



Manufacturers of: Railway,  
Automotive & Medical Equipment



**Absorbing Impact, Enabling Legacy-  
The Damper Behind India's Motion.**



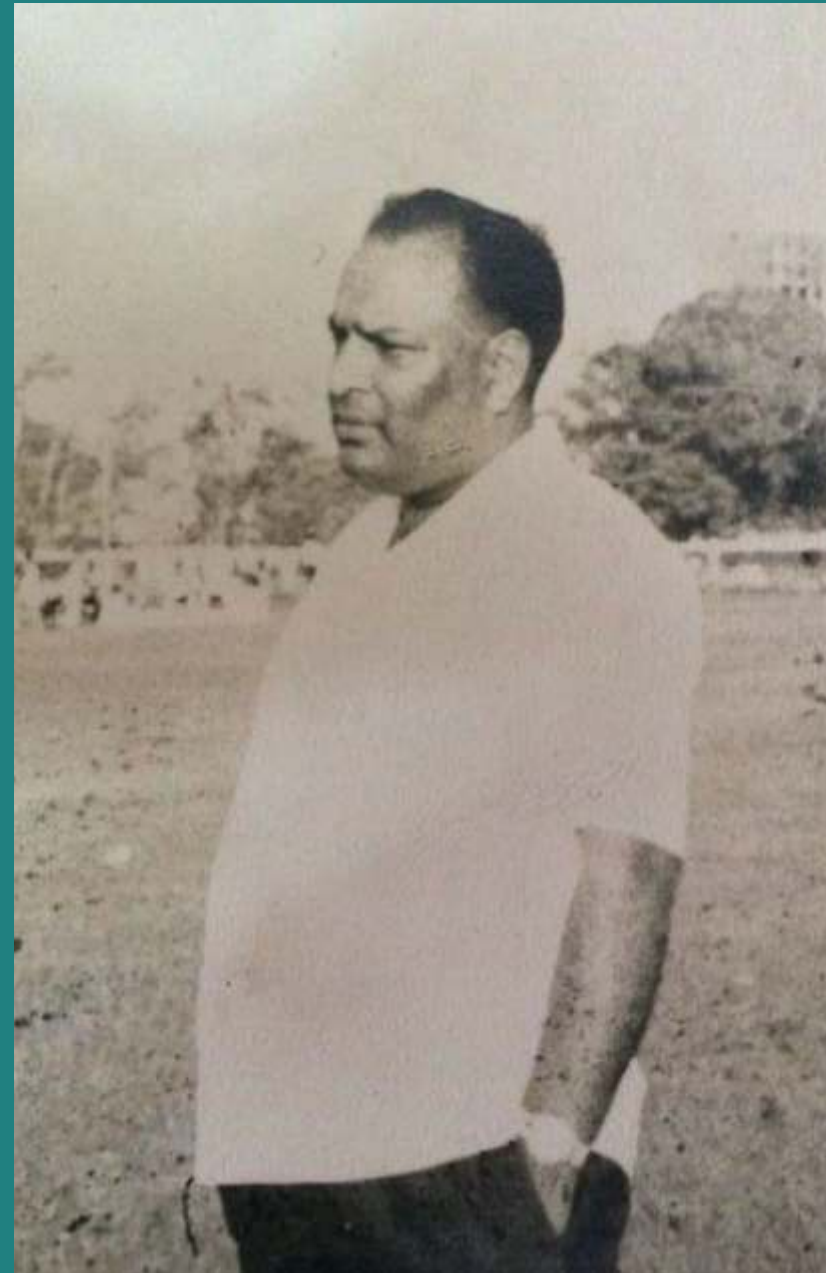
**Welcome to the world of GB –**  
Where Engineering Meets Excellence

Founded by Late Sri Amrit Lal Gupta, GB Group of Industries is one of India's distinguished industrial houses, serving critical sectors including Railways, Defence, Power, Oil & Gas, Heavy Earth Moving Equipment, and Pharmaceuticals. With a legacy of engineering excellence and an unwavering commitment to quality, our footprint today extends across Southeast Asia, Europe, and the Middle East.

At GB Equipment Systems Ltd., we believe that progress rides on precision. From the resilience of a shock absorber to the reliability of a hydraulic damper, every component we engineer is designed to perform – consistently, safely, and efficiently.

Carrying forward our founder's vision, we continue to transform engineering challenges into performance-driven solutions for motion control and vibration management. Our mission is clear – to deliver dependable, innovative products that make systems smoother, safer, and more sustainable.

Because at GB, precision isn't just what we do – it's who we are.



*Late Sh. Amrit Lal Gupta*  
Founder, GB Equipment Systems Ltd.

# WHY GB ?

## Our Core Values

- ▶ Integrity — We do what's right, even when no one is watching.
- ▶ Innovation — We continuously improve, adapt, and evolve.
- ▶ Responsibility — To people, to the planet, and to the profession.
- ▶ Excellence — Not a goal, but a standard in everything we do.

## Our Mission

- ▶ Deliver innovative and reliable solutions that drive real world outcomes.
- ▶ Build a culture of transparency, trust, and excellence.
- ▶ Pioneer engineering innovations for a safer and more resilient future.
- ▶ Collaborate with global stakeholders to shape sustainable growth.
- ▶ Contribute meaningfully to **nation-building and social upliftment.**



**Mr. Vineet Kumar Gupta**  
**Chair Person,**  
**GB Group of Companies**

Mr. V. K. Gupta has been the driving force behind the GB Group of Companies since its inception in 1985. A seasoned strategist and visionary leader, he has guided the Group's evolution from a pioneering railway equipment manufacturer to a diversified conglomerate spanning the Defence, Power, Oil & Gas, and Medical Device sectors.

An alumnus of the University of Delhi with a B.Com. (Hons.) and an MBA in Finance, Mr. Gupta blends business acumen with a deep sense of national purpose. After the passing of the Group's founder, Late Shri Amrit Lal Gupta, he took charge of carrying forward the family's legacy—strengthening financial systems, ensuring operational excellence, and embedding a culture of trust, quality, and innovation.

For Mr. Gupta, nation-building is a responsibility—whether it is transforming India's rail infrastructure through high-speed connectivity or bridging the urban-rural divide through affordable medical access. His efforts towards industrial progress were recognised with the Udyog Rattan Award for exceptional service to trade and industry.

Beyond business, he actively champions education and inclusion, serving as President of the Education and Sports Development Association and Chairperson of the Blind Judo Association of India. As a Special Invited Member on the panel of the National Human Rights Commission (India), he continues to advocate for equality, empowerment, and ethical leadership.

A visionary, mentor, and nation-builder, Mr. V. K. Gupta exemplifies the GB Group ethos—engineering progress with purpose and compassion.



**Mr. Pranav Gupta**  
Director,  
GB Group of Companies

Mr. Pranav Gupta, Managing Director of GB Group, represents the new wave of visionary leadership driving India's industrial transformation. An alumnus of Welham Boys' School and Jai Hind College, Mumbai, he joined the company's board in 2017, carrying forward a proud legacy with a forward-thinking approach. Under his stewardship, GB Group has evolved from a leading Indian Railways Rolling Stock manufacturer into a diversified global enterprise spanning engineering, medical technology, and sustainable innovation.

With a relentless focus on excellence, Mr. Gupta established world-class medical device manufacturing facilities in Dehradun, India, and Ho Chi Minh City, Vietnam, redefining international quality benchmarks for disposable syringes, alcohol swabs, and surgical gloves. His strategic vision has also strengthened GB's infrastructure, transforming it into one of India's most organised consumer and supply chain networks with a growing international presence.

Beyond business, Mr. Gupta is deeply committed to nation-building, education, and youth empowerment. He actively mentors young entrepreneurs and serves on the boards of NGOs including the Education and Sports Development Association of India and the Blind Judo Association of India.

A member of the World Economic Forum, BRICS, and international chambers of commerce, Mr. Gupta continues to champion innovation, integrity, and impact – embodying the spirit of India's next-generation leadership.

# Get to Know Us

## About GB Equipment Systems Ltd. (GBESL)

At GBESL, we specialize in the design and manufacturing of hydraulic dampers, air springs, friction snubbers, and fabricated components for the Railways, Defence, and Heavy Engineering sectors.

- The hydraulic dampers (shock absorbers) designed and manufactured at GBESL comply with EN-13802 standards and are customized to meet specific customer requirements.
- GBESL produces air springs in collaboration with ZEMT of CARS, China, catering to a wide range of passenger coach applications.
- Friction Snubber Assemblies, used in diesel and electric locomotives to provide vertical damping in the primary suspension stage, are produced in accordance with RDSO specifications.
- The company manufactures fabricated components for Railways, Defence, and Heavy Earth Moving Equipment, including filter housings and secondary engine air filters for ALCO and EMD locomotives, approved by RDSO.
- On 23rd September 2019, GBESL signed a Technical Co-operation Agreement (MoU) with Zongheng Beijing Mechanical and Electrical Technology Co. Ltd. (ZEMT) of the China Academy of Railway Sciences (CARS) to design, develop, manufacture, and supply axle-mounted brake discs and brake pads for Indian Railways' rolling stock (passenger trains and locomotives).
- ZEMT is one of the largest manufacturers and suppliers of complete braking systems, including brake discs and pads, for China Railways.
- GBESL has also entered into a Memorandum of Understanding with HTC JSC, a multinational glove manufacturing company.
- Expanding its portfolio, GBESL now manufactures hypodermic disposable syringes and needles, contributing to the healthcare and medical device industry.



# Company Overview

At the GB Group, we believe our people are our strongest asset and the driving force behind our continued growth and innovation. We are committed to building a work culture rooted in safety, inclusivity, and continuous learning—fostering an environment where passion meets purpose and every team member is empowered to thrive, contribute meaningfully, and grow alongside the organization.



Our Corporate Social Responsibility (CSR) initiatives reflect our deep commitment to sustainability, community welfare, and environmental responsibility. From ensuring safe and healthy workplaces to investing in healthcare, education, and skill development, we strive to create long-term value – not just for our employees, but for the communities we serve and the world we share.



# GB Quality Standards



## GBESL Policy

At G.B. Equipment Systems Ltd., we are committed to delivering complete customer satisfaction through high-quality products, reliable services, and continuous improvement.

Our Quality Management System is designed to meet all applicable standards and regulatory requirements while proactively evaluating risks and opportunities across every process.

### We aim to achieve sustainable growth through:

- Market expansion and process control
- Consistent product performance and safety
- Zero breakdowns through preventive measures
- Compliance with all legal and environmental obligations
- A safe, healthy, and green workplace
- Ongoing development of employee skills and knowledge

## GBE Objectives

All Heads of Departments (HODs) and the Management Representative (MR) shall ensure the effective implementation of the GBE Policy through measurable objectives:

- Enhance customer satisfaction
- Ensure on-time delivery
- Achieve "zero" customer complaints
- Promote employee awareness, engagement, and motivation through training and communication
- Maintain a safe and healthy work environment
- Achieve zero accidents
- Drive consistent growth in turnover

# A Trusted Partner

GB Equipment Systems Ltd. takes pride in serving the nation as a trusted supplier to the Indian Railways, supporting the country's public mass transportation system with reliable, high-quality engineering solutions.



## G.B Equipment in Indian Railway (OEM's)

- > Rail Coach Factory (RCF- Kapurthala)
- > Integral Coach Factory (ICF-Chennai)
- > Modern Coach Factory (MCF- Raebareli)
- > Kolkata Metro
- > Narrow Gauge
- > Chittaranjan Locomotive Works (CLW-West Bengal)
- > Patiala Locomotive Works (PLW-Punjab)
- > Banaras Locomotive Works (BLW-Banaras)
- > Other Zonal Railways

## Railways Aftermarket

Thailand Railways

## G.B. GROUP Future Plans

- Silent Blocks/ Hydraulic Dampers End Mountings
- Spheri Blocs
- Set of Rubber Metal Bonded Items
- Rubber Parts
- Modified Elastomeric Pads
- Silent Blocks for Anchor Link
- Injection Moulded Silent Blocks for Centre Pivot Arrangement
- Set of Rubber Metal Bonded Items for Air Suspension Bogie
- Electric Panels
- Signal Lights (LED)
- Machined Parts & Fabricated Parts.



The GB Group

# GB Group Products used in different Railway Coaches



Vande Bharat/ Train 18 Coach



LHB COACH



EMU COACH



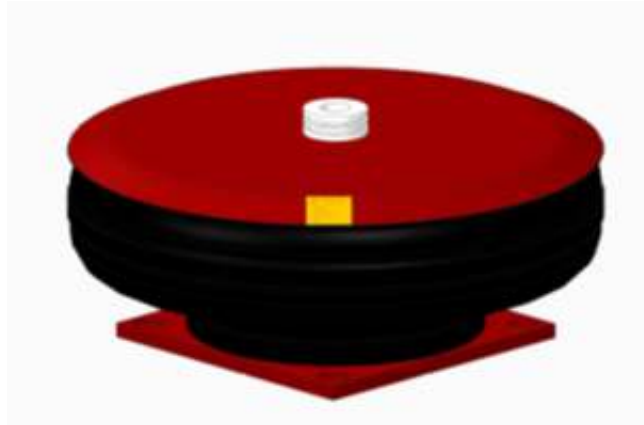
ICF COACH



LOCOMOTIVES



## Products



- Air Spring
- Friction Snubber Assembly/ Damper Lieu of Dash Pot Oil, Shockers.
- Manufacturing & Supply of Hydraulic Shock Absorbers/ Hydraulic Dampers.



## Air Springs

Indian Railways uses Air Springs in its advanced coaches, such as LHB, MEMU, and Vande Bharat, as part of their secondary suspension system to provide superior ride quality, reduced noise and vibration, and constant coach height under varying loads. These systems consist of an air spring, an emergency spring for safety, a levelling valve to control pressure, and air reservoirs, enabling a smoother and more comfortable passenger experience compared to traditional helical springs.

### Benefits

- Enhanced Comfort
- Reduced Noise
- Consistent Height
- Load Handling
- Improved Safety



## Friction Snubber Assembly

Friction snubber assembly is a component integrated into the bogie suspension system to control oscillations and provide damping for both coaches and locomotives. These assemblies, which often incorporate rubber washers, contain friction elements within coil spring nests to absorb vertical loads and prevent excessive springing or nosing (side-to-side motion). They are crucial for stable and safe operation by providing a damping effect proportional to the load.

### Benefits

- Oscillation Control
- Damping
- Stability



## Hydraulic Dampers

G.B. Equipment Dampers are designed for various rail applications depending on damping force requirements & Mounting end types. G.B Equipment dampers are easily serviceable at overhauling interval & lower maintenance cost . We offer a complete overhauling kit along with reconditioning method specified in manual for case of understanding.

### Benefits

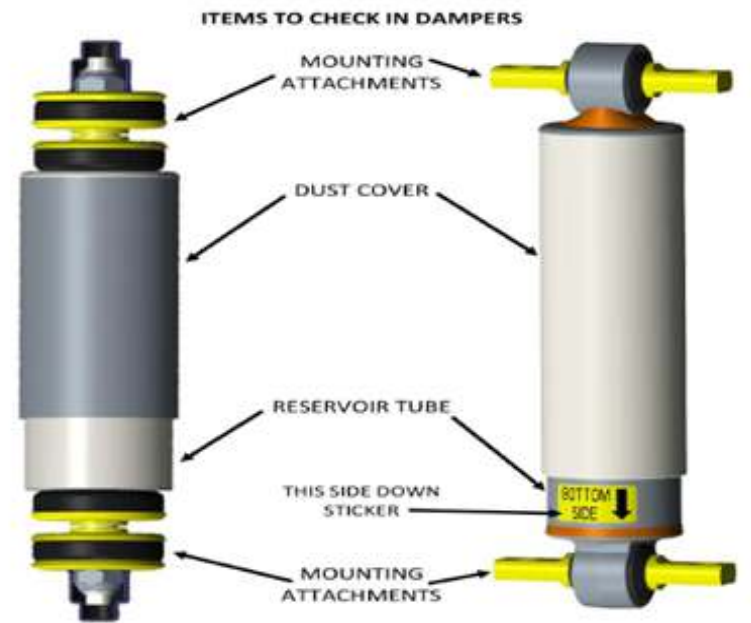
- Ends Silent Block/ Rubber Bushes Mounting.
- Instantaneous Response to Smaller amplitude.
- High Corrosion Resistance
- Stable Damping Characteristics
- Higher Durability Life
- Operating Temperature Range - 20 °C to 80 °C .
- Easy for Overhauling
- Indigenous Serviceable Design



## Hydraulic Dampers

Types of Hydraulic Dampers being producing by G.B. Group

- LHB Coach Dampers



S.NO.	Drawing No.	Type of LHB Dampers
1	LW05100	Secondary Lateral Damper for all Coil Fiat Bogie
2	LW05122	Secondary Lateral Damper for Fiat Bogie with Air Spring
3	LG05102	Secondary Vertical Damper for Non-AC Coaches Having Fiat Bogie
4	LW05101	Secondary Vertical Damper for AC Coaches Having Fiat Bogie
5	LW05102	Primary Vertical Damper For all LHB Coaches Fitted With Fiat Bogie
6	LW05103	Yaw Damper for All Type of LHB Coaches Fitted fiat Bogie



## Hydraulic Dampers

Hydraulic Dampers are very essential part of a vehicle to make journey jerk free. In LHB coaches there are a total of 18 Dampers per coach, and a total of 9 dampers per Bogie.



SECONDARY VERTICAL DAMPER



SECONDARY LATERAL DAMPER



YAW DAMPER



PRIMARY VERTICAL DAMPER

## Hydraulic Dampers

- Electric Locomotive Dampers
- WAP-5 Locomotive Damper
- WAP-7 Locomotive Damper
- WAG-9 locomotive Damper



## GB EQUIPMENT SYSTEMS LTD.

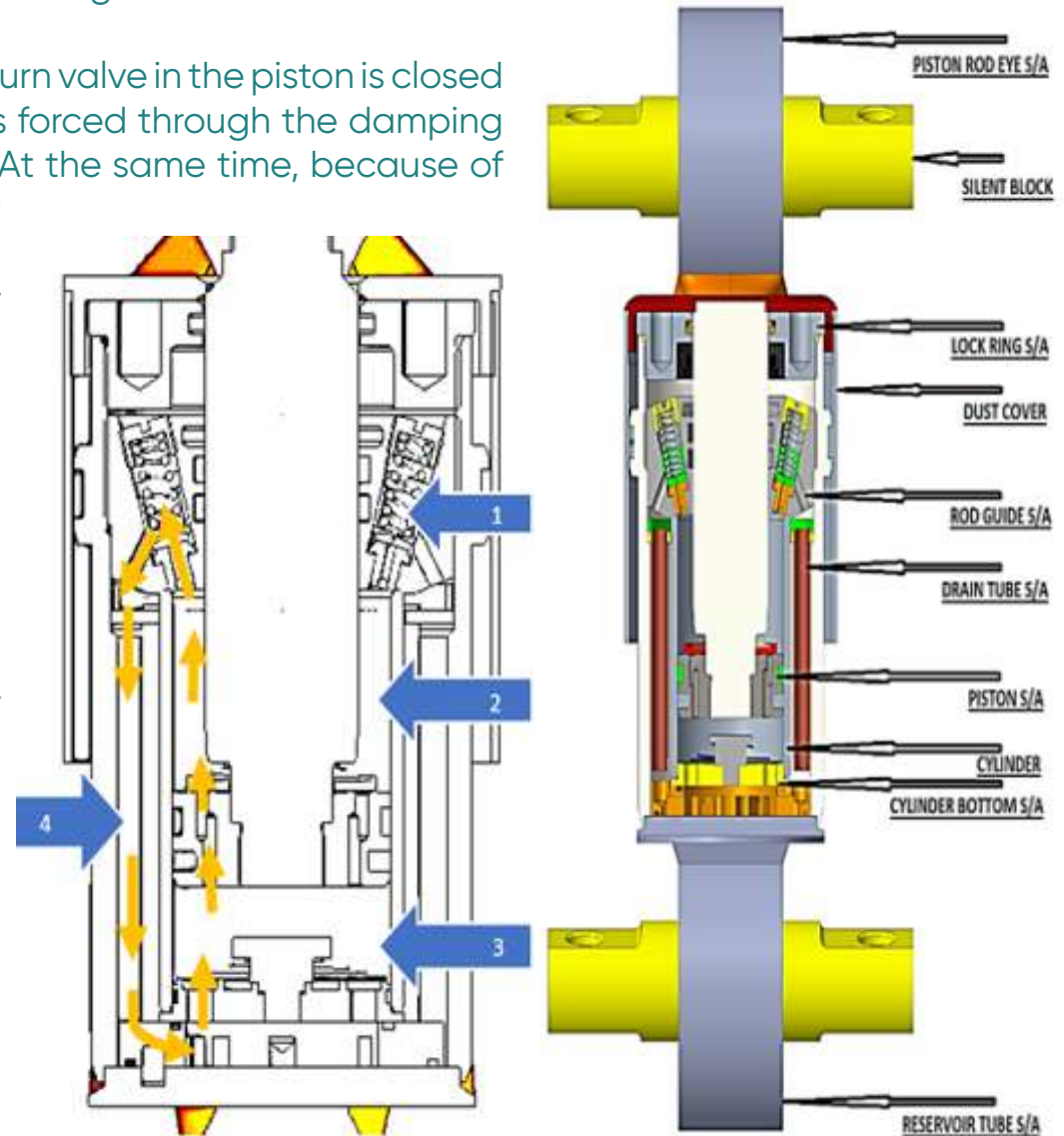
Manufacturer of Railway, Automotive & Medical Equipment

### WORKING PRINCIPLE OF GB GROUP :

This damper type has a circulating oil flow or mono flow principle.

**In extension stroke** the non-return valve in the piston is closed and the oil above the piston is forced through the damping valves into the reservoir tube. At the same time, because of the increased volume below the piston, oil is forced through the non-return cylinder bottom valve.

**In compression stroke** the non-return cylinder bottom valve is closed and because the piston is forced down in the cylinder, oil flows through the now open non-return valve in the piston. The oil displaced by the piston rod is forced through the damping valves. Therefore, during the compression stroke the oil pressures above and below the piston are equal.



The GB Group

## Technical Characteristics

### End Mounting Types



**Rubber Bush Type**

#### **Damping force range**

- 100 kg to 1567 kg @0.1m/sec velocity
- 434kg to 2041kg @0.3m/sec velocity
- Low speed (0.01m/s) with higher damping force values.
- Multi speed damping characteristics.



**Silent Block Type**

#### **Dimensional Range for**

- Dampers (Fitment Lengths)
- Extended Length 385mm to 1083 mm.



# CORPORATE SOCIAL RESPONSIBILITY



At the GB Group, business has always gone hand-in-hand with purpose. Our commitment to CSR is reflected not only in how we operate – with integrity, safety, and sustain ability – but also in how we give back. Through our three flagship initiatives, we invest in people, uplift communities, and champion causes that matter.

## WAMH Foundation

We're All *MAD* Here  
*Making A Difference* in Mental Health

Founded during the global pandemic, **WAMH Foundation** emerged as a safe space for young minds navigating the complexities of modern life. With therapist-led support groups, wellness festivals, peer-led conversations, and emotional resilience workshops, WAMH (We're All MAD Here) is a youth-led movement redefining mental health—one conversation at a time. We believe healing happens in community, and every voice deserves to be heard.



## Blind Judo Association

*Strength. Grace. Vision Beyond Sight.*

Through the **Blind Judo Association**, GB House supports visually impaired athletes with courage in their hearts and discipline in their stride. From organizing national judo championships to sponsoring self-defence workshops for women and charity marathons –we stand by those who rise beyond limits. Every tournament, every medal, every mat holds a story of resilience we're proud to help write.

## ESDA, India

Education and Sports Development Association  
*Empowering Futures, One Opportunity at a Time*

ESDA is our commitment to holistic development – where education meets athletics and potential meets opportunity. Through school outreach, youth sports camps, and national-level sponsorships, ESDA nurtures discipline, leadership, and confidence in young minds. We believe sports and learning aren't just tools – they're pathways to brighter futures.





## The Road Ahead

As we merge heritage with technology, our vision grows bolder.  
We invite the world to build, evolve, and move forward with us.

Manufacturers of: Railway  
Automotive & Medical, Equipments



**The GB Group**

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