

# GERB



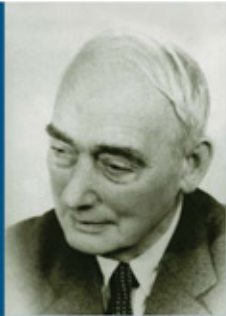
## Profile of a Company



Website: [www.BehsazAndishan.com](http://www.BehsazAndishan.com)  
E-mail: [info@BehsazAndishan.com](mailto:info@BehsazAndishan.com)  
Tel: 88799135 & 75

# Vibrations can be controlled. Wherever they happen.

William Gerb  
Company's Founder



*Dämpfer für Geräusche & Erschütterungen*

*Zeitschrift des Vereines deutscher Ingenieure*

*Band 55 Nr. 20. 15. Juli 1911*

*ETZ 27. April 1911*

- a = Gußkörper zur Befestigung an Masch.-Fuß*
- b = Am Boden befestigtes Gußstück*
- c = elastische Zwischenlage*
- d = drei um 120° versetzte Zugstangen*
- e = zwischen geschaltete federnde Dampfen*



**The GERB Group – your partner with worldwide experience in solving vibration problems of all types.**

More than 100 years ago, the history of GERB began when its founder, William Gerb, became fascinated with an idea that others thought could never be successful. He accepted the challenge of using steel springs to protect work areas and surrounding neighbourhoods from machinery vibrations. Since then, the GERB Group of companies has continued to develop this idea, solving dynamic problems in many new fields of application.

Machinery and equipment in power generation and metal forming plants now employ an active vibration isolation system (source isolation), to reduce foundation size and cost. Sensitive measurement and test equipment, and even entire buildings, employ a passive isolation system (receiver isolation) to protect against disturbing vibrations from nearby machines and traffic, or from earthquakes. Both active and passive isolation systems permit easy realignment of the foundation when poor soil conditions cause the foundation to settle.

Tuned mass dampers are a special type of vibration protection, used to stabilize and reduce vibrations on bridges, buildings, stadiums and ships.



Aspire Tower  
Doha, Qatar



Management (from left to right):  
Dr. Peter Nawrotzki,  
Christoph von Waldow,  
Kai Askan Bunte,  
Ehrenfried von Waldow

# The GERB principle: Innovative Thinking, Resolute Performance.

The GERB name is known for  
international service.

William Gerb knew that innovation is the only way to secure the future. GERB companies don't rely on old, established technologies. Vibration isolation of railway trackbeds, and seismic protection of sensitive buildings are just some of our exciting new applications.

Engineers who are familiar with vibration and structure-borne noise, may also be challenged by room-within-a-room solutions separating TV and recording studios, recital and rehearsal rooms as well as discos, fitness studios and special hospital rooms dynamically and acoustically from the surrounding environment.

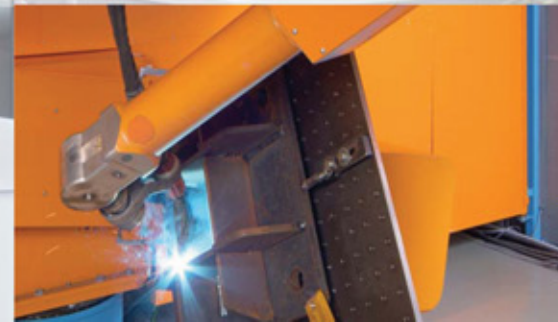
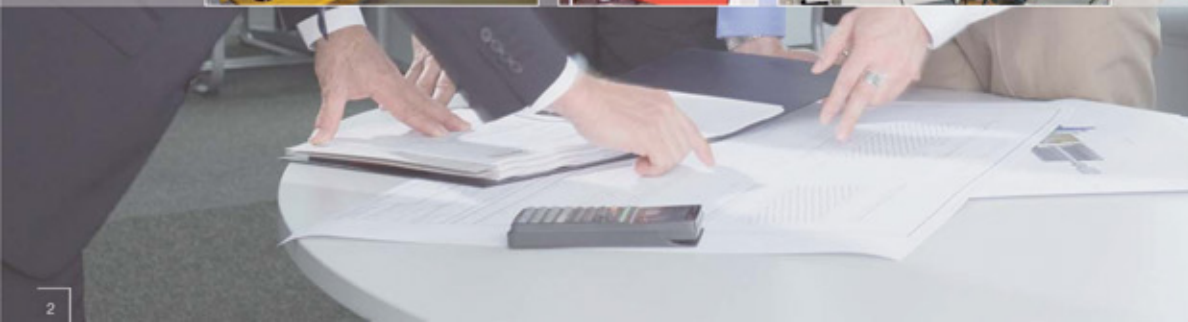
GERB's research and development center located in Berlin, Germany, cooperates with highly regarded research institutions in Germany and abroad.

Today, our growing export business, as well as our many other worldwide activities, confirm the international acceptance of GERB's technology. We will continue to respond to opportunities with new and innovative solutions.

## Our activities:

- International project management by highly trained and experienced engineers.
- Custom-designed, yet economical foundation systems for machinery, equipment and buildings.
- Static and dynamic foundation analysis.
- Workshop drawings and construction supervision for both steel and reinforced concrete structures.
- Elastic support systems for buildings, structures and equipment to protect against subsidence, vibrations, structureborne noise and earthquakes.
- Installation of spring elements and Viscodampers®, or installation supervision, by our trained and experienced technicians.
- Hydraulic jack systems with load capacities up to 6,000 tons are available for lifting buildings or machine foundations.
- GERB engineers measure and analyse vibrations and structureborne noise emissions from machinery and equipment on new applications.

GERB is certified according DIN  
EN ISO 9001.



## Our activities:

GERB has developed elastic support systems consisting of spring elements and Viscodampers® for:

Metal forming machinery (forging hammers, presses), machine tools, shredders, compressors, centrifuges, test stands, and textile machinery;

- to protect the machine operator and nearby sensitive equipment from vibrations at the work location (source isolation),
- to protect the neighbourhood against disturbing vibrations and structure-borne noise.

Precision machinery of all types (e.g. roll grinders, laser measurement machines, test machines, and microscopes)

- to protect against disturbing vibrations from nearby machinery, equipment and

## For quality production, precision is everything. GERB can help.

**GERB systems are essential for today's industrial plant. All types of machines and equipment can be installed on custom-made, yet economical elastic foundations.**

The elastic foundation has a long history at GERB, ever since William Gerb began to improve production quality by elastically supporting machines. There is a broad range of suitable applications, from precision machinery to power generation and metal forming equipment. Machine performance is critical to high product quality.

Today, new equipment is often supplied with a vibration isolation system. Equipment suppliers to the automotive industry, for example, cannot accept excessive tolerances and imprecise control of their production systems. GERB's elastic foundations provide a competitive technical advantage, as well as maintenance-free operation.





Dr. Karl-Heinz Reinsch  
Head of Sales Region East Europe and CIS

Stefan Gutberger  
Head of GERB Civil Engineering



# GERB

## A fundamental GERB philosophy: Safety and Reliability.

**Vibration reduction is a modern and sophisticated technology, with an age-old concern for equipment safety and reliability.**



If the foundation of a steam turbine-generator, for example, is to have an expected lifetime of more than 30 years, the machine foundation must be carefully designed and constructed.

Since GERB's beginning, we have required that our systems must be easily maintained, and safe and reliable for the lifetime of the foundation. Every element can be inspected and serviced without difficulty, even during operation of the machine.

All load-carrying springs are designed to DIN-standards, and have an unlimited lifetime. A high quality corrosion protection system complies with GERB's quality philosophy.



### Other activities:

Elastic foundation systems consisting of spring/Viscodampers® for power plant machinery, including turbinegenerators, boiler feed pumps, coal mills, fans, diesel generators, and piping systems, to

- reduce vibrations and structure borne noise,
- protect against subsidence,
- protect against earthquakes,
- reduce foundation costs.





# No matter where you are or what you are doing, you don't need to be disturbed.

## Other activities:

GERB engineers develop, design and supply elastic support systems for buildings and other structures:

- to protect against vibrations and structure-borne noise from subways, railways and industrial plants,
- to protect against subsidence,
- to protect against earthquakes.

Even the smallest environmental disturbance can be distracting. GERB can help.

When concert halls, opera houses and cinemas open their doors, GERB vibration isolation systems are already in their place. The most sophisticated foundation system helps make the experience unlike any other. Vibrations and structure borne noise are completely isolated, and the evening belongs to the fine arts.

The modern Sheraton hotel at Charles de Gaulle Airport, Paris, has also been supported on GERB spring elements, to protect hotel guests from TGV railway traffic passing beneath the hotel. Passengers of cruise ships fully enjoy their cruise experience when the main engines are decoupled from the ship structure, reducing the overall noise level.

GERB can manage large and complex projects, offering a range of services including vibration analysis and consultation, system design and supply, construction and installation supervision, and performance verification. Examples include the elastically supported IMAX cinema theatre in London, the Bridgewater Concert Hall in Manchester, an opera house in Montpellier and a theatre in Hong Kong.





Carsten Chantrain  
Head of Sales Region Asia

Gerson Lupatelli  
Head of the Technical Field Rail Track Isolation



# GERB

## Whenever new rail lines are developed, think of GERB.

**Our cities are more congested every day,  
creating more noise and vibrations.**

**State-of-the-art vibration protection  
becomes more critical.**

GERB specializes in providing solutions to vibration problems in cities, protecting people from vibrations and structure-borne noise, and maintaining the quality of life in working and living areas.

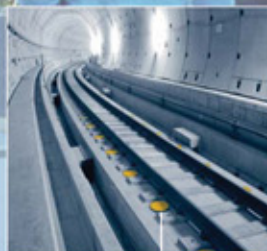
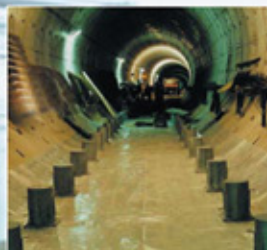
Neighbourhoods can be protected from vibrations and noise caused by freight and commuter rail lines, subways and elevated trains. GERB spring-mass-systems provide a vibration-free interface between the trackbed and nearby residential and commercial buildings. When using GERB spring-mass-systems, rail tracks can safely run through highly sensitive areas.

If rail track isolation is not feasible, nearby buildings can also be elastically supported.

### Solutions for Special Applications:

Highly efficient, spring-masssystems for freight and commuter

- rail lines, subways, and elevated trains, to protect neighbourhoods from vibrations and structureborne noise.



# GERB



Dr. Frank Barutzki  
Head of Sales Region North, Middle and South America

Dr. Armin Winkler  
Head of Sales Region Africa and Middle East



## Whether earthquake or storm – natural disasters can be controlled.

**GERB engineers find solutions to protect machinery, buildings and equipment from devastating forces.**

Mission impossible? Not at all. GERB knows all about dangerous terrain, and has proved itself in many places around the world. Vibration isolation concepts have been continuously improved for earthquake and storm protection. Relying on our experience, we are able to solve complex problems. Structural stability, safety and economy are the most important design parameters.

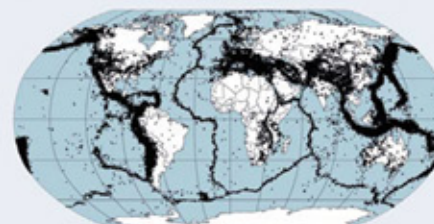
Protecting buildings against earthquakes can be accomplished in different ways, depending on the type of building. Earthquake protection can be either base control – a highly efficient protection system for buildings, or base isolation, or dampers installed on each floor, or elastically-supported upper floors.

One outstanding example of protection against natural disasters is the seven star hotel, Burj Al Arab, in Dubai, UAE. This sail-shaped, steel structure is equipped with GERB tuned mass dampers.

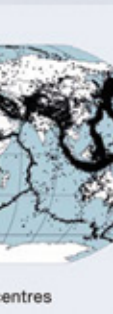
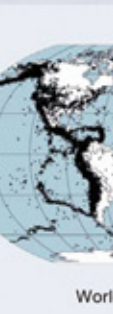
### Other activities:

Tuned mass dampers (TMD) for buildings, bridges, balconies, stadiums, towers and ships. TMDs reduce structural vibrations caused by wind, earthquakes, machinery or traffic.

Spring/Viscodampers® to protect machinery, buildings and equipment from earthquake vibrations.



World Map of Epicentres





The international  
GERB sales team

# GERB

## From A like Australia to Z like Zambia. Our knowledge and our effort is required worldwide.

Australia: Elastic support of power plant machinery.

Austria: Vibration isolation of a 12,000 ton press.

Brazil: Vibration protection of a soccer stadium.

Bulgaria: Earthquake protection of newspaper printing presses.

China: Vibration isolation of railway tracks.

Estland: Vibration isolation of compressors.

France: Vibration isolation of buildings.

Germany: Protection of buildings against subsidence.

Greece: Protection of a concert hall studio from structure borne noise.

Great Britain: Tuned mass dampers for the Millennium bridge.

India: Vibration isolation of textile machinery.

Indonesia: Vibration isolation of metal forming machinery.

Italy: Vibration isolation of textile machinery.

Japan: Elastic support of presses.

Korea: Trackbed isolation of a high speed train

Lebanon: Vibration isolation of textile machinery.

Mexico: Earthquake protection of a newspaper printing press.

Malaysia: Vibration isolation of a newspaper printing press.

Nicaragua: Elastic support of barge-mounted diesel gensets.

Norway: Tuned mass dampers for three bridges.

Pakistan: Elastic support of power plant machinery.

Saudi Arabia: Elastic support of power plant machinery.

Spain: Vibration isolation of a hospital.

South Africa: Elastic support of power plant machinery.

Thailand: Vibration isolation of newspaper printing presses.

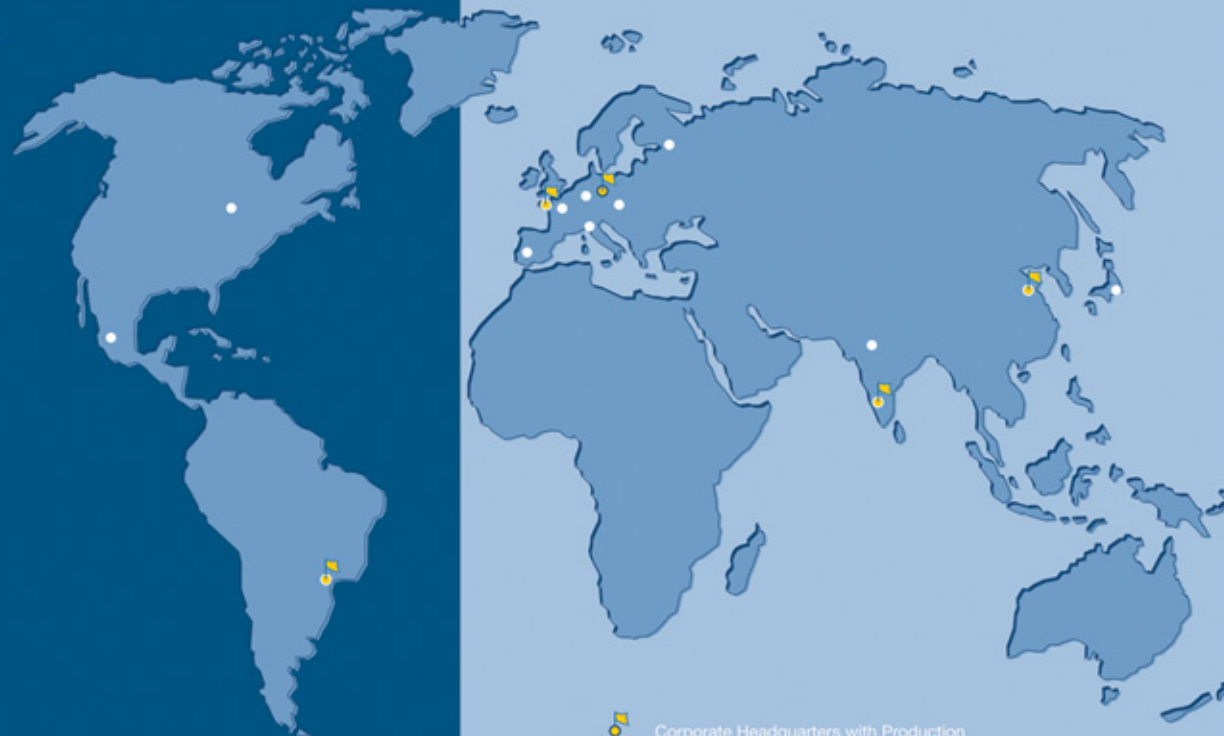
Turkey: Vibration isolation/earthquake protection of power plant machinery.

UAE: Tuned mass dampers for skyscrapers.

USA: Earthquake protection of private residences.

Venezuela: Elastic support of power plant machinery.

Zambia: Vibration isolation of fans.



-  Corporate Headquarters with Production
-  Subsidiary with Production
-  Subsidiary



### Our Corporate Headquarters

GERB Schwingungsisolierungen  
Roedernallee 174-176  
13407 Berlin/Germany  
Tel. +49 -30 -41 91-0  
Fax+49 -30-41 91-199  
iso@GERB.de

### Subsidiaries with Production

Bangalore, India  
Qingdao, China  
Saint Nazaire, France  
São Paulo, Brasil

### Subsidiaries

Chicago, USA  
Essen, Germany  
Guadalajara, Mexico  
Madrid, Spain  
Malland, Italy  
Neu-Delhi, India  
Paris, France  
Prag, Czechia  
Saint Petersburg, Russia  
Yokohama, Japan

# GERB

Our overseas Subsidiaries  
with Production



Bangalore, India



Qingdao, China



Saint Nazaire, France



São Paulo, Brasil

The GERB Showroom  
Headquarters, Berlin



**GERB Schwingungsisolierungen GmbH & Co. KG**

**Roedernallee 174 – 176**  
**13407 Berlin / Germany**  
Tel. +49 -30-41 91-0  
Fax +49 -30-41 91-199  
iso@gerb.de

**Ruhrallee 311**  
**45136 Essen / Germany**  
Tel. +49 -201-266 04-0  
Fax +49 -201-266 04-40  
iso@gerb.de

**[www.gerb.com](http://www.gerb.com)**

