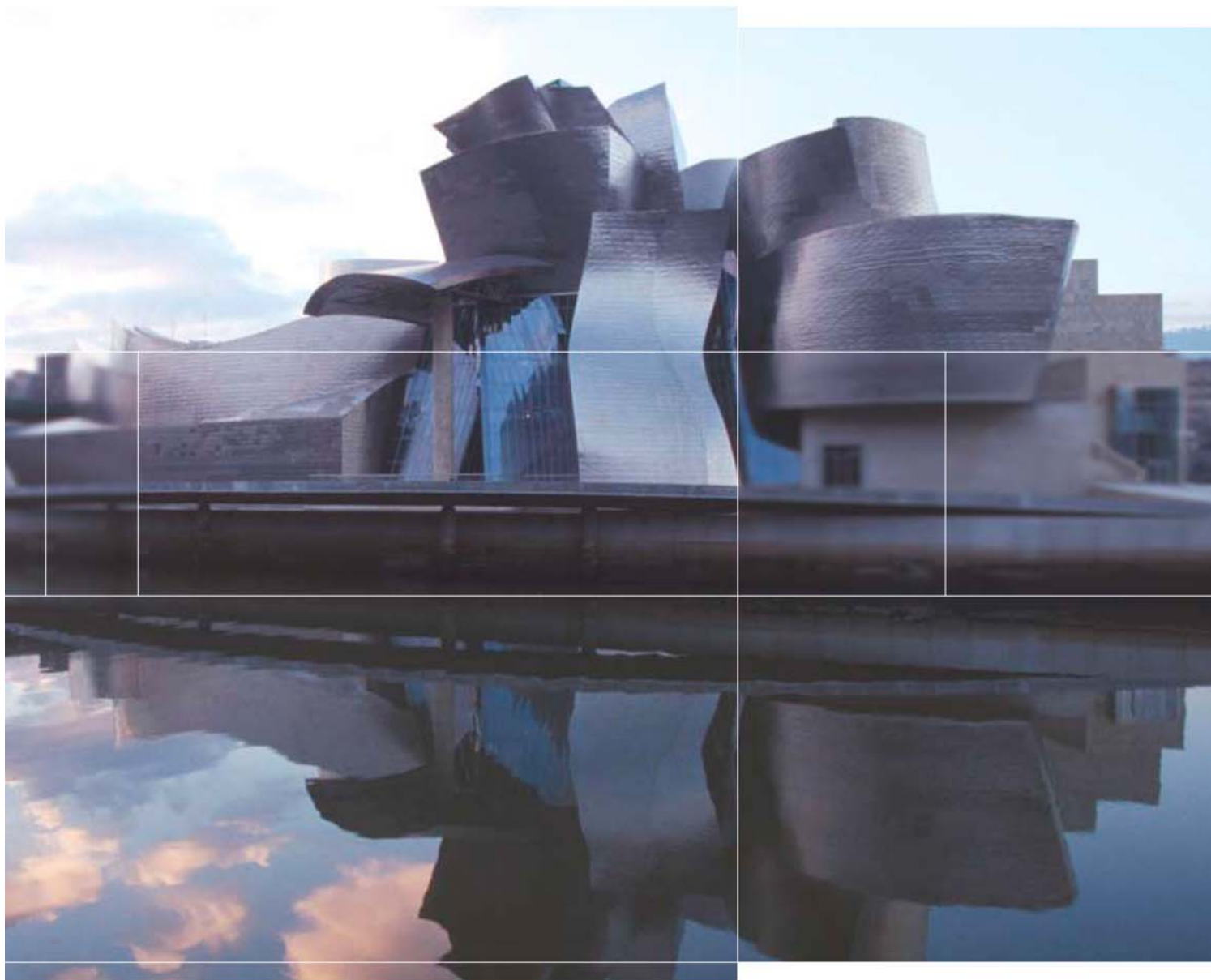
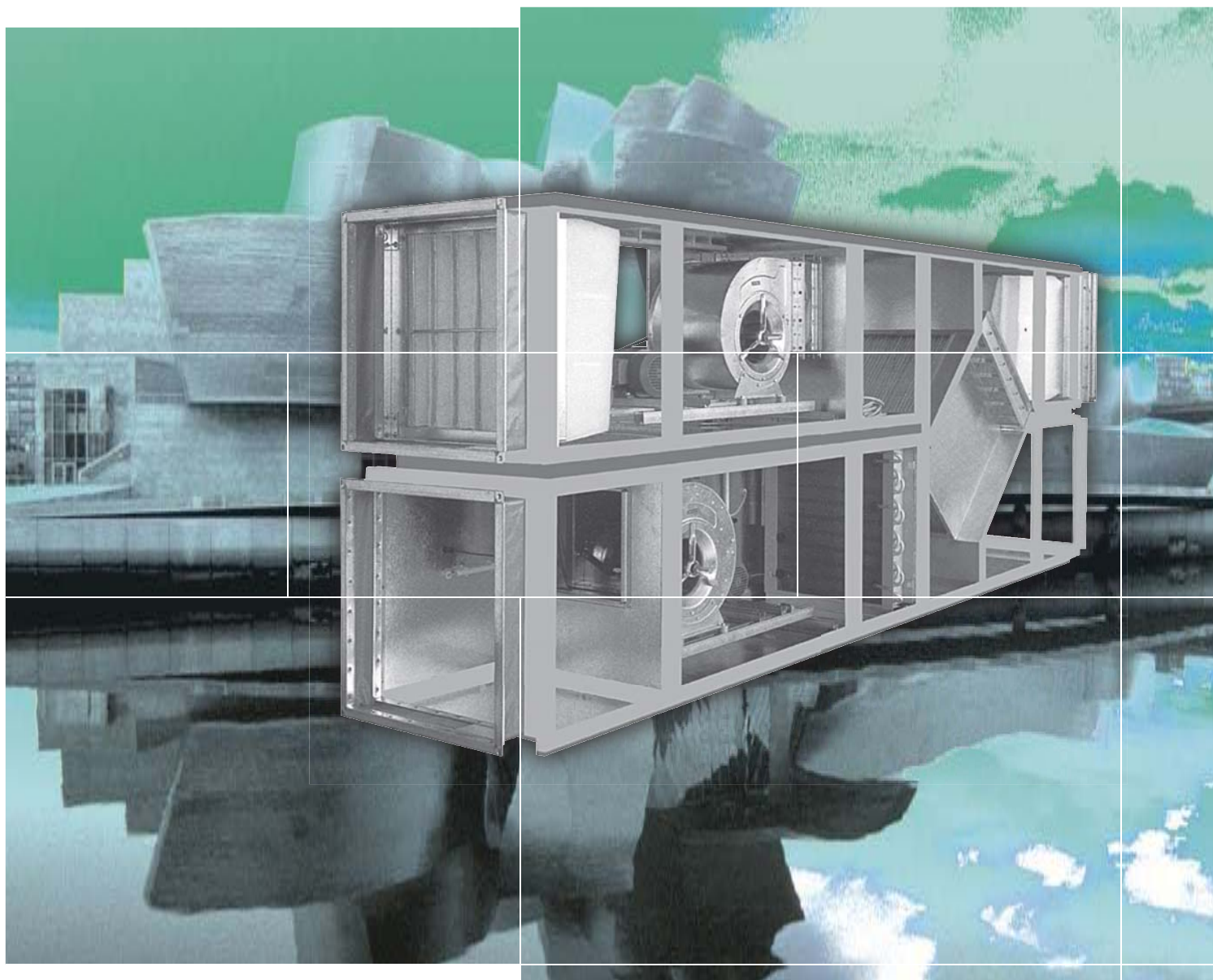


Centrifugal Fans
Centrifugalni ventilatori



23 rotavent fans have been chosen for the Museum Guggenheim at Bilbao. Noise level, energy consumption, and product quality have been the decisive criteria for this choice.

The heart of a central air handling unit ...



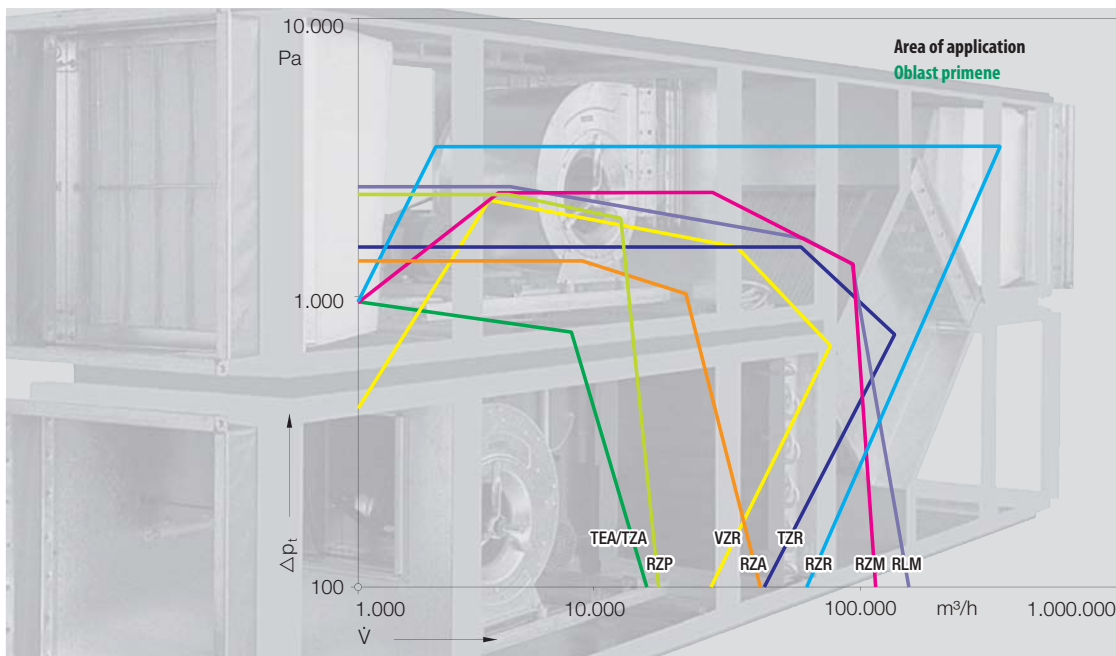
Nizak nivo buke, mala potrošnja energije, kao i kvalitet proizvoda bili su odlučujući kriterijumi prilikom izbora 23 rotavent ventilatora za potrebe Muzeja Guggenheim u Bilbao-u.

Srce klima komore

Nowadays there is a great choice of different fan ranges available for everybody who has to select fans for an AHU. Every execution has been optimised to its strengths. GebhardtVentilatoren offers the opportunity to find just the right fan for every application.

... everybody who selects a fan is responsible to make best use of the energy and to respect the admitted limits for noise emission.

Making the system work ...



Example of fan designation RZR:

R	Z	R
1	2	3
Centrifugal impeller with backward curved blades	Double inlet	Belt drive

1 = Impeller

- R - Centrifugal impeller *rotavent*
- T - Impeller with forward curved blades
- V - Centrifugal impeller *touravent*

2 = Casing

- Z - Double inlet
- E - Single inlet

3 = Drive

- R - Belt drive
- A - Integral motor
- P - EC motor
- M - IEC standard motor

Ventilator omogućava funkcionisanje sistema

Danas postoji veliki izbor ventilatora različitih karakteristika namenjenih za ugradnju u klima komore, koji zadovoljavaju sve zahteve. Svaki tip ventilatora ima optimalne karakteristike. GebhardtVentilatoren nudi mogućnost izbora odgovarajućeg ventilatora za svaku primenu.

...svako ko bira ventilatore odgovoran je za racionalno korišćenje energije uz poštovanje prihvatljivog nivoa buke.

Primer označavanja ventilatora RZR:

R	Z	R
1	2	3
Centrifugalno radno kolo sa unapred zakrivljenim lopaticama	Dvostruki usis (duplex)	Kaišni prenos

1 = Radno kolo (rotor)

- R - Centrifugalno radno kolo *rotavent*
- T - Radno kolo sa unapred zakrivljenim lopaticama
- V - Centrifugalno radno kolo *touravent*

2 = Kućište

- Z - Dvostruki usis (duplex)
- E - Jednostruki usis (simplex)

3 = Pogon

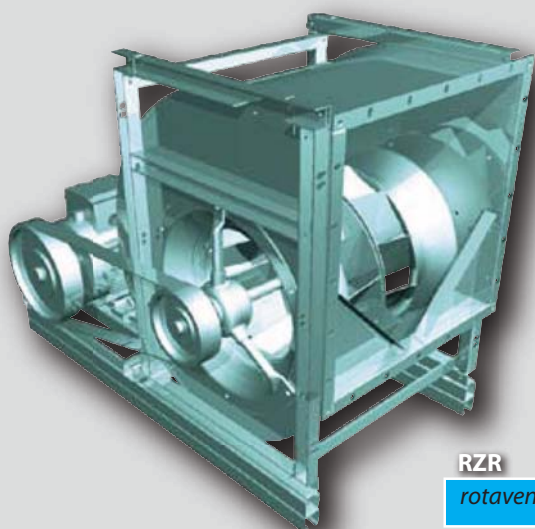
- R - Kaišni pogon
- A - Integrirani motor
- P - EC motor
- M - IEC standardni motor

Gebhardt rotavent – RZR

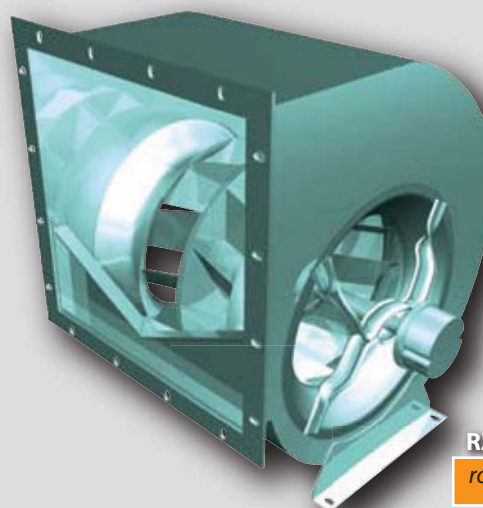
- Belt driven fan ranges up to size 1.600 (350.000 m³/h).
- Aerofoil blades supplying high pressure range.
- Easy adaptation to changing operating conditions.
- Unsensible to external aerodynamic influences.
- High efficiency and excellent noise characteristics.
- Suitable for flat belt drives.

Gebhardt rotavent – RZA / RZP

- Fan range with direct drive by integrated motor up to size 560 (35.000 m³/h).
- Most compact design.
- Economical use because of maintenance free operation.
- No dust generation, no subsequent filter necessary.
- 100% speed controlled at high efficiency values.
- Low slip technology means high motor efficiency.
- Suitable for frequency control.



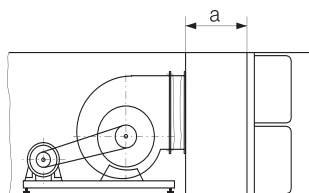
RZR
rotavent



RZA
rotavent

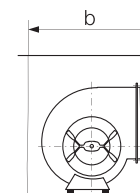
Gebhardt rotavent – RZR

- Ventilatori sa kaišnim prenosom, veličine do 1 600 (350 000 m³/h).
- Aerodinamički oblikovane lopatice (aerofoil) za visoke pritiske.
- Lako prilagođavanje promenljivim uslovima eksploatacije.
- Neosetljivi na spoljašnje uslove strujanja.
- Visoka efikasnost i odlične karakteristike u pogledu buke.
- Pogodan za pogon pomoću ravnih kaiševa.



Gebhardt rotavent – RZA / RZP

- Ventilatora sa direktnim pogonom pomoću integrisanog motora, veličine do 560 (35 000 m³/h).
- Izuzetno kompaktna konstrukcija.
- Ekonomična eksploatacija bez potrebe za održavanjem.
- Nema stvaranja prašine, pa nije potrebno filtriranje.
- 100% regulisanje brzine uz visoku efikasnost.
- "Low slip" tehnologija daje visoku efikasnost.
- Pogodan za primenu frekventnog regulatora.

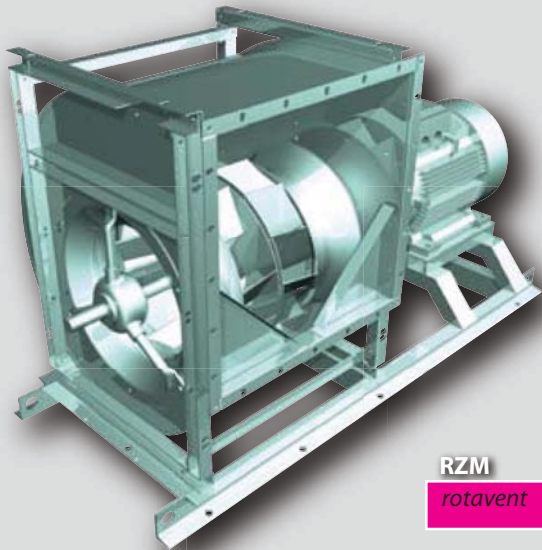


Gebhardt rotavent – RZM

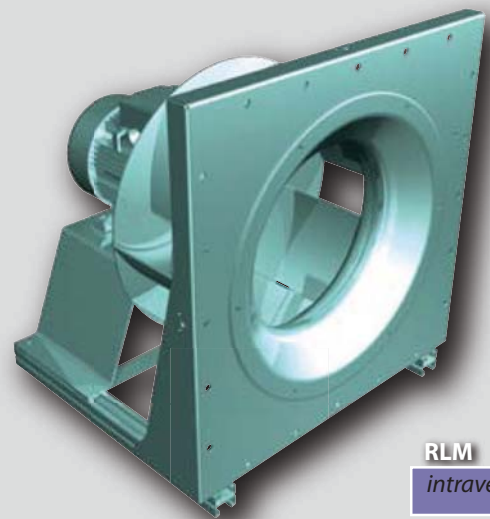
- Fan range with direct drive by IEC motor up to size 1.600 (200.000 m³/h).
- Direct drive covering higher performance range.
- IEC motor fitted on the side, control by frequency inverter.
- No belt drive losses, maintenance free.
- No dust generation, no subsequent filter necessary.
- All advantages of the famous rotavent design.

Gebhardt intravent – RLM

- Plug fan range with direct drive by IEC motor up to size 1.400 (130.000 m³/h).
- Single inlet fan for pressures up to 2000 Pa.
- Variable speed by inverter control.
- High efficiency even without casing.
- Reduced length.
- Multiple connection possibilities at pressure side.



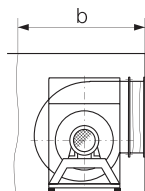
RZM
rotavent



RLM
intravent

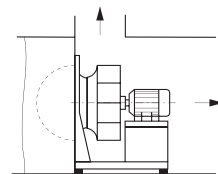
Gebhardt rotavent – RZM

- Ventilator sa direktnim pogonom pomoću IEC motora, veličine do 1 600 (200 000 m³/h).
- Direktna pogon omogućava veći stepen korisnosti.
- IEC motor postavljen bočno, regulisan pomoću frekventnog regulatora.
- Nema gubitaka usled kaišnog prenosa, nema potrebe za održavanjem.
- Nema stvaranja prašine, pa nije potrebno filtriranje.
- Sve prednosti poznate rotavent konstrukcije.



Gebhardt intravent – RLM

- Ventilator bez kućišta direktno pogonjen IEC motorom, veličine do 1 400 (130 000 m³/h).
- Jednostruki usis za pritiske do 2000 Pa.
- Promenljiv broj obrtaja primenom frekventnog regulatora.
- Visoka efikasnost čak i bez kućišta.
- Smanjeni gabariti ventilatora.
- Mogućnosti više priključaka na potisu.

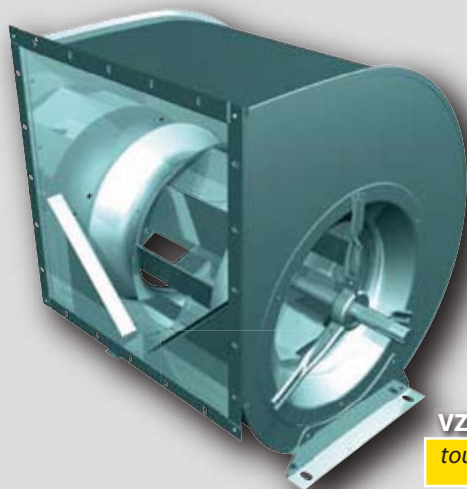


Gebhardt touravent – VZR

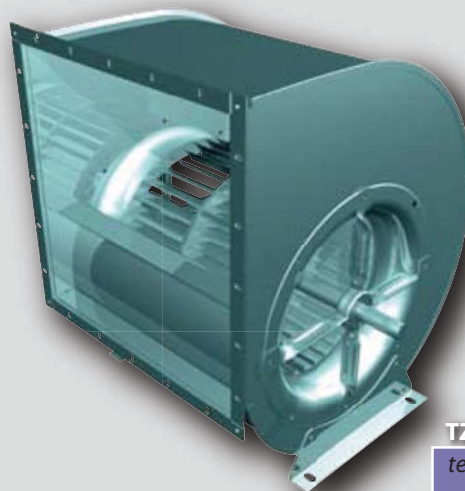
- Belt driven fan range up to size 710 (50.000 m³/h).
- Backward inclined laminar blades.
- Pressure range up to 2000 Pa.
- Economical solution by design and execution.
- Very good price/performance ratio.
- Stable operation over the whole fan curve range.
- Interesting element in combination with the full Gebhardt fan range.

Gebhardt teravent – TZR

- Belt driven fan range up to size 1000 (100.000 m³/h).
- Forward curved multiblade impeller.
- Available with brackets & flanges.
- Large flow rate within low pressure ranges.
- Low rotating speed.
- Low noise levels.



VZR
touravent



TZR
teravent

Gebhardt touravent – VZR

- Ventilator sa kaišnim prenosom, veličine do 710 (50 000 m³/h).
- Unazad nagnute lopatice.
- Napor do 2 000 Pa.
- Ekonomično konstruktivno rešenje
- Veoma dobar odnos cena/radne karakteristike.
- Stabilan rad duž cele radne krive ventilatora.
- Interesantan element u kombinacije sa različitim tipovima ventilatora proizvodnje Gebhardt.

Gebhardt teravent – TZR

- Ventilator sa kaišnim prenosom, veličine do 1 000 (100 000 m³/h).
- Radno kolo sa unapred zakrivljenim lopaticama.
- Može se isporučiti sa nosećim ramom i prirubnicama.
- Veliki protok pri niskim pritiscima.
- Mali broj obrtaja.
- Nizak nivo buke.

Gebhardt silentovent – TZA

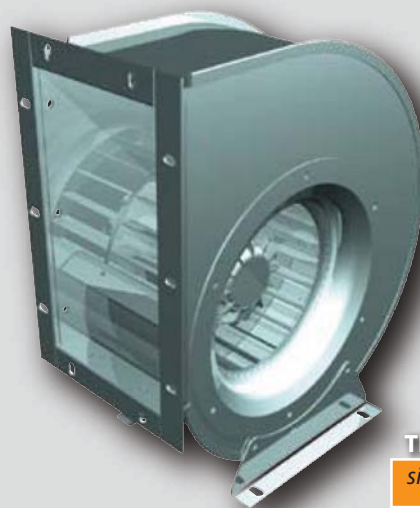
- Double inlet, double width.
- Available for last 45 years.
- Operating hundreds of thousand units.
- Easy to install, easy to operate.
- Up to 10.000 m³/h.
- Single phase, 3-phase.
- 100% controlled by voltagevariation.



TZA
sientovent

Gebhardt silentovent – TEA

- Single inlet, single width.
- Ultra flat and compact.
- Low noise, flexible use.
- Easy to install, easy to operate.
- Up to 4.000 m³/h.
- Single phase, 3-phase.
- 100% controlled by voltagevariation.



TEA
sientovent

Gebhardt silentovent – TZA

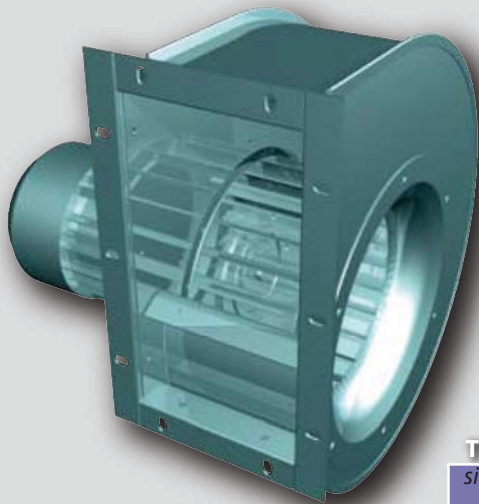
- Dvostruki usis, dupla širina.
- Proizvodi se već 45 godina.
- Ugrađen je u stotine hiljada uređaja.
- Laka montaža, jednostavno korišćenje.
- Protok do 10 000 m³/h.
- Monofazni, trofazni.
- 100% regulacija promenom napona.

Gebhardt silentovent – TEA

- Jednostruki usis, mala širina.
- Kompaktne konstrukcije.
- Nizak nivo buke, fleksibilan u radu.
- Laka montaža, jednostavno korišćenje.
- Protok do 4 000 m³/h.
- Monofazni, trofazni.
- 100% regulacija promenom napona.

Gebhardt silentovent – TEM/REM

- Single, inlet, single width.
- Centrifugal fans – forward or backward curved impeller
- equipped with standard IEC motor.
- For integration or with brackets for duct connection.
- Up to 20.000 m³/h.
- Ex proof (ATEX) versions available.
- Speed control by inverter.



TEM
sientovent

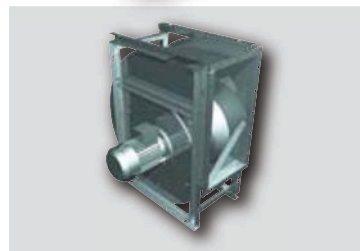


REM
rotavent



Gebhardt silentovent – TEM/REM

- Jednostruki usis.
- Centrifugalni ventilatori – radno kolo sa unapred ili unazad zakrivljenim lopaticama.
- Opremljen standardnim IEC motorom.
- Za ugradnju u uređaj ili za kanalsku ugradnju.
- Protok do 20.000 m³/h.
- Izrađuje se i u Ex zaštiti (ATEX), na zahtev
- Inverterska regulacija broja obrtaja.



The volumeter offers a simple and reliable possibility for checking or controlling the actual flow rate during operation.

Merilo protoka omogućava jednostavnu i pouzdanu proveru i regulaciju stvarnog protoka tokom eksploatacije.

... the integrated volumeter

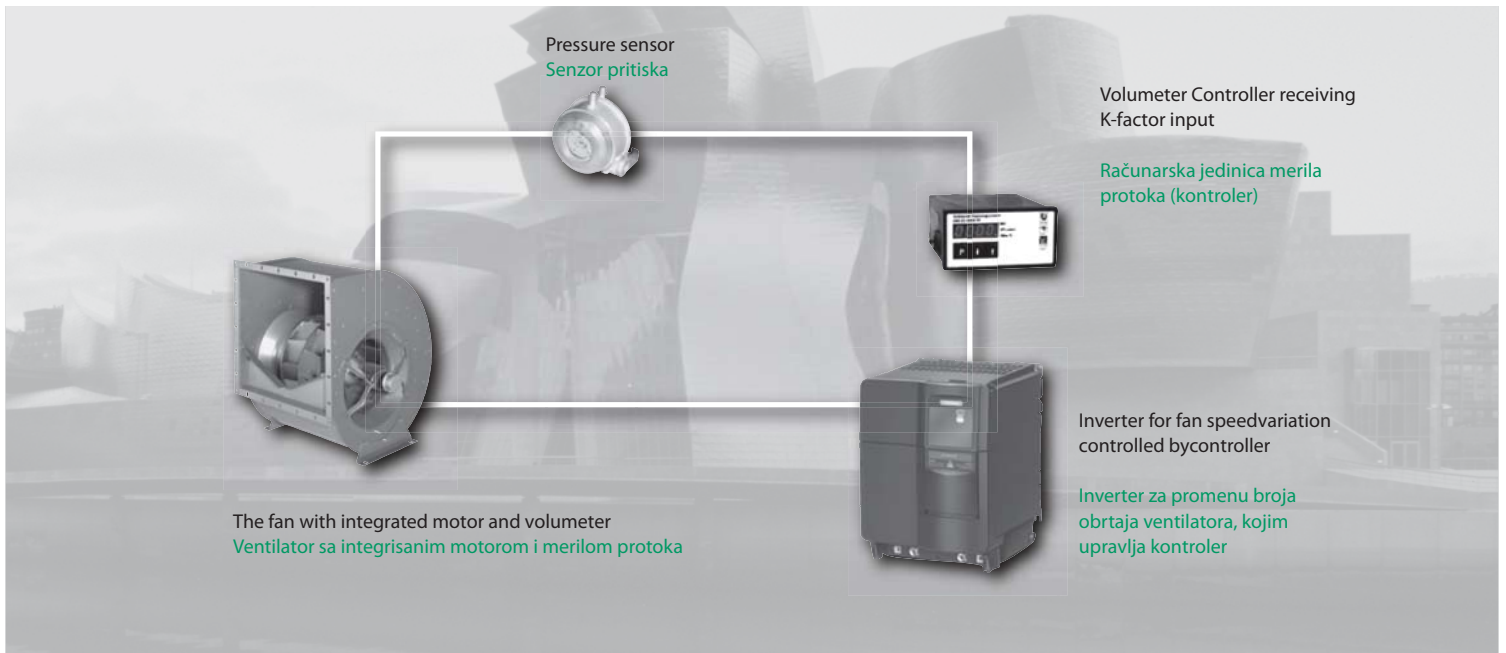
Flow rate check and control on the fan with the Gebhardt volumeter

- Easy
- Cheap
- Effective

... integrisano merilo protoka

Provera protoka kroz ventilator i njegovo regulisanje pomoću Gebhardt merila protoka (protokomera) je:

- jednostavno
- jeftino
- efikasno



All technical data is supplied by the software

proSELECTA II

- Simple
- Fast
- Reliable

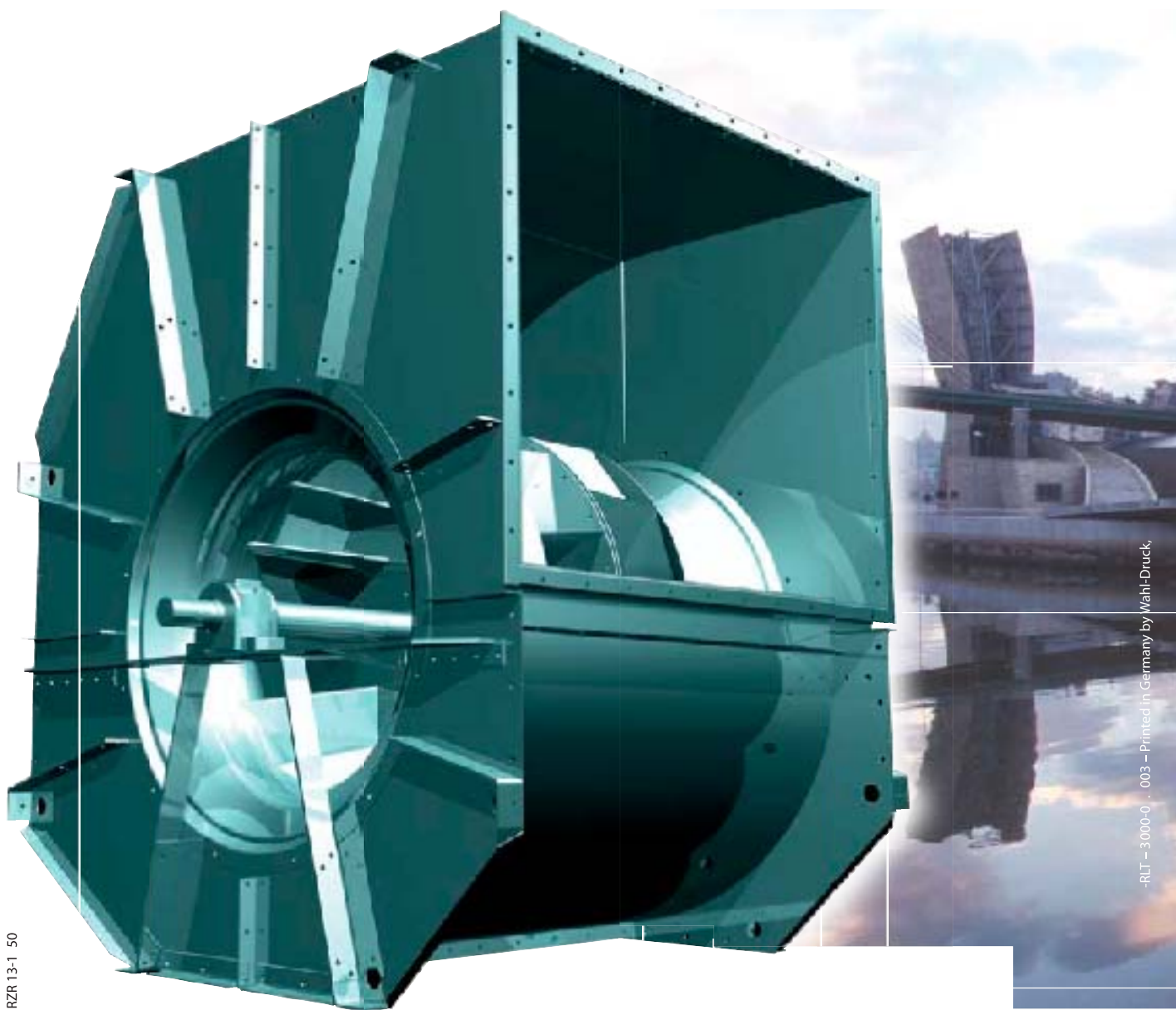
Svi tehnički podaci se dobijaju pomoću softvera

ProSelecta++

- jednostavno
- brzo
- pouzdano

This are the Gebhardt product ranges

- Centrifugal fans
- Roof extract fans
- Axial flow fans
- Process fans
- Smoke extract fans
- Domestic ventilation Bel Air
- Filter Fan Units



RZR 13-1 50

RLT - 3000-0 - 003 - Printed in Germany by Wahl-Druck,

GebhardtVentilatoren GmbH & Co. KG

Predstavništvo u Beogradu
Kumanovska 14, 11000 Beograd
Tel. +381 11 383 68 86, 308 57 40
Fax: +381 11 344 41 13
E-mail: gobrid@eunet.rs
www.airtrend.rs • www.gobrid.rs