

# Pneumatic tube systems

*Automated transportation solutions*



## An international company

### Latest technology coupled with tradition

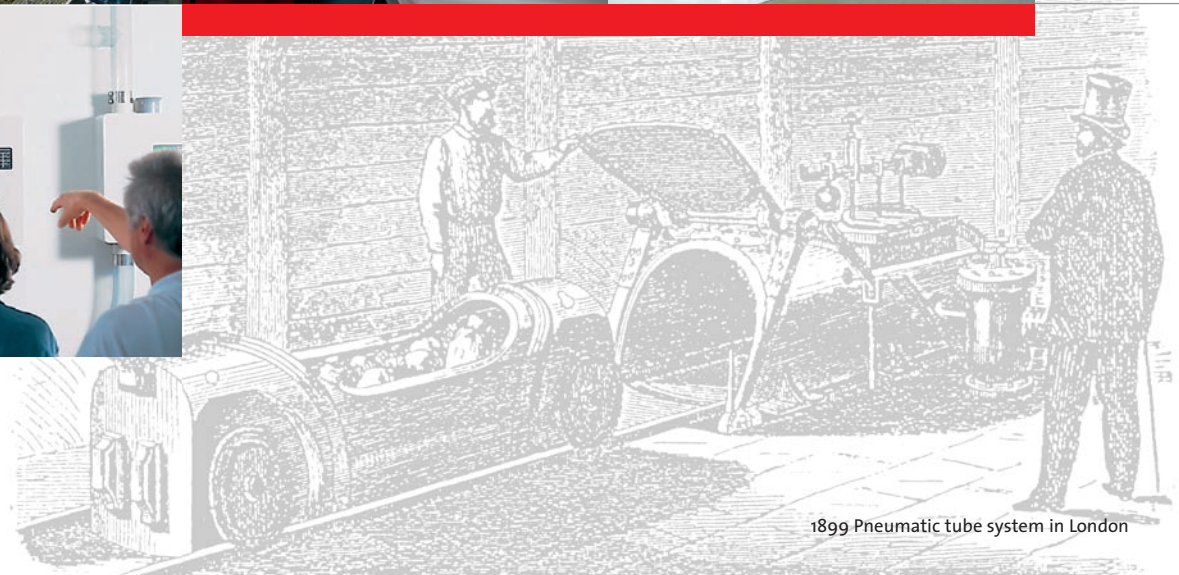
Pneumatic tube systems have been successfully produced in the Stuttgart area since 1956. AeroCom has been the name and trademark of the company since 1996. Through merger activity in 1980 it brought a number of well-known companies such as Aeropost, Airfix, and AeroTrans together under one roof. Today these names still stand for quality, reliability and advanced technology in pneumatic tube systems.

An important step towards the future was accomplished in the year 2001, when the entire company moved to a brand new factory and administration building in Schwaebisch Gmuend.

More than 35.000 AeroCom pneumatic tube systems have been installed in virtually every type of business, institution and industry. This wealth of experience has made AeroCom the largest manufacturer of pneumatic tube systems in the world. AeroCom Pneumatic Tube Systems enjoy an unrivalled reputation in all market and product sectors.

Our range of services includes consultancy and project design with analysis of requirements, the selection of the most suitable pneumatic tube system and the work of installation and servicing.

Modern production methods and excellent working conditions ensure that the high quality of our products is maintained consistently wherever we are.



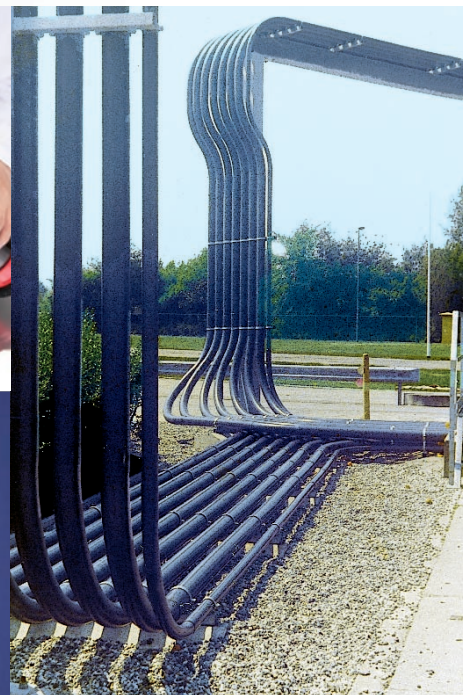
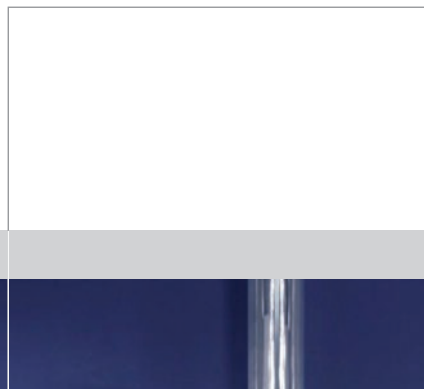
1899 Pneumatic tube system in London

## Our versatility is demonstrated every day – in the most varied environments

Versatility is one of our strengths. Depending on the equipment, our systems meet the most widely varying specifications, from small businesses to large groups and even in hospitals. Thousands of users throughout the world would not be without their pneumatic tube systems.

### Hospital

Every department of a hospital can be connected to a pneumatic tube system. Laboratory samples, blood plasma, scans, documents etc. can be reliably transported with no risk of damage.



### Industry, specimen transport and administration

In industry and administration, documents are often dispatched to individual departments that are often located far apart. Individual components sent “just in time” from the stores to production, liquid samples of oil from the tanker filling station to the refinery lab – they are no problem for Aerocom pneumatic tube systems.



## Cash handling

In toll booths, petrol stations, banks and supermarkets. All tills, and particularly the journey from them to the secure area, are areas of risk. This is where pneumatic tube systems can eliminate risk situations.

Aerocom offers a wide range of options, including simple cash dispatch systems and the ability to supply change.

## PharmaPost

Automated storage technology for pharmacies. PharmaPost automates the transport of pharmaceutical products from storage areas to the counter. Difficult pathways and long distances are easily negotiated using this pneumatic tube system, irrespective of where the products are dispensed.

Most pharmacies commit a large part of what should be profitable square footage to the storage of pharmaceuticals. The PharmaPost pneumatic tube system allows pharmacies to locate pharmaceutical storage remotely. PharmaPost supplies system solutions for manual and automated filling and dispensing.





## How does a pneumatic tube system work?

Optimize your transportation processes

A pneumatic tube system consists of a number of principal components: A blower to create the pressure and suction required for transportation, containers, known as carriers, that fit closely in the tubes to convey the articles, and stations where the destination is selected and the filled containers are inserted.

These stations also receive incoming carriers and gently deposit them out of the system. Diverters are used within a tube system to direct the carriers to their selected destination or else to communicate with the various zones.

Powerful controllers are used to regulate these transportation logistics. All kinds of material can be simply, rapidly and economically dispatched in this way using air as the driving force.



### Software:

All processes are displayed and reported in the system, enabling transportation to be accurately evaluated and analysed.

### Control unit:

Powerful controllers are used to coordinate the sending and receiving processes. The differences between the microprocessor-controlled systems depend on their complexity and the purpose for which they are used.

### Carrier:

The Aerocom carrier is an attractively designed, robust precision engineered container with a sturdy swivel cap.

### Blower with reversing valve:

The blower creates both pressure and suction. However, the absolute value of the air pressure is not significant. It is the quantity of air that creates the driving force and produces speeds of six to eight metres per second.

### Diverter:

This is the only technique that allows a pneumatic system to be both complex and rationally designed. It enables a carrier to be inserted at any station in the system and transported to the desired recipient.

### Precision dispatch Tubes:

PVC tubing is the preferred material in today's systems. In some applications, mainly public building such as hospitals, stainless steel tubing is specified. The tube system can be installed in false ceilings or, if connecting a number of buildings, it can be laid underground or in the open.

## Why use an Aeroacom-System?

Transport systems for efficient organisation

### When is the right time to install a pneumatic tube system?

Aeroacom produces customised tube systems for all sizes of organisation, from a 2-point system to microprocessor-controlled multi-zone systems with up to 512 stations. 80% of our new systems are installed in existing buildings.

### Why use a pneumatic tube systems?

Tube systems solve the problem of internal transportation and operate at speeds of 6-8 metres per second. That saves time and energy and allows your staff to be more productive instead of running errands.

### What can the system carry?

Aeroacom systems can transport virtually anything: liquid, toxic, valuable, hot or cold, 0.1 g or 28 kg, provided that it is no more than 30 cm in diameter. This includes a whole range of items: blood or tissue samples, medicines, documents, instruments, X-rays, laboratory specimens, oil, spare parts, hot steel samples, etc.

### Where can the system be installed?

More or less anywhere. Horizontally or vertically, in false ceilings or in full view. And not only inside a building. Aeroacom pneumatic tube systems are also used in facilities that are far apart. Even streets and rivers do not present an obstacle.

**We are sure to have a solution that meets your transportation needs.**

**Just ask us.**

short pathways

rapid transport

6–8 metres per second

secure transportation



time and cost efficient

reliable

energy-saving

**A worthwhile investment**  
Much sooner than you think...

...because Aeroacom engineers use the latest technology to build maximum efficiency into their plans, giving you an ideal price-performance ratio. The following real life case shows how quickly the Aeroacom pneumatic system pays for itself.

|                        |  |
|------------------------|--|
| Business:              | a specialist photo shop                              |
| Working days per year: | 300  |
| Premises:              | Sales area on the ground floor, lab on the 2nd floor |
| Number of errands:     | 40 per day   |
| Time required:         | 2 min per trip                                       |
| Cost per hour:         | Euro 15  |
| Total costs:           | 6,000 Euro per year                                  |
| Tube system:           | Aeroacom 2-point                                     |
| Total investment:      | approx. 3,200 Euro                                   |
| Payback period:        | approx. 7 months                                     |

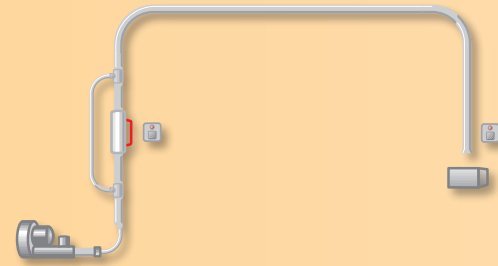


## Types of system



### Point to point

The simple two-point connection. From A to B and from B to A.

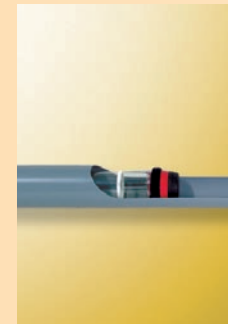


## Stations including tube diameter

- 90
- 110



Open Endstation



Horizontal Endstation



Send and receive from below



Door-Station

- 160
- 200
- 315



KSA Station

## Components and accessories

- 90
- 110
- 160
- 200
- 315



Three-way-diverter

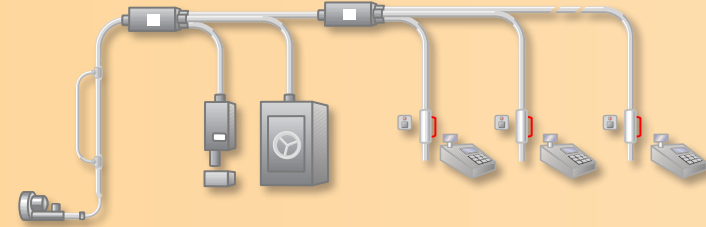


Dispatch tube PVC or stainless steel



### Cash disposal

Systems for two-way connection between cash points and a secure area.



- 90
- 110
- 160



Endstation



Slide-Station



Sending- and receiving flap



External arrival Signals



EWS-Station



Carrier



Power pack



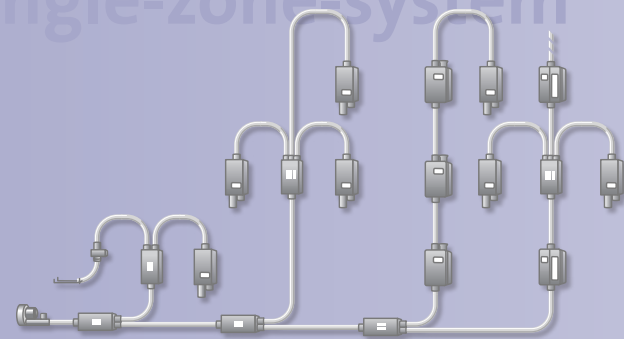
Slide gate



### Single-zone-system

The standard system, linking up to 99 stations, with automatic dispatch.

All stations can send to each other.



- 110
- 160
- 200



OES-Station



Multi-Load-Station



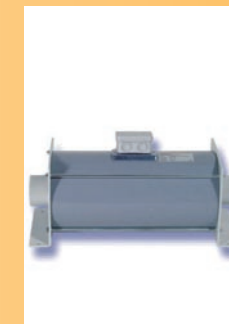
COM-Station



Premium-Station



3-phase-blower with receiving valve



Single-phase-blower



Silencer



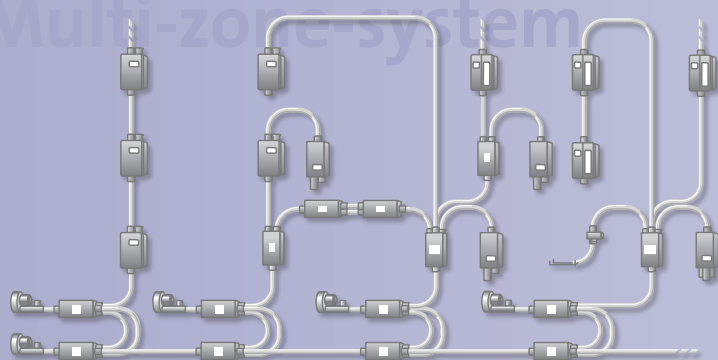
Controller Unit



### Multi-zone-system

The multi-zone system with up to 512 stations. Up to 64 zones, with automatic dispatch.

All stations can send to each other.



- 110
- 160



Desk-Station



GIGA-Station



Linear coupler



Transfer zone area



Receiving basket (steel)



Receiving basket



Laboratory receiving Station

## A quick fit

### Finding the carrier that suits your needs

The procedure is very simple. The illustrated circles represent the internal diameters of Aerocom carriers, namely 80mm, 115mm, 154mm and 240mm (3¼", 4½", 6" and 9½"). Each of these fits one of the standard Aerocom tubes (diameters 110mm, 160mm, 200mm and 315mm – 4", 6", 8" and 12") and is marked with the corresponding tube diameter.

1. Simply place the item that you wish to transport on the smallest possible circle. The only factor that is of importance to you, the user, is which of these four circles accommodates the goods to be carried. It does not matter whether the object is horizontal or vertical. The four scales at the bottom of this page give you the four standard diameters.
2. Measure the length of the item. See the table for the standard carrier lengths (245mm to 500mm - 9¾" to 19½"). Experience has shown that using the smallest possible radius for bending the tubes has advantages when routing them within a building.
3. Read the bend radius off from the table. While the provided scales and measures illustrate standard tubing, bends and carriers, your Aerocom representative is available to recommend any number of customised solutions. With the tubing, bend radius and carrier, minimums established, the next objective is the identification of the ideal Aerocom pneumatic tube system.

| Tube outside diameter | Carrier inside diameter | Carrier length | Bend Radius |
|-----------------------|-------------------------|----------------|-------------|
|-----------------------|-------------------------|----------------|-------------|

|     |    |     |     |
|-----|----|-----|-----|
| 110 | 80 | 245 | 550 |
|     | 72 | 350 | 650 |
|     | 86 | 220 | 650 |

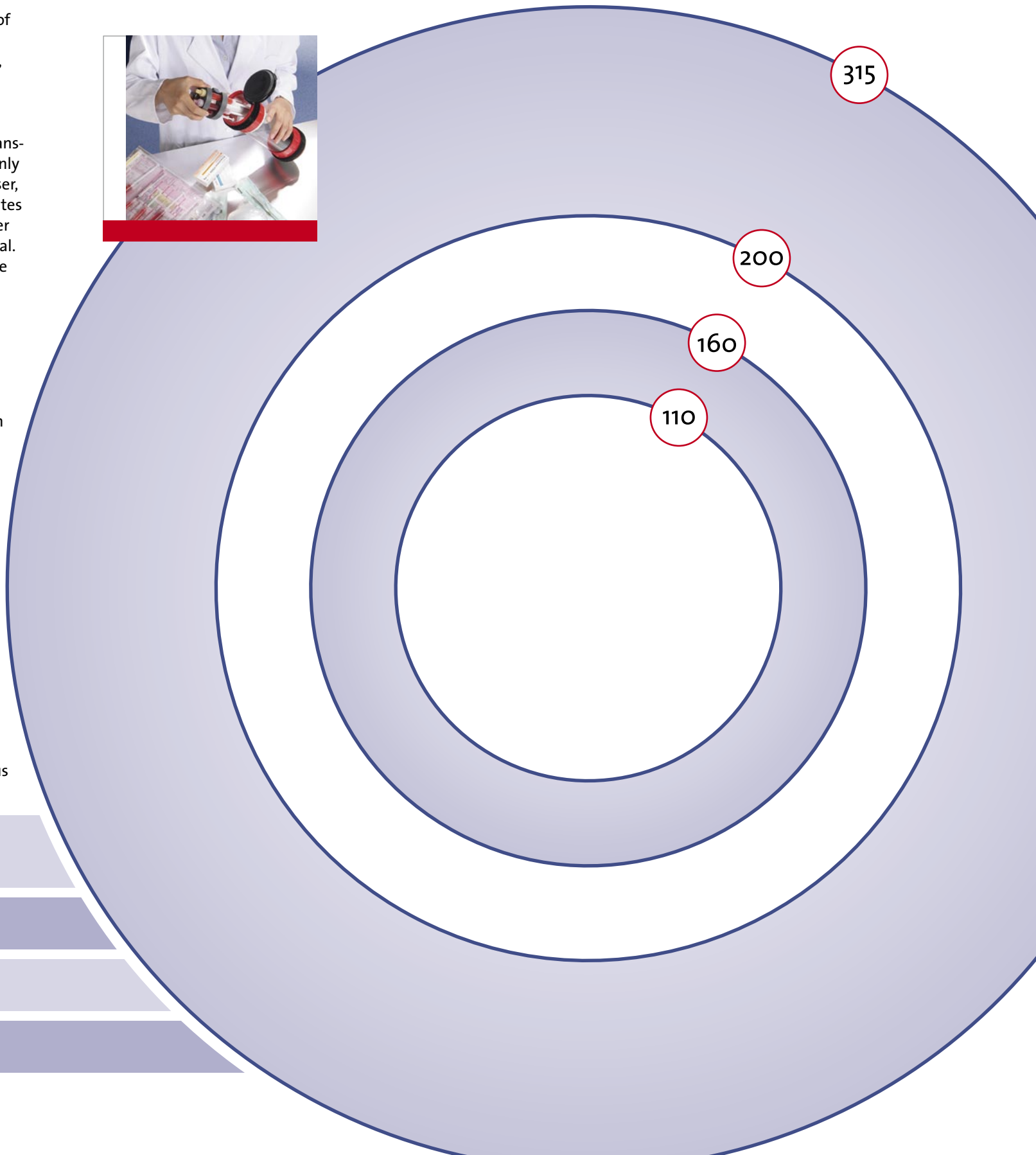
|     |     |     |      |
|-----|-----|-----|------|
| 160 | 115 | 330 | 800  |
|     | 115 | 400 | 1200 |

|     |     |     |      |
|-----|-----|-----|------|
| 200 | 154 | 350 | 1250 |
|     | 154 | 420 | 1250 |

|     |     |     |      |
|-----|-----|-----|------|
| 315 | 240 | 420 | 1000 |
|     | 240 | 500 | 1000 |

Dimensions in mm

Now you know the standard tube diameter needed, the appropriate carrier and the resulting minimum tube bend radius. We can always supply tubes and carriers in special dimensions to suit other needs. Please enquire.

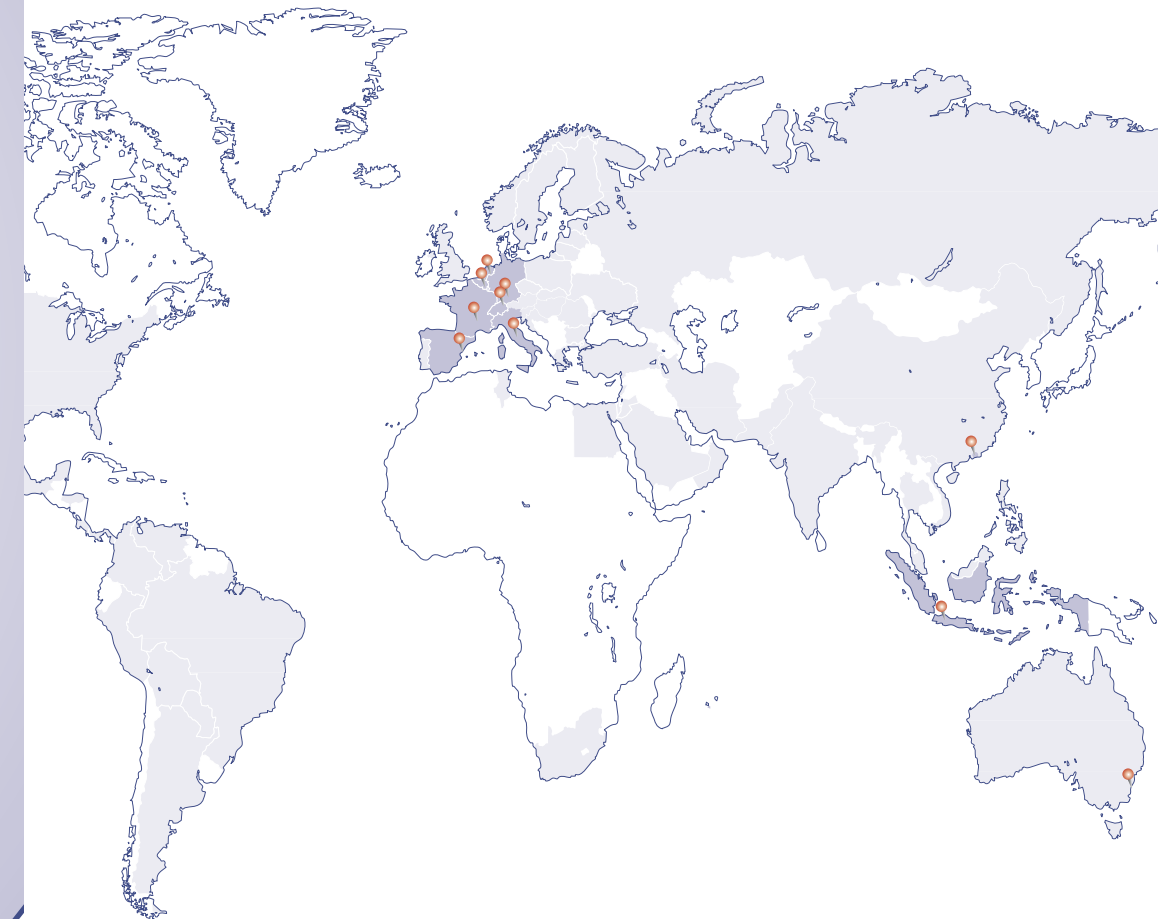



## We create connections

### – worldwide

We are represented by more than 65 reliable business partners in all continents of the world. With our six sales offices in Europe (Netherlands, Belgium, France, Switzerland, Spain and Italy), as well as Australia, Hong Kong & Jakarta and ten factory outlets in Germany we are always ready to serve you. We also work together with other reputable companies. In collaboration with these partners we have built up an unequalled sales and service network.

Made in Germany – this is not just a claim that we make for the quality of our products but a standard that applies to the entire range of our products and services.



 Sales offices in Europe and Asia



Aerocom is a world leader in the manufacture of modern pneumatic tube systems and internal logistics.

We have the experience and expertise to custom design solutions for virtually any application in pneumatic materials logistics. We can provide special technical solutions to meet individual customer specifications.

We are represented in 65 countries throughout the world. These partners, together with our ten offices in Germany and six in the rest of Europe (Belgium, France, Italy, Switzerland, Spain and Netherlands), keep us close to our customers wherever they are.



Aerocom GmbH & Co.  
Pneumatic Tube Systems  
Adam-Riese-Straße 16  
73529 Schwaebisch-Gmuend  
T +49 (0) 7171 1045-0  
F +49 (0) 7171 1045-299  
info@aerocom.de

[www.aerocom.de](http://www.aerocom.de)