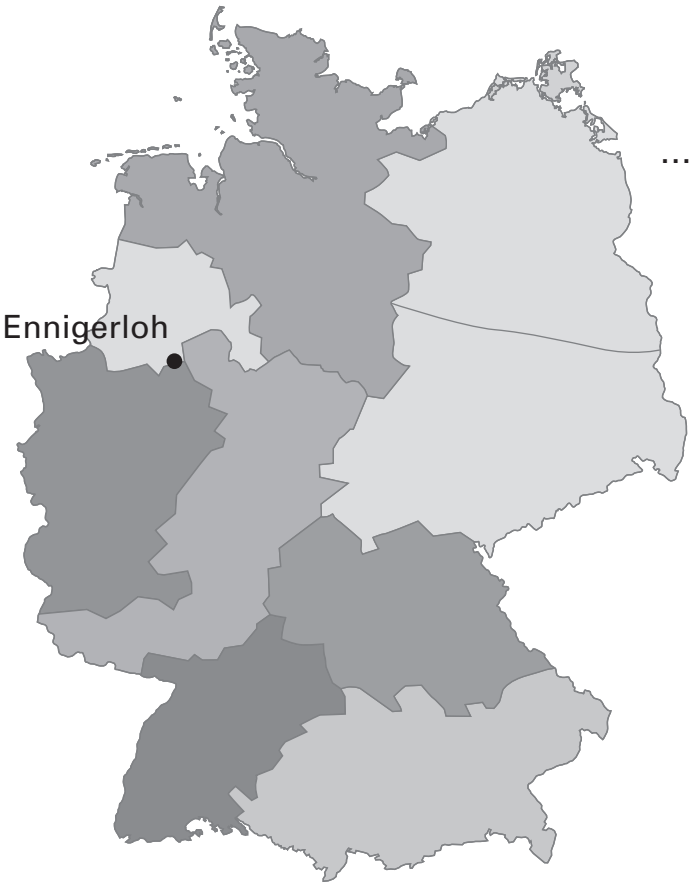
GERCO® – Technik GmbH

Drying, Conveying and more ...

GERCO® – Technik GmbH

Headquarter in Ennigerloh

GERCO® –Technik GmbH is headquartered in Ennigerloh in Germany. Located in the centre of the German region of Münsterland, we have specialised in coming up with and producing world-class peripheral equipment for the plastics industry. We develop, engineer and manufacture products of superior quality in our own production plant according to streamlined production processes.



...in Germany

...in Europe

We would like to give you a compact outline of our range of products & supplies with this brochure. Take your time and get a comprehensive view of the many solutions we've got for you.

You can choose between various conveying, metering and drying systems. It doesn't matter whether it's a one- or multi-chamber dryer, GERCO® offers you just the right solution for your plastics-processing operation. Whatever product you're interested in, you can rely on GERCO® products to be developed and manufactured at the highest level of precision.

GERMAN ENGINEERING is not just a slogan to us. It's the standard we live by and what motivates us to continually improve our products. Put your trust in our experience and expertise when we're talking about products with a long service life for our customer. Put your confidence in our many years of experience that many user have benefited from.

We want you to be 100% satisfied from the word go.

Quality from the start.

We would be glad to consult with you on our products – give us a call!

Table of contents

Granulate dry air dryers

INFO Box

- single-chamber dryer 50–800 litres
- drying performance 9–260 kg/h
- attainable residual humidity 0.02 %
- lightweight and compact construction
- mobile operation
- easy to clean
- removeable granulate container

The hallmark of our single-chamber dry-air dryers are a compact and moveable design. They can be placed directly next to the processing machine or completely automated as the central dryer. All of the dryers with this design have two molecular sieves to guarantee continuous granulate drying while a Siemens S7 SPS ensures optimum process routine. Beyond this, the touch panel enables you to easily change the dry parameters while excellent insulation provides energy-efficient drying without damaging the pourable plastic granulates. TAR dew-point-dependant regeneration and the VüS completely automatic-overdrying protection provides energy-efficient dryer operation. Finally, you can show and evaluate energetic requirements on the touch panel while the removeable granulate containers ensure simple cleaning and the option of individually adapting the dryers to drying requirements.

Technical data	GTT 50 ES	GTT 101 ES	GTT 201 ES	GTT 401 ES
Unit capacity litres	50	100	200	400
Dimensions H x W x D mm	1550 x 1116 x 906	1450 x 720 x 970	1630 x 900 x 1200	1700 x 1060 x 1320
Weight kg	171	200	320	360
Drying performance kg/h	9–30	18–65	30–120	60–240
Power consumption kW	5.75	7.36	15.3	16.2
Air throughput m^3/h*	70	132	168	210

*open flow rate

Multi-chamber dry air dryers

INFO Box

- multi-chamber dryer 100–800 litres
- drying performance 5 – 260 kg/h
- attainable residual humidity 0.02 %
- lightweight, compact and mobile construction
- singe tempering for the chambers
- removeable granulate container
- additional material containers for matching

The hallmark of our compact dry-air dryers (multi-chamber) is a compact and moveable design. They can be placed directly next to the processing machine or completely automated as the central dryer. All of the dryers with this design have two molecular sieves to guarantee continuous granulate drying while excellent insulation provides energy-efficient drying without damaging the pourable plastic granulates. A Siemens S7 SPS ensures optimum process routine. Beyond this, the touch panel enables you to easily change the dry parameters and each of the individual chambers can be operated with various granulates and temperatures. Furthermore, its built-in timer can control the drying process in each of the chambers individually. TAR dew-point-dependant regeneration and the VüS completely automatic over-drying protection provide energy-efficient dryer operation. Furthermore, you can show and evaluate energetic requirements on the touch panel while series-production of removeable material containers make it easy to clean the dryers. Finally, the fact that it is equipped with smaller material containers make it possible for the dryer to be used as a low-quantity dryer for matching or in the laboratory.

Technical data	TTM 2/50 ES	TTM 2/100 ES	TTM 2/200 ES	TTM 2/400 ES	TTM 3/100 ES	TTM 4/50 ES	TTM 4/100ES
Unit capacity litres	2 x 50	2 x 100	2 x 200	2 x 400	3 x 100	4 x 50	4 x 100
Dimensions H x W x D mm	1550 x 1116 x 906	1600 x 1480 x 775	1700 x 1800 x 1200	1700 x 2500 x 1150	1700 x 2500 x 1150	1550 x 1610 x 906	1700 x 2900 x 930
Weight kg	250	360	450	490	485	350	550
Drying performance kg/h*	5–10	10–33	18–65	30–120	10–33	5–10	11–33
Power consumption kW	8.4	11.4	16	16.7	15.5	12.4	19
Air throughput m³/h**	132	168	210	270	210	168	210

*Drying capacity per chamber / **open flow rate

Touch panel dry-air dryers

INFO Box

- process routine optimised energetically
- time switch
- easy handling
- multilingual
- regeneration dependent upon dew-point
- power monitor
- overdrying protection

All of our dry-air dryers are equipped with a Siemens S7 control system and touch panel. This equipment enables you to install added features.

Dew-point dependant regeneration (TAR)

The built-in dew-point sensor shows the current dew-point in the touch panel. Regeneration takes place dependent upon the dew-point. The TAR system only regenerates the molecular sieve when the dew-point rises above a specific value. The cycle time of regeneration increases, which causes increased energy efficiency.

Completely automatic overdrying protection (VüS)

Overdrying protection protects the granulate to be dried against overdrying while minimising the dryer's power requirements. It monitors the temperature of the recirculation of the dry-air dryer so that granulate heating is switched off when the recirculation temperature reaches a permanently set limit. However, the dry air continues to circulate to ensure that the granulate cannot absorb any humidity. When it falls below the permanently set limit temperature, the heater is turned on again. This overdrying protection unit functions automatically.




Warm air dryers

INFO Box

- Warm air dryers 50–800 l
- Single- or multi-chamber dryers
- Mobile
- Built-in conveyor equipment

Warm air dryers are used for the drying of non- or only slightly hygroscopic plastics. Their simple and robust construction guarantees their reliable operation and long service life. All dryers of the GTT and TTM series are also available as warm air dryers of the W- or MK series.

A special feature of the GERCO warm air dryers is the TF series with conveyor. The warm air dryer transports the granulate to the machine by means of the built-in blower

Small granulate and vacuum suction conveyor units

INFO Box

- Single or twin conveyor units
- Feed performance 50–1000 kg/h
- Feed distance 5–30 m
- Feed height max. 5 m
- Stainless steel tank

GERCO conveyor units are suitable for the transport of all free-flowing plastic granulates. They can be used individually or for the automation of our dryers. The integrated micro-controller controls monitor the transport process and the filter cleaning, and allow the connection of a two-component separator. With the separator, regenerate can be added to the new material. The conveyor units consist of a stainless steel conveyor tank with different volumes. The vacuum is created by an integrated AC blower or by an external DC blower. The conveyors of the ZSF series can be used for the transport of all plastic granulates. The units are equipped with a side-channel compressor and are used for the automatic filling of two plastic processing machines.

Technical data	GKS 50	VSF 101	VSF 151	VSF 251	VSF 501	VSF 1000	ZSF 151	ZSF 251
Dimension Ø x H mm	Ø 170 x 490	Ø 230 x 725	Ø 230 x 576	Ø 230 x 576	Ø 280 x 895	Ø 320 x 1100	Ø 230 x 576	Ø 230 x 576
Blower unit W x D x H	X	X	365 x 370 x 650	365 x 370 x 650	365 x 370 x 650	365 x 370 x 650		
Weight kg	8	12	26	29	29	29	2 x 8	2 x 8
Capacity litres	2	8	8	8	20	50	2 x 8	2 x 8
Feed performance kg/h	50	100	150	250	500	1000	150	150
Feed height m	2	3	5	5	5	5	4	4
Feed distance m	5	10	15	20	20	30	15	15
Operating voltage V	230	230	3 x 400	3 x 400	3 x 400	3 x 400	3 x 400	3 x 400
Frequency Hz	50	50	50	50	50	50	50	50
Power consumption kW	0.85	0.95	1.5	2.2	2.2	5.5	1.5	2.2

Injector conveyor units, granulate air conveyors

INFO Box

- Injector conveyor units
- Feed performance 20–30 kg/h
- Feed distance 5–30 m
- Feed height 3 m
- Stainless steel tank
- Wear-free feed

The conveyor units of this series operate on compressed air. By reducing the pressure of the compressed air via specially-designed injector nozzles, a vacuum is created, which is used for the transport of the plastic granulate.

IF 01

GDF uni

Technical data	IF 01	IF 03	GDF mini	GDF uni	GDF uni 5
Dimensions Ø x H mm (HxWxD)	214 x 130 x 202	460 x 130 x 205	210 x 330	Ø 170 x 635	Ø 348 x 640
Weight kg	2.5	3	4	9.2	11
Capacity litres	1	3	2	2	5
Feed performance kg/h	20	40	40	250	300
Feed height m	2	2	3	3	3
Feed distance m	3	3	5	30	30
Operating voltage V	230	230	230	230	230
Frequency Hz	50	50	50	50	50
Power consumption VA	50	15	15	10	10
Hose connection diameter Ø mm	30	30	30	40	40

Modular multi-chamber dry air dryers

INFO Box

- Modular multi-chamber dryers 30–6000 l
- Drying performance 6–1200 kg/h
- Achievable residual humidity 0.02 %
- Round granulate tanks

These dry air dryers offer a wide application range due to their modular construction. The drying tanks of up to 100 litres can be either fitted direct on the intake shaft of a processing machine or, as illustrated, operated as a central unit. All dryers from 200 litres are supplied on a frame. The drying tasks are of stainless steel, and are equipped with a sight-glass. The good insulation of the tanks enables efficient and economic drying. Dry air generators are available with air throughputs of up to 2000 m³/h and tank volumes of up to 6000 litres.

Technical data	TLE 3	TLE 6	TLE 28	TLE 40	TLE 55	TLE 65	TLE 85
Tank capacity litres	30–100	80–200	800–1000	1200	1500	2000	2500
Height mm	850	900	1600	2100	2100	2100	2100
Width mm	330	400	550	800	1200	1200	1200
Depth mm	750	800	800	1000	1800	1800	1800
Weight kg	45	60	330	380	750	850	900
Drying performance kg/h	6–20	20–40	90–170	130–250	150–300	200–400	250–500
Operating voltage V	230	3 x 400	3 x 400V	3 x 400V	3 x 400V	3 x 400V	3 x 400V
Power consumption kW	2.8	5.8	14.5	22.3	29.5–36.5	34.5–42.5	40.5–40.5
Air throughput m³/h	30	60	280	400	550	650	850

Volumetric dosing units

INFO Box

- Volumetric dosing unit
- Tank volume 7–40 litres
- Dosing peformance 0.003–430 kg/h
- Microprocessor control

The volumetric dosing units of the type GVD are suitable for the production of granulate / master batch mixtures in the range of 0.003–430 kg/h. The design and modular construction ensure both easy operation and quick cleaning. The unit consists of the basic module, onto which are flanged the tank for the plastic granulate and the dosing unit. The controls are located in a separate housing. The digital display allows the easy

Technical data	GVD 25	GVD 50	GVD 51	GVD 120
Tank volume litres	7	12	40	70
Dimensions H x W x D mm	422 x 605 x 270	472 x 635 x 270	652 x 970 x 390	822 x 710 x 490
Weight kg	18	20	28	30
Dosing performance in kg/h	0.003–20	0.003–180	25–180	25–430
Power consumption W	50	250	920	920
Controls	microprocesseur	microprocesseur	microprocesseur	microprocesseur

Automatic Removal Robots

INFO Box

- Max. removal weight 1000 g
- Stroke 400 mm – 700 mm
- Simple touch operation
- Solid design

Automatic removal robots or sprue pickers are pneumatic grappler systems for the removal of injection moulded articles or sprue from the processing machine.

Technical Data	HS 500 S	HS 500	HP 700
Vertical stroke Y in mm	400–450–500–550	400–450–500–550–600	550–600–650–700–750
Ejection stroke X in mm	0–50	0–50	0–80
	adjustable speed	adjustable speed	adjustable speed
Transversal stroke Z in mm	400–450–500–550	400–450–500–550–600	550–600–650–700–750
Swivelling axis	15–90° min.	0–90° min.	0–90° min.
	adjustable speed	adjustable speed	adjustable speed
Removal weight incl. grappler in g	500	500	1000
Total cycle in s	approx. 3.5	approx. 3.5	approx. 4.5s

Performance overview

				Dryer Size litres									
				7	12	27	42	50	62	200	400	800	1000
Material **		Time	Temp. C°	Dryer capacity kg/h									
ABS	Acrylnitril-Butadien-Styrol	2–3	80	2	3	6	9	11	13	43	87	173	217
LCP	Flüssigkristallpolymere	4	150–160	1	2	4	7	8	10	33	65	130	163
PA 6	Polyamid 6	4	80	1	2	4	7	8	10	33	65	130	163
PA6.6, 6.10	6.6, 6.10 Polyamid 6.6, 6.10	3–5	80	1	2	4	5	7	8	26	52	104	130
PA 11,12	Polyamid 11/12	4–6	80	1	1	3	5	5	7	22	43	87	108
PAEK	Polyaryletherketon	4	150	1	2	4	7	8	10	33	65	130	163
PAEK-HT	Polyaryletherketon Hochtemp.	3	180	2	3	6	9	11	13	43	87	173	217
PAI	Polyamidimid	3	180	2	3	6	9	11	13	43	87	173	217
PBT	Polybutylenterephthalat	2–3	120	2	3	6	9	11	13	43	87	173	217
PC	Polycarbonat	2–3	120	2	3	6	9	11	13	43	87	173	217
PC/ABS	PC/Acrylnitril-Butadien-Styrol Blend	2–3	100–110	2	3	6	9	11	13	43	87	173	217
PC/PBT	PC/Polybutylentherephthalat Blend	2–4	105–115	1	2	4	7	8	10	33	65	130	163
PC/PETP	PC/Polyäthylentherephthalat Blend	2–4	105–115	1	2	4	7	8	10	33	65	130	163
PEEK	Polyetheretherketon	2–3	150	2	3	6	9	11	13	43	87	173	217
PEI	Polyetherimid	3–4	150	1	2	4	7	8	10	33	65	130	163
PEK	Polyetherketon	4	160	1	2	4	7	8	10	33	65	130	163
PESU	Polyethersulfon	3–4	120	1	2	4	7	8	10	33	65	130	163
PET-a	Polyethylenterephthalat (amorph)	3	120	2	3	6	9	11	13	43	87	173	217
PET-c	Polyethylenterephthalat (kristallin)	6	170	1	1	3	5	5	7	22	43	87	108
PETP	Polyethylenterephthalat	3	120	2	3	6	9	11	13	43	87	173	217
PI	Polyimid	2–3	120	2	3	6	9	11	13	43	87	173	217
PMMA	Polymethylmethacrylat	2–3	80–100	2	3	6	9	11	13	43	87	173	217
POM	Polyoxymethylen, Polyacetal	2–3	100	2	3	6	9	11	13	43	87	173	217
PPA	Polyphthalamid	6	80	1	1	3	5	5	7	22	43	87	108
PPE	Polyphenylenether	3–4	110–120	1	2	4	7	8	10	33	65	130	163
PPO	Polyphenylenoxid	2	110	2	4	9	14	16	20	65	130	260	325
PPS	Polyphenylensulfid	3–4	150	1	2	4	7	8	10	33	65	130	163
PPSU	Polyphenylsulfon	2.5	150	2	3	7	11	13	16	52	104	208	260
PS	Polystyrol	1–2	80	2	4	9	14	16	20	65	130	260	325
PSU	Polysulfon	2–3	120–135	2	3	6	9	11	13	43	87	173	217
PUR	Polyurethan	2–3	90–100	2	3	6	9	11	13	43	87	173	217
SAN	Styrol-Acrylnitril	2–3	80	2	3	6	9	11	13	43	87	173	217
TPE	Polyesterelastomer	2–3	110	2	3	6	9	11	13	43	87	173	217
TPU	thermoplastisches Polyurethan	1–2	100–110	2	4	9	14	16	20	65	130	260	325

** All data are appoximate values for unlubricated air dryer. The drying recommendations of the material manufacturers are to be considered! Fillers increase spezf. Density. Bulk density kg/l = approx. 0.6 x density g/cm³.

GERCO® – Technik GmbH

Drying, Conveying and more ...

Layout: agentur-geistreich.de · Druck: Darpe Industriedruck, darpe.de · Druckfehler, Irrtümer sowie technische Änderungen vorbehalten. Stand 04/17, Teilenummer 099-395606

Vertrieb durch:

GERCO® Technik GmbH

Am Fleigendahl 5 · 59320 Ennigerloh

Fon +49 2524 928 559-0
Fax +49 2524 928 559-1
info@gerco-technik.de

www.gerco-technik.de