MORE THAN JUST EQUIPMENT, WE DELIVER SOLUTIONS

RAILWAY DEPOT EQUIPMENT
MORE THAN JUST EQUIPMENT, WE DELIVER SOLUTIONS
The introduction of Bulox Equipment fast-tracked the group’s aspiration to establish itself as one of the leading design and engineering companies with production of both standard and customized equipment. Bulox Equipment is one of the very few, if not the only, company in the world that fully focuses on the design, manufacture and distribution of the most comprehensive range of Depot equipment in the Railway industry. Bulox Equipment also collaborates with many other companies worldwide with leading edge technologies to provide a comprehensive solution for its clients.

Most of Bulox-Cyclosystem equipment are designed to be simple, modular, practical and reliable, yet much emphasis has also been put into its aesthetic appearances and quality.

With a young and modern management team coupled with its vast experience in designing customized equipment, Bulox Equipment is fully equipped to undertake the toughest challenges the industry can offer. The company continues to deliver on its commitment despite sometimes running into an unchartered ground - the very core strength which sets the company apart from the competition.
CORPORATE PROFILE

OUR VISION
To be an Organization of choice that attracts all Talents to create Great Products and Services for the betterment of Society and Mankind.

OUR MISSION
To be a World-Class Leader in providing the best and ultimate solution to our clients by designing and developing the most Cost-effective, Innovative and Practical Equipment for their Operation and Maintenance requirements.

OUR CULTURE
As an Organization which thrives on challenges and innovation, we are open for ideas and suggestions from everyone – including our Clients, Vendors and Stakeholders. While breaking status quo is what we do best to get things done, Bulox Equipment places great emphasis on trust and long-term close relationship with everyone we work with – for without such warm, passion and humanity, our existence as an organization is meaningless. Trust, Openness, Transparency, Alignment & Love (TOTAL) are the basic key words that best describe our Culture.

INNOVATION & COLLABORATION
As an Engineering-based company, we believe that “Nothing is Impossible”. Time and again, we have proven our critics wrong by coming up with innovative ways to solve problems by adopting the latest technologies and implementing the best practices to overcome all the challenges – in an open and collaborative way with our Clients, Vendors and Technology Partners.

Research & Development
Laboratory Analysis
Sponsored Charity Golf Tournament
Roadshows & Exhibitions
CORPORATE PROFILE

SERVICE EXCELLENCE
Bulox Equipment recognizes the importance of providing good services to all its clients, for without it, all good Quality Products mean nothing. It is the synergy of Good Products and Services that truly sets the company apart from its competition. Driven by excellence, we believe all our employees must learn to communicate well, have the right attitude and provide the best possible services to all our clients so as to attain a long lasting partnership – regardless whether they are Customers or Suppliers.

QUALITY ASSURANCE
In the current competitive environment, Quality is the basic hallmark that differentiates a company’s products and services from the competition. Bulox Equipment strives to achieve the highest Standard Quality in all its Products and Services by adopting and implementing all relevant International Quality Standards and best practices in the industry.

CORPORATE RESPONSIBILITY
In line with Bulox Corporation’s Management philosophy, Bulox Equipment is fully committed to respect every individual regardless of their gender, race, culture or beliefs. We will also strictly abide by all local government regulations and conduct our businesses in the most transparent and ethical manner, respect diversity, commit to Health & Safety, and contribute to environmental preservation efforts to the best of our ability.
The Compression Spring Test Rig is a simple and reliable test system which can be used for testing most type of compression springs found in the Bogie Suspension System. It provides full testing parameters necessary to ensure that a spring is fully tested and suitable for re-use after servicing. Test Data are automatically captured and stored for detail analysis and print-out.

The Air Spring Test Stand provides a comprehensive test for the Bogie-mounted Air Springs. The testing involves both vertical axial load as well as side movement - with full test parameters that are automatically captured and recorded.

The Chevron Spring Test Rig is designed to carry out the performance test of the Bogie Chevron Spring using the axial load and deflection of the Chevron Spring. The test stand is a non-destructive, stationary and hydraulic-operated system. The test stand will compress the Chevron Spring with applied force by hydraulic ram which will then be released to check the spring stroke. The pressure-stroke graph is automatically recorded and printed based on the test data gathered.
STANDARDIZED & CUSTOMIZED TEST RIGS

VERTICAL DAMPER TEST STAND
The Vertical Damper Test Stand is used for testing most types of Vertically-Mounted Dampers. The Damper can be driven by either Motorized Cam System or Hydraulic Actuators. All Operational Settings are pre-programmed and all Test Data are automatically captured for further analysis.

UNIVERSAL DAMPER TEST STAND
The Universal Damper Test System is the latest development from Bulox Equipment. It can be used to test a wide range of Dampers - both Vertical as well as Horizontal type on the same Equipment. The Tester is very sturdy and compactly-designed, very user-friendly and provide a wide testing possibilities for many different types of Dampers normally found in the Railway industry. It is hydrostatically-operated and has a wide HMI Screen that enables an Operator to check and captures all the Test Parameters automatically.

AUTOMATIC & SEMI-AUTO COUPLER TEST STAND
The Automatic and Semi-Automatic Coupler Test Stand is a heavy-duty equipment which can provide actual load for the testing of each type of coupler. The basic testing parameter includes: coupling & de-coupling operation, air leakage test, electrical continuity test and full load pulling withstand tests.
The No-Load Motor Test System is designed and manufactured for testing a wide range of AC or DC Motors based on NO-LOAD condition. The testing can be done on a Single Motor or a combination of Multiple Units of similar Motors at a single time. The control and testing of the Motors are based on using microprocessor technologies and all test procedures and data acquisition are monitored and captured automatically.

The Full Load Regenerative Traction Motor Test System is one of the latest developments from Bulox Equipment that truly revolutionized the way Full Load Testing of Traction Motors are carried out in the past. It is compact and modular in design, and is loaded with new features such as Very Low Energy Consumption due to Regenerative Power, Low Heat & Noise Dissipation, Universal Motor Mounting, Fully Automatic Operation, Safe & Reliable Operation, Complete Data Acquisition, etc.
The Air Compressor Test Rig is used to fully test the Train Carriage Air Compressor Module to ensure its performance and operational consistency – after overhaul or servicing.

The Air Receivers Test Stand is used to test Air Receivers for pressure withstands and leakages using hydro-static medium as a safety precaution.

The Injection Pumps Test Stand is used for testing Locomotive engine fuel injection pumps’ operation. It automatically uses AC inverter drives and microprocessor-based monitoring, control and recording. It also measures oil spray frequency, temperature and pressure.

The Brake Drum Test Rig is used for testing air brake pressure system to ensure that it falls within the pressure range when fully actuated.
STANDARDIZED & CUSTOMIZED TEST RIGS

BOGIE TEST SYSTEM
The Bogie Test System can be designed for a basic or comprehensive testing of a fully assembled Bogie. The system utilizes both microprocessor drives and monitoring, as well as hydraulic system to ensure that all the required testing are carried out on each fully assembled Bogie.

BRAKE VALVES TEST STAND
The Brake Valves Test Stands are designed for the procedural testing of different Brake Valves using accumulated air receivers and bypass or cut-off valves. Some of the tests include: pressure withstand, flow rate measurement, timings and operational test, etc.

GOVERNOR TEST STAND
The Governor Test Stand is designed for operational testing of a specific type of Engine Governor. Details of the Engine Governor and its testing parameters must be provided to design this equipment.

SPEEDO METER/OVER SPEED TEST SYSTEM
This equipment can be designed as an integrated or separate test system for the testing and calibration of a Train Speedo Meter System or an Over Speed Trip Device.

OTHER CUSTOMIZED TEST STANDS
Please contact us for all your other customized test rig requirements.
The Stationary Wheelset Inspection System (LAC Series) is a fully automated ultrasonic inspection system for dismounted wheelset. It uses a combination of phased array and conventional ultrasonic inspection technologies to achieve intensive and precise inspection for defects in the wheel and axle.

The LZM Series is a handheld model that can provide precise defect information on the solid axle without dismantling the wheelset from the train.

The In Vehicle Ultrasonic Inspection System for Wheelset (LU Series) conducts automatic and efficient inspection of the wheelset while mounted on a train using robotic technology, combining phased array and conventional ultrasonic inspection technologies. The captured data are electronically-recorded and can be used to fully analyze the condition of the wheelsets of a particular vehicle easily.

The Dynamic Inspection System for Pantograph provides automatic inspection of pantograph including wear of pantograph slide, centreline deviation, contact pressure between catenary and pantograph.
COMPONENT CLEANING MACHINES

**CYCLOJET MANU-CLEANER**
The Cyclojet Manu-Cleaner is the simplest and most economical range of standard cleaning machines produced by Cyclosystem for manual cleaning of small components and parts typically found in a maintenance workshop. It comes in three different sizes (Small, Medium & Large) and is fabricated with corrosion-resistance material. The machine is designed to be compact and practical, and uses a high quality pump to filter and recycle its cleaning solution.

**CYCLOJET INEX SERIES**
The Cyclojet “INEX” series is a standard range of “in-expensive” spray cleaners which uses high pressure spray jets to clean the washparts in an enclosed chamber automatically. It comes in three basic sizes (Small, Medium & Large) and is fabricated with non-corrosive or stainless steel materials. The eco-friendly aqueous-based cleaning medium is usually heated, automatically filtered, and recycled. The Cyclojet INEX series comes with many optional features which can make the Cleaner a true workhorse for cleaning small parts in a workshop automatically.

**CYCLOJET INEX-PLUS SERIES**
The CycloJet “INEX-Plus” series is a range of standard cleaning machines developed by Cyclosystem which combines spray jet and immersion cleaning technologies together into one machine. This combination of different cleaning technologies makes the Cyclojet “INEX-Plus” machine truly one of the most effective and economical cleaners in the industry. The Cleaner is designed to be highly modular and comes in three basic sizes (Small, Medium & Large), and with many optional features to ensure that a washpart is thoroughly cleaned. It is typically fabricated with non-corrosive or stainless steel materials and the wash solution is automatically filtered and recycled.

**CYCLOJET HEAVY-DUTY SPRAY SERIES (SINGLE & MULTI-STAGE)**
The Cyclojet Heavy-Duty Spray series is a range of standard cleaners used for automatic cleaning of larger parts using jet spray cleaning technology. The machine comes in either Single or Multi-stage and is fabricated in stainless steel materials to ensure long-life usage. It is modular in design and offers optional attachments which can make the Cleaner a true workhorse for automatic and effective cleaning of medium to large washparts. The cleaning medium is automatically heated, filtered, recycled, and is typically aqueous-based. The Cleaners come in several standard sizes but can also be customized to suit specific cleaning needs.
COMPONENT CLEANING MACHINES

CYCLODIP IMMERSION CLEANING SYSTEM
The Cyclo dip Immersion Cleaners is a range of standard size immersion cleaners which allows the cleaning medium to reach every corner of the washparts and provide 100% cleaning coverage. It comes in standard sizes (Small, Medium & Large) but other bigger sizes can also be considered for larger washparts. Standard Cyclo dip Cleaners are equipped with stainless steel hinged covers and lifting platform. Additional accessories may include: heating & timer control, air agitation, pump circulation or ultrasonic agitation to increase the cleaning efficiency, etc.

MULTI-PURPOSE CLEANING BOOTH (WET/DRY)
The Customized Multi-Purpose Cleaning Booth is an environmentally-controlled room used for cleaning or dusting large parts such as Bogie Assembly, Traction Motor, AirCond and AirCond Filters, etc.

The room can be customized according to any size requirement and incorporate high efficiency lighting and exhaust filtering system, to enable proper and safe operation.

CYCLOSONIC CLEANING SYSTEM
The Cyclosonic Cleaning System is a stand-alone or a series of Cleaning Baths which makes use of Ultrasonic Medium (sound) to help clean a washpart thoroughly. The ultrasonic technology helps create cavitation (microscopic bubbles) in the cleaning medium which helps “scrub” the surfaces of the washparts for hard to reach areas. The Cleaners are typically fabricated with stainless steel materials and are modular in design.
The Cyclojet Ultra-High Pressure Robotic Cleaner is the latest cutting edge-innovation by Cyclosystem. It utilizes a 6-Axis Robotic Arm with ultra-high pressure oscillating spray jets to clean the washpart(s) effectively.

The Robotic Cleaner does not require any heating or use of detergent to clean the parts, hence, saving a lot of energy and operational costs. The machine is intended for cleaning Bogie/Wheelset, Axle Box & other complicated wash parts.

With this technology:
• No heating is required
• No detergent is needed
• Expect High Cleaning Efficiency
• Expect Lower Cost for Waste Water Treatment
• Achieve maximum cleaning results with minimum energy and time required

The Ultra HP Robotic Cleaning Technology requires very low water usage, with little to no environmental risk, reduces downtime and provides better safety performance.
COMPONENT CLEANING MACHINES

**AUTOMATIC BOGIE & WHEELSET WASH PLANT**
The Automatic Bogie & Wheelset Wash Plant is a two or multi-stage equipment which cleans a Bogie, Wheelset or any other Rail Car components in a closed chamber, automatically, using specially-designed high pressure oscillating spray jet system. Cyclosystem’s Bogie Wash Plant is probably one of the most efficient wash plants in the industry.

**CYCLOJET BEARING CLEANER**
The Cyclojet Bearing Cleaner is a multi-stage automatic cleaner that uses high pressure jets to clean the Bearings located on a fixture, fast and efficiently. It is able to separate all the heavy sludge from the cleaner and remove them automatically.

**CYCLOJET TRACTION MOTOR CLEANER**
The Cyclojet Traction Motor Cleaner cleans and rinses the Traction Motors and other related parts, automatically and efficiently, without deteriorating the insulation level of the motors’ electrical coils and windings.

Please contact us for all your other customized cleaning system requirements.
AUTOMATIC TRAIN WASH PLANTS

Cyclosystem’s high performance and modern Train Wash Plants employ the latest technologies to clean a Train automatically - either on a weekly or daily basis. Cyclosystem’s Train Wash Plants are designed in modular system which allows a high level of flexibility to integrate them into a complete and reliable cleaning system with possibility of recycling 100% of its waste water.
AUTOMATIC UNDERFRAME CLEANING SYSTEM

The UnderFrame Cleaner (UFC) is a specially-designed system which makes use of high pressure jets to clean the under carriage and sides (below the sole plate) of the train automatically. The UFC is very versatile and can be programmed for cleaning different types of trains’ under-carriage precisely.
Cyclosystem-designed Waste Water Treatment Plant (CycloTreat) is compact and modular. It combines the latest technologies with conventional treatment process to provide a complete solution to your individual waste water treatment needs.
CYCLOHEAT
Cycloheat is a wide range of high quality industrial drying ovens of various temperatures for heating purposes. Cycloheat equipment are energy efficient, corrosion-resistant and made up of stainless steel. It can meet challenging demands of a wide variety of industries and applications.

CYCLOCLEAN
A wide range of aqueous-based cleaning Agents or Detergents to suit different cleaning applications.
MOBILE LIFTING JACKS
Bulox Mobile Lifting Jacks are designed for the safest and highly reliable operation using trapezoidal screws to ensure that it is self-locking in case of any power failure.

RAIL-GUIDED LIFTING JACKS
Bulox Rail-Guided Lifting Jacks are used for safe and reliable lifting of Locomotives, EMUs or wagons, etc. on a set of guided rails in the Depot.

MONORAIL LIFTING JACKS
Bulox Monorail Lifting Jacks can be customized to suit the lifting of monorail vehicles with extended height.

CAR SUPPORTING STANDS
Bulox Car Supporting Stands support the axle of the main vehicle. It comes in mobile and adjustable heights.
LIFTING AND HANDLING SYSTEM

WIRELESS LIFTING JACKS
Bulox Wireless Lifting Jacks provide a clear and free access under the vehicle without cable installation on the floor. It is easy to navigate and also incorporates simple and centralized operation controls.

BOGIE ROTATOR/MANIPULATOR
Bulox Bogie or Wheelset Rotator/Manipulator is used for easy dismantling or re-assembly of components attached to the Bogie or Wheelset during servicing.

TRACK SWITCHING SYSTEM
Bulox Track Switching System is a technically-advanced, fully integrated Track Switching System, designed to provide exceptional operational performance in terms of reliability, availability, maintainability and safety.
LIFTING AND HANDLING SYSTEM

BOGIE/WHEELSET TURNTABLES
Bogie or Wheelset Turntables come in either manually-operated or motorized type. They are used to redirect the Bogie or Wheelset on fixed rails in the workshop.

TELESCOPIC BOGIE DROP SYSTEM
Bulox Equipment’s Telescopic Bogie Drop System is one of the latest innovations for lifting of Trains or Railcars in the Railway industry. It provides a safe and reliable operation, and also reduces the need for construction of deep pits, thus, saving a lot of civil works.

MOBILE BOGIE DROP SYSTEM
The Bogie Drop System is used to help disassemble and separate the Bogie from the Monorail or EMU cars, reliably and safely. It is designed to be operated in Remote or Wireless Radio-Controlled Mode.

OTHER CUSTOMIZED LIFTING & HANDLING SYSTEM
We produce a wide variety of custom-engineered Lifting & Handling System for your rail & track needs.
TRAVERSE SYSTEM (FOR MONORAIL & LOCOMOTIVE)

The Traverser System is used for the automatic lateral transferring of a Rail Vehicle from one track to another in a safe and reliable way.
UNDERFLOOR LIFTING SYSTEM

The Underfloor Lifting System (ULS) is used for the automatic lifting of a train set in the Depot for the removal of the Train undercarriage sub-assemblies. It consists of both the Bogie and Car Body Lifters which are fully retracted on the floors when not in use. The ULS is programmed for automatic synchronizing to ensure a very safe and reliable operation.
CUSTOMIZED RAILWAY MAINTENANCE VEHICLES

SELF-PROPELLED TRACK CLEANING AND VACUUM VEHICLES

The Track Cleaning and Vacuum Vehicle (TCVV) is designed and manufactured for Tunnel Cleaning and Vacuum. The special vehicle is equipped with high pressure oscillating spray capable to wash tunnel ceilings, walls, tracks and track beds, automatically. For special zones, it can also clean using high pressure water guns manually. The vehicle is also equipped with dust vacuum system. Vacuum hose is flexible and adjustable to provide the best coverage. The TCV has its own sewage reclaiming system using pneumatic diaphragm pump. The vehicle is designed to travel in both directions. A Scissor-Lifting Platform that is electro-hydraulic powered with a remote control or self-control, is also mounted on the vehicle for side shifting.
The Track & Tunnel Cleaning Wagon (TCW) can be designed either as a Shunter-towed or a Self-Propelled vehicle. It is used for automatic cleaning of the tracks or tunnel during off revenue hours using ultra-high pressure water jets system. The TCW can also be adapted to provide vacuum cleaning and other maintenance services along the track or tunnel.

Rail Loading Wagons

The Rail Loading Wagon is a standard un-powered wagon used for easy loading/un-loading and transporting of rails in a safe manner using hydraulic-assisted customized lifting and stacking system.
Bulox Equipment has the capabilities and vast experience to design Maintenance Vehicles for both the Monorail and Metro System. These Maintenance Vehicles come in many variations and are suitably designed to meet the performance requirements of each application. Bulox Equipment is one of the few companies which has the fastest installed-based Monorail Maintenance Vehicle in South East Asia.
CUSTOMIZED WORK CARS

Bulox Equipment can design and fabricate a wide variety of workcars – both powered and un-powered, to support Railway Maintenance works.

OTHER CUSTOMIZED RAILWAY VEHICLES

Please contact us to custom design other special vehicles to meet your requirement.