

AERZEN

POSITIVE DISPLACEMENT BLOWERS

New Aerzen Positive Displacement Blower Units
Delta Blower Generation 5
Intake volume flows from 60 m³/h to 3.600 m³/h

**It's new and
individual!**



**AERZENER MASCHINENFABRIK
GMBH**

G1-067 | 00 | EN

2000

4.2006

It's new: *Delta Blower* 5 Generation

Stands for the new series of positive displacement blower units made by Aerzener Maschinenfabrik

Aerzener Maschinenfabrik began making positive displacement blowers in 1868 and is proud to be one of the oldest and largest manufacturers worldwide, with a market leading position in Europe. Technical competence, experienced staff and constant dialogue with our customers maintains the basis for the successful developments that originate from Aerzen. Our priority is that the customer benefits and because of these innovative products Aerzener Maschinenfabrik can guarantee that plant manufacturers and end users alike can secure their market success in the long and short term.



Customers Benefit from Technical Progress

The Delta Blower Generation 5 is the synthesis of the successful characteristics developed in previous generations combined with new technical innovations that already meet the market requirements of the future.

Why Generation 5?

Aerzener Maschinenfabrik was the first blower manufacturer to design a compact unit in 1960 and has developed this machine type continuously ever since.

Delta Blower Generation 5 is therefore the fifth generation of Aerzen blower units and represents the successful combination of tradition and innovation. However compared to other blower models this new series offers 5 main advantages for the customers. 5 main advantages which led to the name „Generation 5“.

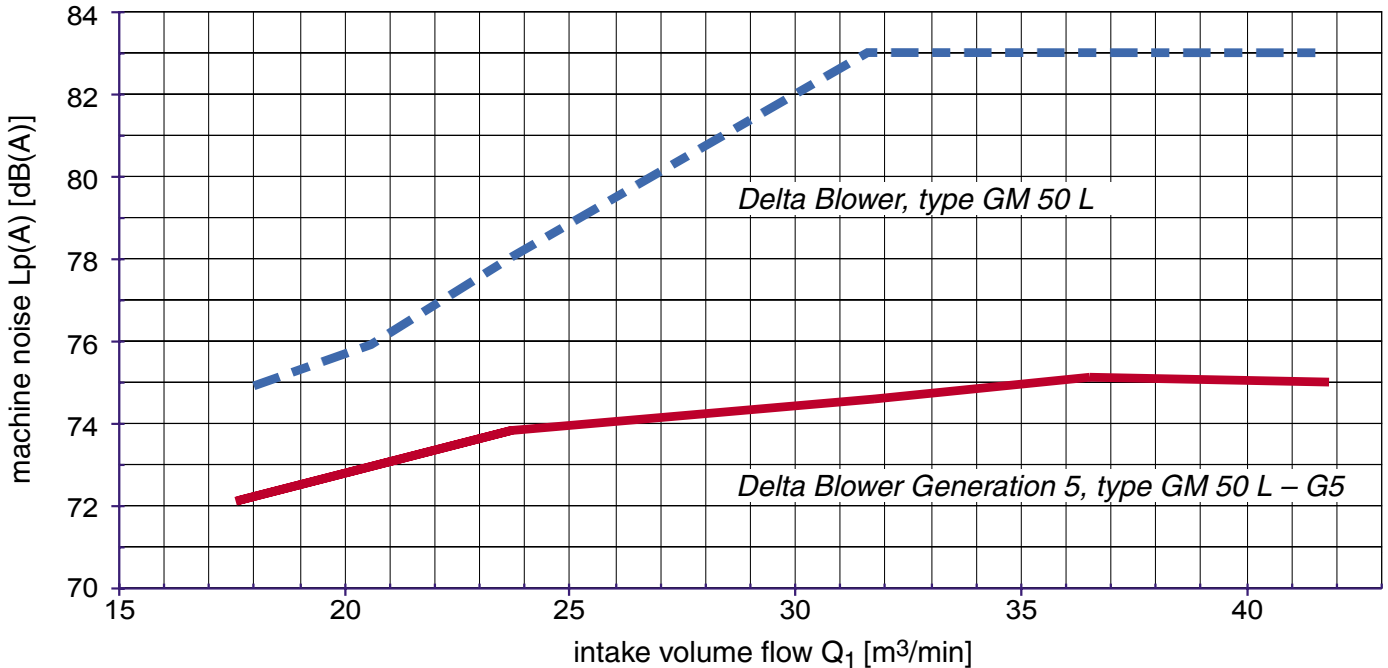


➤ Lower Sound Levels

Compared with the previous generation the sound levels of the Delta Blower Generation 5 series have been reduced by an average of 6 - 8 dB(A), in some single cases even lower sound levels have been achieved.

The silencing system within the units is totally reactive; therefore the danger of contamination from absorption material is eliminated. Due to these considerable sound reductions, expensive measures, such as special acoustic hoods are no longer required.

Comparison of sound pressure levels (700 mbar with acoustic hood)



Easy operation and maintenance:

Transport with fork lifters and lifting trucks, the maintenance work 'oil' and 'filter' are carried out from the front.

The oil level control can be viewed from the outside when blower is running.



➤ **Simple Operation and Easy Maintenance**

During development, special consideration was given to the ease of handling of the new units. The first consideration was easy positioning and installation: The units can be transported at site, by means of a suitable fork or pallet truck. They are delivered with a service pack that includes a lifting jack, oil funnel and an initial fill of oil, which also makes commissioning very easy. All service tasks and components that require maintenance are accessible from the front of the unit.

However, the important advantage is the new oil system. The oil level can be viewed and checked from the outside with the blower fully operational, this is possible without any problems. Therefore, blower shutdowns, process and production interruptions belong to the past.



➤ Mechanical Fan

A mechanical fan mounted on the blower drive shaft is used to ventilate the acoustic hood. Without the need for an electric fan additional electrical installation and energy costs are saved.

An additional advantage for this system is that it fully complies with all ATEX requirements. Expensive ex-proof fan motors are not required - a considerable cost saving.

➤ Absorption Material Eliminated

The base for the Generation 5 blower is also the discharge silencer in which the sound level is reduced by diverting the air flow. Absorption material which is subject to degradation has not been used in any part of the unit. The downstream system cannot become contaminated when it is used for pneumatic conveying of bulk food materials and the integrity of the foodstuff is guaranteed. In the sewage industry, the blockage of an aeration system can be avoided; costly maintenance expenditure is minimized and production losses are eliminated.

9 sizes in 5 nominal widths

Less room needed due to compact design and installation variant 'Side-by-Side'.



➤ Space Saving Design

Especially with the smaller size units the dimensions have been reduced, linked with the facility to install the units "side by side", the required floor space has also been considerably reduced. Providing further cost savings in designing the size of the blower room.

Due to the changed dimensions and type of design there is a better possibility of replacement regarding the previous Aerzen generations KI, KII and KIII.

Further advantages of the new series Delta Blower Generation 5 are the following:

- Aerzen base support certified as spark arrester for ATEX-applications (please also refer to brochure A1-020)
- Blower stage with patented procedure for pulsation reduction
- Standard application for energy-saving motors of class EFF1
- Compliant as per the PED guidelines (discharge silencer and pressure valve)
- Intake on the 'cold' side of the unit
- Automatic belt retention due to hinged motor mounting plate



Delta Blower 5

Generation

Generation 5 uses a mechanical fan!

This is mounted on the blower shaft and, therefore, does not need any additional absorbed power or electrical installation costs.

Scope of supply:

- Blower stage
- Base support with integrated discharge silencer
- Intake system with filter and silencer
- Drive (hinged motor mounting plate and belt drive)
- Connecting housing with pressure valve and non-return flap
- Flexible connection with clamps

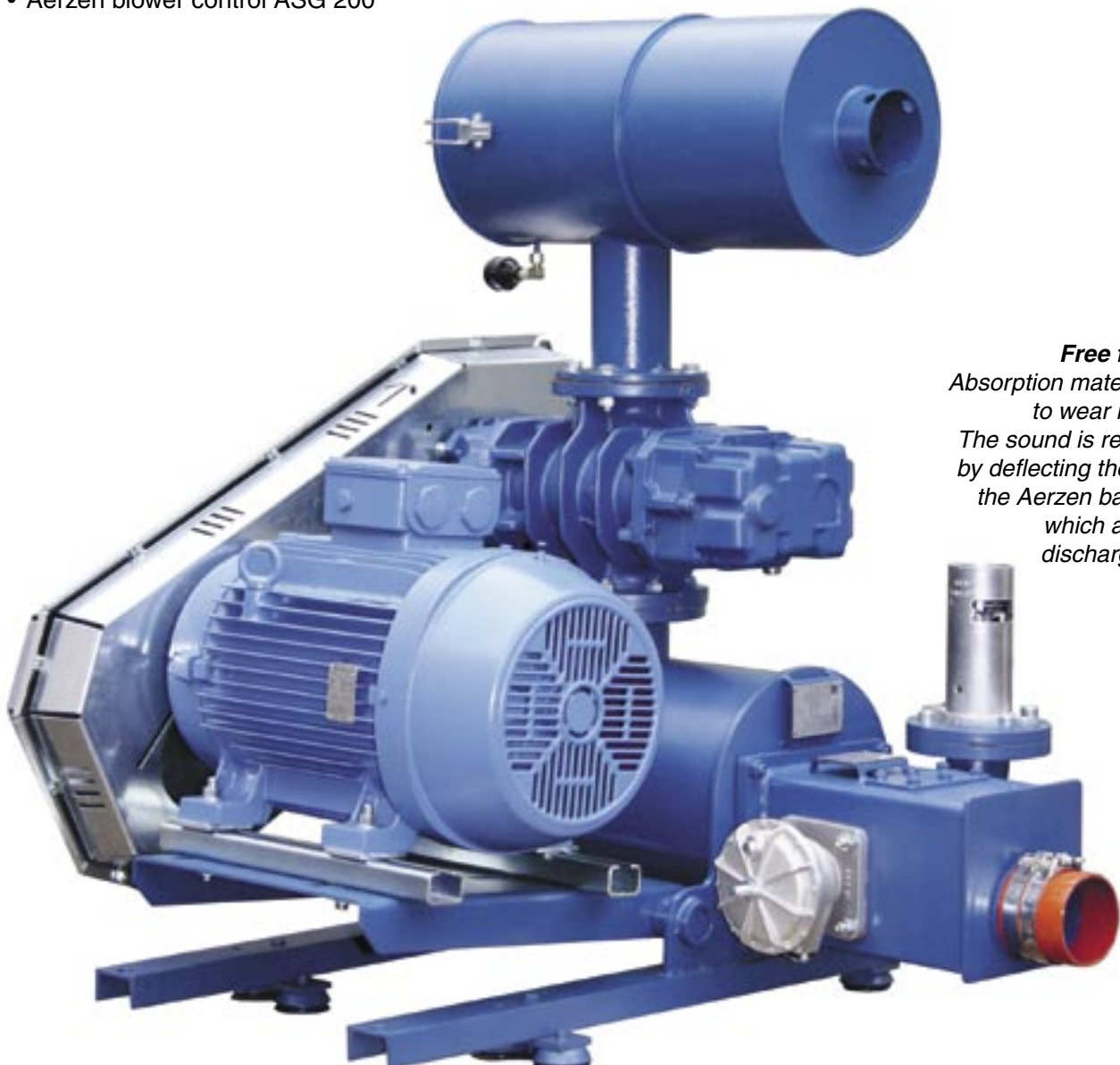
Accessories:

- Acoustic hood for internal or external installation
- Driving motor EFF1
- Start-up unloading device
- Pressure gauge for indication of conveying pressure
- Maintenance indicator for monitoring of the intake filter
- Aerzen blower control ASG 200



Optional accessories:

Aerzen blower control 'ASG 200'



Free from wear:

Absorption material subject to wear is not used. The sound is reduced only by deflecting the air flow in the Aerzen base support which also acts as discharge silencer.

Fields of application and use

Aerzen blower units are designed for the conveying of air and neutral gases.

At present, the series Delta Blower Generation 5 is available for overpressure and vacuum applications with nominal widths of DN 80 to DN 200. Further sizes and designs (vacuum, gas, nitrogen) are in preparation.

Using a flexible modular construction and a belt driven system makes it possible for all blowers and motor sizes to be installed, within a nominal range. Therefore, achieving an optimum adjustment to match the blower output and power consumption.

Future modifications are also possible.

For the new series Generation 5, 9 sizes are available for intake volume flows from approximately 60 m³/h to 3.600 m³/h and overpressures up to 1000 bar. The entire series Delta Blower includes 16 sizes and volume flows up to 15.000 m³/h.

Examples for the various fields of application:

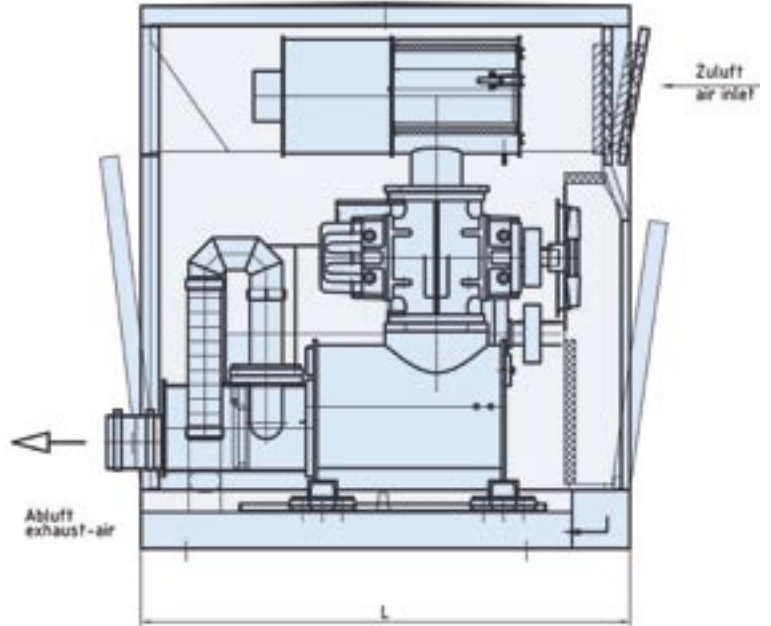
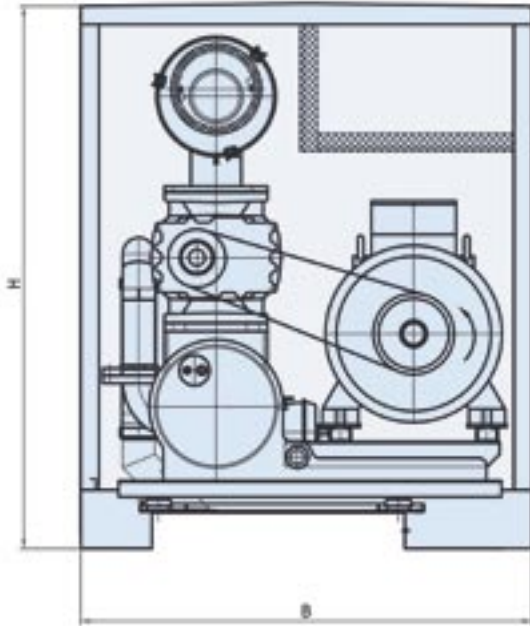
- Pneumatic conveying of bulk materials
- Sewage water purification
- Drinking water treatment
- Aeration of rivers and lakes
- Chemical and processing industry
- Glass and paper industry
- and many more



Delta Blower₅

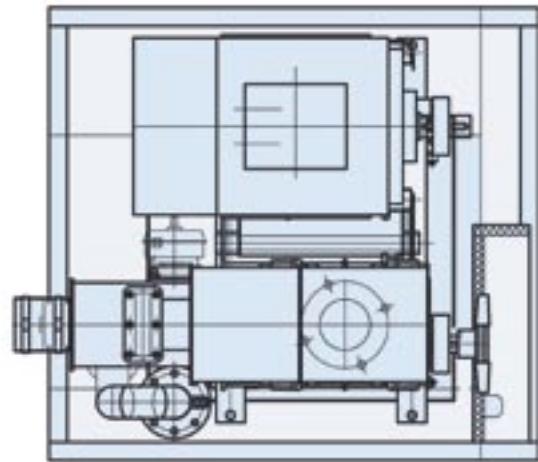
Generation

Generation 5 saves space! Especially with the smaller sizes the dimensions have been reduced and an installation variant 'Side-by-Side' is also possible.



Delta Blower₅

Generation



Performance data

Blower size	Overpressure, max. data				Dimensions and weights				
	Pressure	Volume flow	Motor rating	Sound press. level	Length	Width	Height	DN	Weight without motor
	mbar	m ³ /h	kW	dB(A)	mm	mm	mm		approx. kg
GM 4S-G5	1000	342	15	70	1135	925	1280	80	280
GM 7L-G5	700	493	15	70	1135	925	1280	80	330
GM 10S-G5	1000	542	30	70	1135	925	1280	80	350
GM 10S-G5	1000	696	30	73	1355	1250	1500	100	580
GM 15L-G5	700	1038	30	73	1355	1250	1500	100	580
GM 25S-G5	1000	1452	55	73	1355	1250	1500	125	640
GM 30L-G5	700	2082	75	75	1800	1500	1976	150	910
GM 35S-G5	1000	2418	90	75	1800	1500	1976	150	980
GM 50L-G5	700	2610	90	75	1800	1500	1976	150	1080
GM 50L-G5	700	3306	90	78	2055	1700	2075	200	1370
GM 60S-G5	1000	3540	132	78	2055	1700	2075	200	1490

dimensions (in mm) not binding

A good address, everywhere

Federal Republic of Germany

Aerzener Maschinenfabrik GmbH · Reherweg 28
31855 Aerzen / Germany
Tel. + 49 51 54 8 10
Fax + 49 51 54 8 11 91

Vertriebsbüro Nord
Weißer Kamp 23
29683 Bad Fallingb.ostel
Germany
Tel. + 49 51 62 98 13-0
Fax + 49 51 62 98 13 20

Vertriebsbüro Ost
Klosterstraße 8-9,
13581 Berlin / Germany
Tel. + 49 30 36 75 84-6
Fax + 49 30 36 75 84 80
Außenstelle Taucha:
August-Bebel-Str. 13c
04425 Taucha / Germany
Tel. + 49 34 29 81 46 86
Fax + 49 34 29 81 46 87

Vertriebsbüro Mitte
Erfurter Straße 2
63796 Kahl / Germany
Tel. + 49 61 88 91 04-0
Fax + 49 61 88 91 04 20

Vertriebsbüro Süd
Föhrenweg 1
89275 Elchingen / Germany
Tel. + 49 73 08 96 08-0
Fax + 49 73 08 96 08 20

Vertriebsbüro West
Taubenstraße 12
42551 Velbert / Germany
Tel. + 49 20 51 98 54-0
Fax + 49 20 51 98 54 18

Otto Zimmermann GmbH
Untertürkheimer Straße 9
66117 Saarbrücken
Germany
Tel. + 49 6 81 5 80 07-0
Fax + 49 6 81 5 80 07 43

Europe

Aerzen-France S.A.S.
10, Avenue Léon Harmel
92168 Antony Cedex
France
Tel. + 33 1-46 74 13 00
Fax + 33 1-46 66 00 61
for France, Algeria, Morocco and Tunisia

Aerzen Machines Ltd.
Aerzen House, Langston Road
Loughton, Essex, IG10 3SQ
United Kingdom
Tel. + 44 20 85 02 81 00
Fax + 44 20 85 02 81 02

Aerzen Belgium NV
Zone Guldendelle
A. De Coninckstraat 11
3070 Kortenberg / Belgium
Tel. + 32 2-7 57 22 78
Fax + 32 2-7 57 22 83
for Belgium and Luxembourg

Aerzen Nederland B.V.
Fotograaf 3
6921 RR Duiven
The Netherlands
Tel. + 31 26-311-26 41
Fax + 31 26-311-73 69

Aerzen Iberica S.A.
c/Urogallo 13
28946 Fuenlabrada / Spain
Tel. + 34 91-6 42 44 50
Fax + 34 91-6 42 29 03

Aerzen Iberica S.A.
Rua: Sacadura Cabral, 216, 7º B
2765-349 S. João do Estoril
Portugal
Tel. + 35 12 14 68 24 66
Fax + 35 12 14 68 24 67

Aerzen Svenska AB
Östra Bangatan 20
19560 Arlandastad
Sweden
Tel. + 46 8-59 12 21 90
Fax + 46 8-59 11 72 09

Aerzen Finland Oy AB
Teollisuustie 15
02880 Veikkola / Finland
Tel. + 35 89 - 8 19 47 20
Fax + 35 89-4 77 22 25

Bran & Luebbe AS
Sandviksveien 22
1363 Høvik / Norway
Tel. + 47 67 83 26 50
Fax + 47 67 83 26 51
for Norway and Iceland

Aerzen Svenska AB
Nakskovvej 28
2500 Valby / Denmark
Tel. + 45 36 16 40 48
Fax + 45 36 16 40 48

Aerzen Austria
Handelsges. m.b.H.
Gewerbepark Tresdorf II/1
2111 Tresdorf / Austria
Tel. + 43 22 62 7 43 88
Fax + 43 22 62 7 43 99

Aerzen (Schweiz) AG
Zürcherstrasse 300
8500 Frauenfeld
Switzerland
Tel. + 41 52-7 25 00 60
Fax + 41 52-7 25 00 66
for Switzerland and Liechtenstein

Alfonso Savoia Figli s.a.s.
di Savoia Alberto & C.
Via Vittor Pisani, 28
20124 Milano / Italy
Tel. + 39 02-67 07 52 77
Fax + 39 02-67 07 50 03

MANGRINOX S.A.
14, Grevenon Str.
11855 Athens / Greece
Tel. + 30 210-3 42 32 01-3
Fax + 30 210-3 45 97 67

Aerzen Polska S.A.
Ul. Marconich 9/17
02-954 Warszawa / Poland
Tel. + 48 22 642 29 09
Fax + 48 22 642 33 08

Aerzen Slovakia S.R.O.
Mariánska 17
90031 Stupava / Slovakia
Tel. + 42 12 65 93 46 94
Fax + 42 12 65 45 71 01

Aerzen Hungária Kft.
Bécsi út 52.III./4.
1036 Budapest / Hungary
Tel. + 36 14 39 22 00
Fax + 36 14 39 19 22

Aerzen Cz s.r.o.
Namesti TGM 729/7
69002 Breclav
Czech Republik
Tel. + 42 05 19 32 66 57
Fax + 42 05 19 32 66 58

HAFI Engineering & Consulting Gesellschaft m.b.H.
Mühlatorplatz 4-6
6800 Feldkirch / Austria
Tel. + 43 55 22-7 79 24-0
Fax + 43 55 22-7 49 38
for the remaining countries in Eastern Europe

Brasil, Mexico, USA, Canada and Asia

Aerzen do Brasil Ltda.
Rua Howard Archibaldi
Acheson Jr. N° 615
Jardim da Glória, Cep 06711
280 Cotia, SP / Brasil
Tel. + 55 11-46 12 40 21
Fax + 55 11-46 12 02 32

Aerzen México
Av. San Rafael 31
Fraccionamiento Industrial Lerma
Lerma 52000 Estado de México (Toluca) / México
Tel. + 52 72 82 82 55 08
Fax + 52 72 82 82 51 97

Aerzen USA Corporation
645 Sands Court
Coatesville, PA 19320 / USA
Tel. + 1 610-3 80 02 44
Fax + 1 610-3 80 02 78

Aerzen Canada Blowers Compressors Inc.
1995 Montée Labossière
Vaudreuil, Quebec J7V8P2
Canada
Tel. + 1 450-4 24-39 66
Fax + 1 450-4 24-39 85

Aerzen Asia Pte. Ltd.
38 Woodlands
Industrial Park E1
#04-01 Singapore 757700
Tel. + 65 6254 5080
Fax + 65 6254 6935

Aerzen International Trading (Shanghai) Co. Ltd.
No. 519 Tong Li Road
Jiu Ting Town
Song Jiang District
201615 Shanghai / P.R.China
Tel. + 86 21 5109 7767
Fax + 86 21 5109 7768

We would be pleased to provide the addresses of our representatives in the remaining continents, upon request.



Aerzener Maschinenfabrik GmbH

Reherweg 28 · 31855 Aerzen / Germany – P.O. Box 1163 · 31849 Aerzen / Germany
Phone + 49 51 54 / 8 10 · Fax + 49 51 54 / 8 11 91 · <http://www.aerzener.com> · E-mail: info@aerzener.de