



COMPACT drying/conveying units

Motan's COMPACT units are designed for flexible preparation of materials next to the replication lines. They are ideal for applications from one up to four injection moulding machines.

Conveying to the drying bin

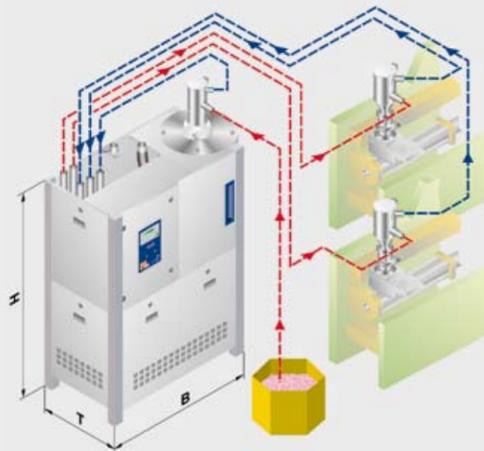
The intergrated hopper loader can convey material over different distances – depending on which blower has been specified.

Drying

The twin desiccant bed dryer generates in a closed environment a continual stream of dry air with a low dew point guaranteeing a residual moisture content of at least 50 ppm. A unique benefit of the COMPACT dryer is that no cooling water is required.

Control

All conveying and drying functions are controlled using a Siemens PLC. Operation is simple.



The COMPACT dryer feeding two machines.

Technical data					
Dry air generator Type COMPACT	50/1	50/2	80/2	80/3	100/4
Drying bin volume (l)	140	140	200	200	250
Dry air flow rate (m³/h)	50	50	80	80	100
Number of drying bins	1	1-2	1-2	1-3	1-4
Typical material throughput (kg/h)	25	25	40	40	50
Temperature range (°C)	60 - 130	60 - 130	60 - 130	60 - 130	60 - 130
Power supply (V/Hz)	3/IN/PE 400/50				400/50*
Compressed air oil and water-free (bar)	5 - 7	5 - 7	5 - 7	5 - 7	5 - 7
Parts in contact with material	Stainless steel				
Control	Siemens SPS S7				
Filtration rate (%)	99,995				
Connected load of conveying blower (kW)	1.3	1.3	2.2	2.2	2.2
Equivalent conveying distances (m)	25	25	50	50	50
Dimensions (mm)					
B	1350			1350	
H	1900			2125	
T	690			690	
Weight approx. (kg)**	320	320	350	350	400
Colour RAL	7040	7040	7040	7040	7040

* With frequency converter.
** Depending on equipment.

Subject to technical changes.

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Our service

We are proud of our people. In all our operations around the world, the same standards of excellence are applied in all departments of our work for you – the customer. Their advice and consultancy is based on a clear understanding of what you need allied to in-depth knowledge of potential solutions. You can be certain that the recommended solution to your needs is the best there is.

Carefully orchestrated equipment manufacture and administrative systems result in delivery and installation exactly when promised. Technical support continues after installation – after-sales service is as important to Motan as supplying the equipment.

We want your next order too and we will only achieve that if you are satisfied with our service.



Materials handling solutions for Optical Disc manufacturing

New applications for Optical Discs are being developed everyday. Increased memory capacity and faster memory technology are making ever increasing demands on the manufacturing process. The raw material used, be it Polycarbonate or PMMA, must be handled under strict processing parameters.

As a world leader in plastics raw materials handling, we meet these high expectations. Motan has developed DISCtec, a tailor-made solution for the replicator, covering material storage silos to big-bag discharge stations; small compact dryers to fully centralised handling systems and materials conveying.

Each component has been designed to meet the very special demands of Optical Disc production for all types of CD and DVD formats.



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Innovation

Motan's teamwork approach to research and development is responsible for its strong growth within the Optical Disc industry. Engineers from Motan have collaborated with leading material suppliers, integrators, injection moulding machine manufacturers and customers to develop some of the most innovative equipment in the industry today. Replicators benefit from the resulting solutions; correctly dried and contamination free material delivered to the injection moulding machine without fail.

Material storage

Profitability starts with well organised material storage. Motan has a full range of storage solutions designed specifically for OD manufacture. From big-bag discharge stations to large centralised silo systems.

Water chiller

MOCHILL units are compact water-air chillers to cool hydraulic systems and moulds for injection moulding in conjunction with high pump pressure.

Conveying to the machine

Small batch conveying and low material levels are maintained with the specially designed machine loader. The material feed-lines are purged after every material conveying cycle and hot dry air is used to convey the granulate. This ensures that the material is kept dry and at the correct temperature at all times. Sprue recovery systems can be integrated.



Centralised materials handling systems

Motan's systems operate at maximum efficiency and with a minimum of operating maintenance. The integration of central storage, drying, dry air conveying, line purging and material distribution systems enables the replicator to optimise his production area while maintaining maximum flexibility and production up-time.



Drying bins

The stainless steel LUXOR drying bins are sized to accommodate the material throughput of the system. They are fully insulated and come equipped as standard with the ETA-process® patented energy-recovery system.

DISCtec

Contamination-free

All components have been designed to eliminate any chance of contamination. Materials such as polished stainless steel and reinforced glass are used, and all items are specially cleaned before installation. All air used for drying and conveying the granulate is micro-filtered. The process air HEPA filter is located after the process heaters and guarantees a filtration efficiency of 99.995%.



Information and control systems

Effective operation, control and monitoring of the material handling system is essential for the ultimate efficiency of the production process. Motan's control systems are tailored to the customer's precise requirements. For complex installations the LINKnet visualisation system offers a higher degree of operating convenience and visual information.



Central dryer

Motan's simple, yet highly efficient insulated, dual-bed series of LUXOR central dryers are all designed with closed-loop cooling during the regeneration phase to give consistently low dew points throughout the drying process.



Central conveying

System loaders are connected to maintenance free three-phase vacuum pumps. A self cleaning central filter allows for material dust and fines to be collected away from the production area.

