



# Directly from the inventor –

# **Compressed Air Resin Drying!**

In 1991, the **compressed air resin drying** invention by Rainer Farrag brought the plastics industry major advantages such as **life time** performance stability, operation economy, simplicity and compactness.

The CARD Series is developed by the FarragTech team in Wolfurt/Austria with the highest innovation and more than **20 years of experience** in the industry. FarragTech is now offering more than 30 different types and sizes of compressed air based resin dryers and a wide variety of accessories.













# We rely on

# **Engineering and Quality!**

CARD (Compressed Air Resin Dryer) replaces the desiccant, the regeneration process and the many moving parts of standard desiccant dryers by simply decompressing and heating compressed air. The continuous air and energy control, the optimal drying hopper geometry and the preheating process by secondary air circuit considerably reduce the energy consumption.

Air and heat recovery from the process leads to **zero energy drying**. Details such as externally removable air distributors and hinged lids simplify hopper cleaning.

The careful choice of materials and components combined with the high quality craftsmanship guarantee trouble free operation.

# Undeniable advantages!

### Life performance guarantee

Unlike desiccant drying, there is no efficiency drop over time in drying with CARD. The modulating control of air flow and the precise temperature control guarantee perfect drying with the lowest operation cost.

### 3 year full warranty

All CARD-Series are delivered with an extensive warranty for 3 years. There is no risk, due to perfect engineering, careful choice of materials and the highest quality of craftsmanship.

### Maintenance free operation

No desiccant, no moving parts, no regeneration, no process air filter and no chilled air coil. CARD-Series are designed for maintenance free operation. Cleaning the hopper is made easy.

## CARD – Advantages:

- Highest reliability
- Lowest operation cost
- No material degradation
- Plug and play
- Simple to operate

- Maintenance free
- Compact
- Feed throat installation
- Floor standing single unit
- Integration in central system
- Easy to clean
- Easy to move
- Polished stainless steel hopper
- Insulated for high temperature
- High quality housing









# **CARD**-G/FIT

The G-Series with hopper sizes 1 – 6 liter [0.26 – 1.6 gal] is developed for lowest material throughput on micro-molding machines. Equipped with the superior FIT controller it does not leave any wish unfulfilled.

No material degradation with recipe drying, data recording, weekly timer, calendar timer, interface to connect to the processing machine... And when it is time to change material, the insulated stainless steel hopper is easy to clean through the hinged lid without disconnecting the integrated loader. It is simply a miniature of its bigger brothers in the S-Series.



# « Easy to clean

# **CARD**-G

Being on a budget does not mean sacrificing quality. The G-Series in the same stainless steel quality of the G/FIT is also available with simple, high quality temperature controller. It is still capable of controlling a hopper loader and it will also prevent material degradation by automatically dropping the set temperature to a lower level when no material demand is detected.







» Sight glass with integrated handle









# **CARD**-S



This best seller series is designed for middle throughput in 6 hopper sizes from 10 to 160 liters [2.6 – 42.3 gal] with FIT controller to satisfy the discriminating hi-tech industry. The modulating energy control, the stainless steel hopper ergonomic design, the hinged lid, the sight glass frame with integrated handle on both sides, the interface to connect two loaders and the externally disconnectable air distributor among the uncountable details of the S-Series prove its leadership in the industry.



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# **CARD-**E



The economy version of the S-Series offers the same 6 hopper sizes in the stainless steel quality and the insulation for high temperature operation up to 200 °C [392 °F] with simple precise temperature controller without sacrificing drying performance. The E-Series made its debut in long run jobs and low volume jobs with its simple plug and play features and the ability of running one hopper loader on its control system.

The CARD-E is simply unbeatable with its modulating energy control and its price tag.

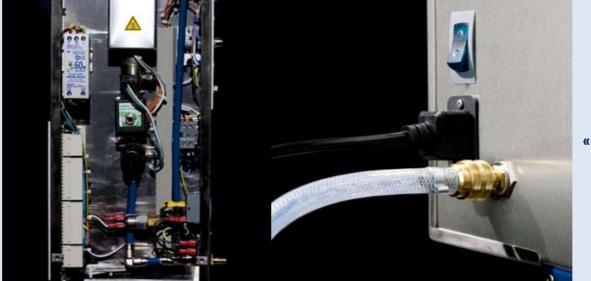


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Behind the cover »



» Precise temperature controller, loader switch and alarm reset

### « Plug and play Compressed air, power and on/off switch



# **FarragTech**

# **CARD**-M

The M-Series in 2 sizes of 110 and 160 liter [29 and 42.3 gal] is the connecting link between the S- and L-Series. The unbeatable economy of the L-Series with the secondary air preheating process set in the compact housing of the S-Series. On mobile frame and suction box or directly installed on the feed throat, the M-Series is as flexible as its smaller siblings. The FIT controller on the front and the interface on the back side of the high quality dryer combined with the service door, the hinged lid and 3 sight glasses set the M-Series in a class by itself.



# **CARD-L**

The top line and the largest member of the CARD-Family come in 10 standard sizes covering hopper volumes from 250 to 3500 liter [66 – 925 gal]. Whether single or integrated in a central system, every dryer contains its own FIT controller, a built-in switch cabinet and interface for loaders and molding machine controls. The L-Series is designed with the capability of recovering compressed air from blow molding machines and heat from the air compressor allowing for ZERO ENERGY DRYING. The maintenance free operation, the ease of cleaning through two service doors with built-in sight glasses and automatic filter cleaning make the L-Series incomparable with any other dryer.



« Flanged, externally disconnectable distributors

CARD 160M on mobile frame with dual port suction box and vacuum loader



« Integrated CE-Compliant switch cabinet



**▼** FarragTech

FARRAGTECHGmbH

ERWEITERTER MODUS

SPRACHE/LANGUAGE



# **FIT**-Controller

The CARD family members G/FIT, S, M and L are equipped with the intuitive operable FIT controller.

### » Operator friendly

The large, high resolution color display combined with the operator friendly software and the simple numeric keyboard makes it as simple as 1-2-3 in any language to set drying parameters and operate up to two loaders.

### » Drying recipes

FIT controllers contain all drying parameters for standard resins including drying time, temperature and sleep mode parameters. 100 additional special recipe pages are ready for operator programming for non-standard materials. Choosing a resin recipe sets the dryer in full automatic drying mode avoiding human errors.

### » Sleep mode

FIT observes the material flow through the loader operation or communication with the processing machine and automatically lowers the temperature to avoid degradation when production stops.



or Verturi-type loaders to load and/or unload the dryer. The loader control can be used to activate the sleep

### » Processing machine interface

cation between CARD dryers and processing machines via CAN-Bus, Modbus, Profibus, Ethernet, TTY, RS485 or RS232. The drying data can be displayed and the dryer can be operated through the processing machine controller

### » Individual software

FarragTech Software developers are available to customize FIT software to user specs.

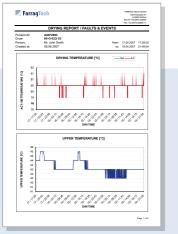


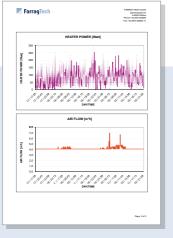
# **CARD**-Commander



Documentation and data history in all and every part of the production is becoming the standard in today's manufacturing. The CARD-Commander is a combination of hardware and software developed by FarragTech to not only collect and save all relevant drying process data from unlimited number of FIT equipped CARD-Dryers and FIT controlled loaders but also to control those dryers and loaders from a central computer or a laptop. The **web based design** allows **no data loss** even if the network connection is lost and enables connecting remote production facilities with the head quarters as well as safe remote access via Ethernet. The saved data can be viewed and printed in tables or graphic charts and the Commander can be programmed to transfer data to other software.

# | Particular | Par





DRYING REPORT / FAULTS & EVENTS		
Product-ID:	A0072803	
Dryer:	68-0-623/ 63	
Person:	Mr. John Smith	from: 17.04.2007 17:28:05
Created at:	06.06.2007	to: 19.04.2007 21:48:04
DATE / TIME	FAULT / EVENT	DATE / TIME ON DRYER
19.04.2007.21.52.51	NR ACTIVATED	19:04:2007:21:53:58
19.04.2007 21:58:04 COMMUNICATION E	RROR MASTER-SLAVE	
10.05.2007 01:28:23		
	RROR MASTER-SLAVE	
19.04.2007 22:14:00 POWER FAILURE		19.04.2007.22:15:07
19.04.2007.23:14:02 RE-POWERED		19.04.2007.23:15:09
19.04.2007.23:14:21 SET VALUE CHANG	ш	19.04.2007.23:15:28
19.04.2007 23:20:52 NO COMPRESSED /	NR ACTIVATED	19.04.2007.23:21:59
19.04.2007.20.21.21 NO COMPRESSED A	NR «-DEACTIVATED	19.04.2007.23:23:23
24.04.2007.06:29:36 SET VALUE CHANG	10	24.04.2007 09:41:38
24.04.2007 15:19:47 SET VALUE CHANG	ш	24.04.2007 18:21:49
24.04.2007 15:20:28 DRYING TEMPERAL	TRE TOO HIGH -> ACTIVATED	24.04.2007 18:22:30
24.04.2007 15:20:43 DRYING TEMPERAT	URE TOO LOW <- DEACTMATED	24.04.2007 18:22:45
02:05:2007 12:29:21 POWER FAILURE		02.05.2007 15:31:23
02.05.2007 13:29:23 RE-POWERED		02.05.2007 16:31:25
02 05 2007 14:30:01 SET VALUE CHANG	10	62.05.2007 17:32:03
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# **CARD**-Accessories

CARD Dryers are light weight, compact and flexible, which makes them very flexible and suitable for any installation type. Integrating loader controls in the dryer control creates harmony between material handling and drying. The wide range of accessories developed by FarragTech for its innovative CARD-Series turns it into a perfect system. FarragTech-Engineering works in direct contact with valued customers and CARD-Users to design complex central drying and material handling systems as well as individual custom solutions from the silos to the feed throat of every processing machine on the production floor.

### » Loaders

A wide variety of material loaders starting from a tiny Venturi Loaders to fit on the lid of a dryer hopper as little as 1 liter up to large size vacuum loaders with single or dual port are available. Individual loader control, dryer/loader combined controls and central system controls are at your finger tip for any application.

### » Suction boxes

Stainless steel suction boxes with single and/or multiple suction ports for conventional or dry air material loading system are available for any floor standing or mobile dryer size starting from 10 liter [2.6 gal].

### » Mobile frames

Standard mobile frames on casters for any CARD-Size between 10 and 850 liter [2.6 – 221.5 gal] are available.

### » Feed throat adaptors

The G, S, E and M-Series are suitable for direct installation on the feed throats of processing machine. The L-Series is suitable for installation on top of the processing machine. A wide variety of feed throat adaptors is available to connect between machine and dryer.

### » Dryer and material flow monitoring

Compressed air dew point sensors and low material level alarm sensors are available as options to integrate in CARD-Series and central systems.





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