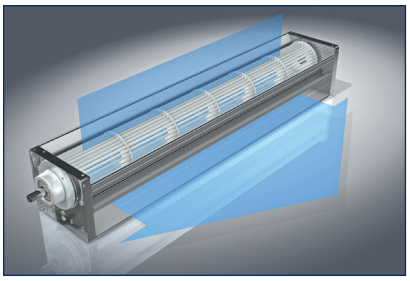
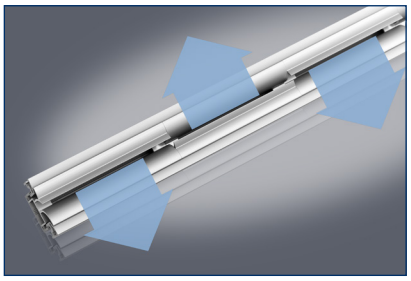
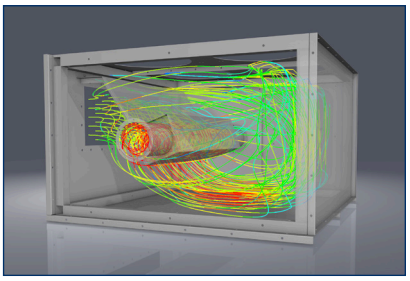
AIR TECH SYSTEMS



TANGENTIAL FANS



LINEAR AIR DIFFUSERS



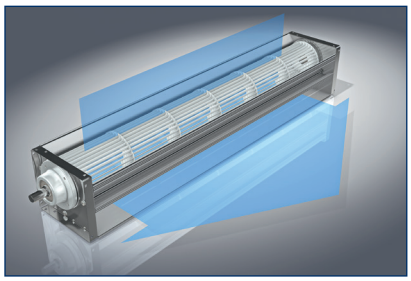
ENGINEERING SERVICES

INNOVATIVE SOLUTIONS FOR RAIL TRANSPORT

LTG.de

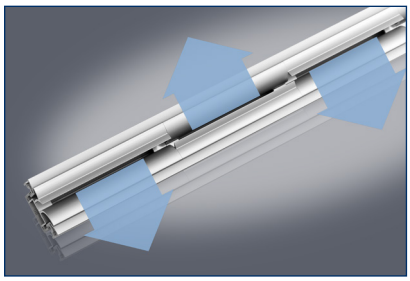
INNOVATIVE SOLUTIONS FOR RAIL TRANSPORT

LTG Aktiengesellschaft offers products and solutions specifically customized to rail transport, such as high-performance tangential fans or highly inductive air diffusors in a narrow and unobtrusive build – ideal for use in rail-bound vehicles.
Moreover we offer you our Egineering Services and would be pleased to advise you!



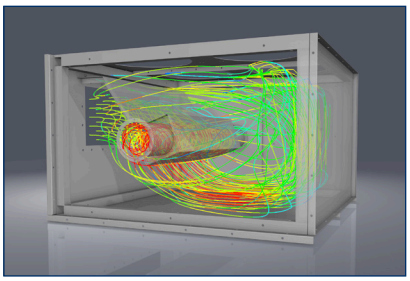
TANGENTIAL FANS

- **Even airflow over large areas**
- **For optimal cooling of drives and power components**
- **For heating of entry area and passenger cabin**
- **Flexible and space-saving installation**



LINEAR AIR DIFFUSERS

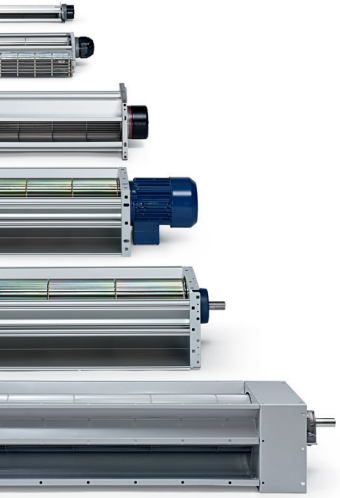
- **Highly inductive single jets for highest thermal comfort**
- **Additional safety concerning fire safety and vandalism**
- **No contamination of ceiling due to LTG System clean®**



ENGINEERING SERVICES

- **Acoustic Measurements**
- **Airflow Simulations**
- **Comfort Measurements**

... to reduce investment risks and to make sure to choose the best climate system due to LTG System clean®

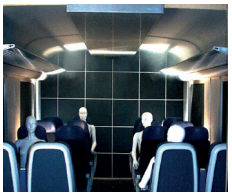


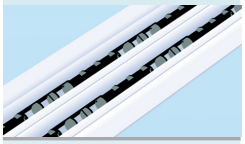
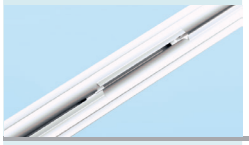
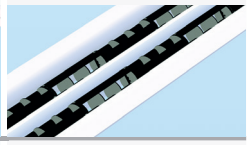
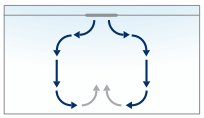
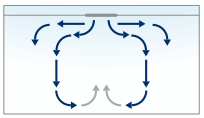
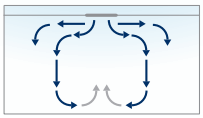
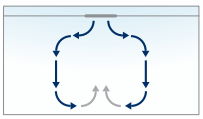
LTG HIGH-PERFORMANCE TANGENTIAL FANS

The robust design and the use of high-quality materials ensure a long service life. The function principle, that makes additional air deflectors unnecessary, along with the space-saving build, makes use of tangential fans particularly efficient.

The tangential fan sucks in air across the entire length of the fan impeller and routes it through the inside of the impeller, where it is deflected and accelerated by the air vortex produced by rotation of the impeller. Then, the air exits again across the entire impeller length on the pressure side. The air vortex separates the suction and pressure sides of the fan in the narrowest point between the impeller and the vortex builder and guides the flow together with the fan deflector. This creates the even laminar air flow across the entire outlet width of the fan. The air flow can be deflected by 90° or 180°.

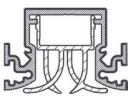
LTG LINEAR AIR DIFFUSERS LDB (SELECTION)

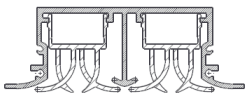

	LDB 12*small*	LDB 12*clean* LTG System clean®	LDB 12*style* LTG System clean®	LDB 20*classic*
				
Features / Application	Extremely narrow, therefore inconspicuous installation in shadow joints or ceiling systems possible. Individual beams adjustable in a range of 180°.	For high comfort, additional slot in the diffuser border profile to reduce contaminaton around the diffuser.	Completely made from metal, non-flammable. Unobtrusive integration in suspended ceilings. Meets highest architectural demands due to its narrow built.	For high comfort. Individual beams adjustable in a range of 180°. For use in ceiling systems or for windshield ventilation.
Numer of slot rows	1	1 | 2 | 3 | 4	1 | 2 | 3 | 4	1 | 2 | 3 | 4
Recommended volume flow rate per meter [m3/h]	**65** with L_{wA} = 35 dB(A)	1 slot row: **70** 2 slot row: **130** 3 slot row: **190** 4 slot row: **250** with L_{wA} = 30 dB(A)	1 slot row: **70** 2 slot row: **130** 3 slot row: **190** 4 slot row: **250** with L_{wA} = 30 dB(A)	1 slot row: **110** 2 slot row: **190** 3 slot row: **250** 4 slot row: **300** with L_{wA} = 35 dB(A)
Integrated sound absorber to increase cross-talk sound attenuation	■	■	■	■
Profile width [mm]	15 rsp. 28	31 up to 240	41 up to 240	31 up to 240
Length [mm]	up to 1500	up to 2000	up to 2500	up to 2000
Diffuser elements adjustable	■	■	■	■
Connection box with integrated air regulator	–	■	■	■
Air diffusion				

Choice of border profiles
for LDB 12/M LTG System clean®

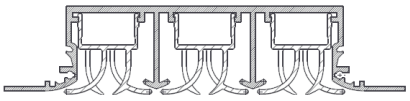
Other combinations on request.



Type 0
available with
1 slot row



Type 8
overlapping to the ceiling
with narrow border

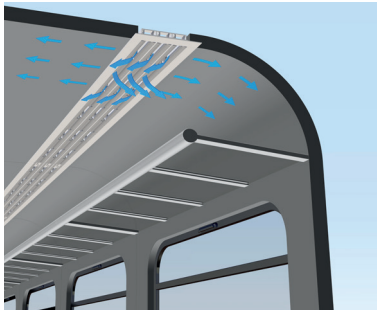


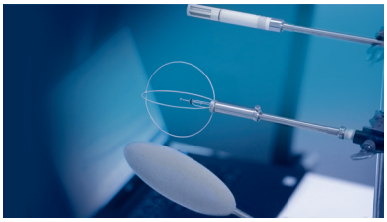
Type 1
overlapping to the ceiling
with wide border

DAS LTG **SYSTEM CLEAN®** – BRILLIANT AND UNIQUE!

Contaminants within the room air like dust, tobacco smoke, carpet abrasions, dust or oil vapour deposit around the ceiling and diffuser as a result of entrainment. The LTG System clean® prevents surface staining almost completely by providing a screen of clean supply air across the ceiling.

The costs of renovation and maintenance are considerably reduced!





LTG ENGINEERING SERVICES

LABORATORY TEST

Secure air handling plans in advance. Use the full the potential of existing systems.

- Optimisation of thermal comfort
- Precise imitation (mock-up)
- Visualisation of flows
- Optimisation of acoustics
- Determination of the required threshold speeds for transport and thermal processes
- Measurement of flow profiles

MEASUREMENT

We review and optimise your ventilation concept or your production process right on site.

- Optimisation of existing air conditioning facilities
- Optimisation of thermal comfort
- Energetic optimisation
- Determination of boundary parameters such as speed, pressure, temperature, humidity or geometries
- Visualisation of flows
- Acoustic measurements

SIMULATION

No matter if you need an air conditioning concept or a new production process – use state of the art simulation tools even in the planning stage.

- Computer-based flow simulation CFD
- Finite-element method
- Development of energy-efficient flow concepts
- Wind simulation

R&D

Use the innovative power and inventive spirit of the LTG engineers for ideal results in your plant.

- Development of customer-specific products
- Individual prototype construction
- Assessment of new concepts before they are implemented

LTG Aktiengesellschaft

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