

PRESTIGIOUS
TECHNOLOGIES
PVT. LTD.



Company Presentation



Our Story

Incorporated in Jan-2017, Prestigious Technologies Pvt. Ltd. is a professional organization focused on serving the market with advance technology Equipment and Products. The technology offerings are from well renowned Global Manufacturers having Distinctive value proposition.

Prestigious Technologies Pvt. Ltd. primarily offers the following Solutions:

- Power Conditioning for HT/LT & Busbar Trunking
- Ergonomic Solutions for Manufacturing
- Vibration Isolation Solutions

Vision and Mission



Prestigious Technologies

VISION

To be the preferred Technological partner to our Customers and seek growth through new ideas, new products and strong partnerships.

MISSION

- To Provide latest technologies to our Customer and ensuring prompt and efficient sales and aftersales services.
- Continuously strive for technology upgradation having unique value propositions to maximize customer benefit.
- Ensuring fair working environment based on respect and cooperation and continuously improving our business processes.

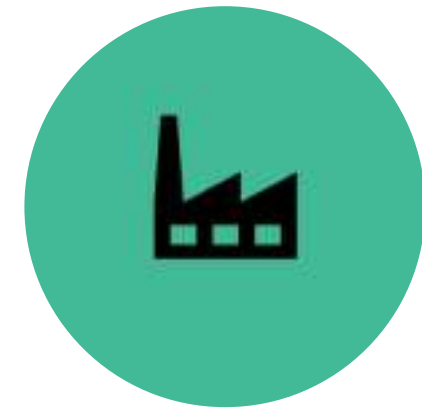
KEY CLIENT SECTORS:



**AUTOMOTIVE &
EARTH MOVING**



**WHITE GOODS &
MEDICAL**



**ENGINEERING &
MACHINE OEM**

Few of Our Valued Customers



Our Products and Services



POWER CONDITIONING
STATIC POWER CONDITIONERS
UPS SYSTEMS
HT & LT TRANSFORMERS
BUSBAR TRUNKING
STATIC VAR GENERATOR



ERGONOMIC SOLUTIONS
SPRING BALANCERS
HOIST
AIR BALANCER
JIB CRANES
XY RAIL SYSTEMS

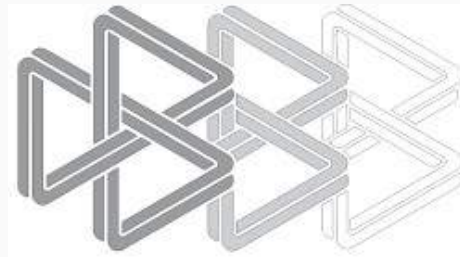


VIBRATION ISOLATION
VIBRATION ISOLATION MOUNTS
ACTIVE ISOLATION SYSTEMS
AIR SPRINGS
VIBRATION ANALYSIS



TSi POWER

Static Power
Conditioner



NAXSO

BUSBAR TRUNKING SYSTEM

BUSBAR TRUNKING
SYSTEM



ERGONOMIC SOLUTIONS



Prestigious Technologies

NUMERICTM

A Group brand |  **legrand**

UPS Systems



Prestigious Technologies

STATIC VAR GENERATOR



VIBRATION TECHNOLOGY

Vibration Isolation Solutions



HT TRANSFORMER & AVR

OUR PARTNERS

POWER CONDITIONING

KEY TECHNOLOGIES:

- Static Power Conditioners
- UPS Systems
- HT/LT Transformers and AVR
- Busbar Trunking System
- Static VAR Generator



Prestigious Technologies

POWER CONDITIONING

Static Power Conditioners



Precision Fast-PWM ac mains voltage correction with sag, swell & noise control

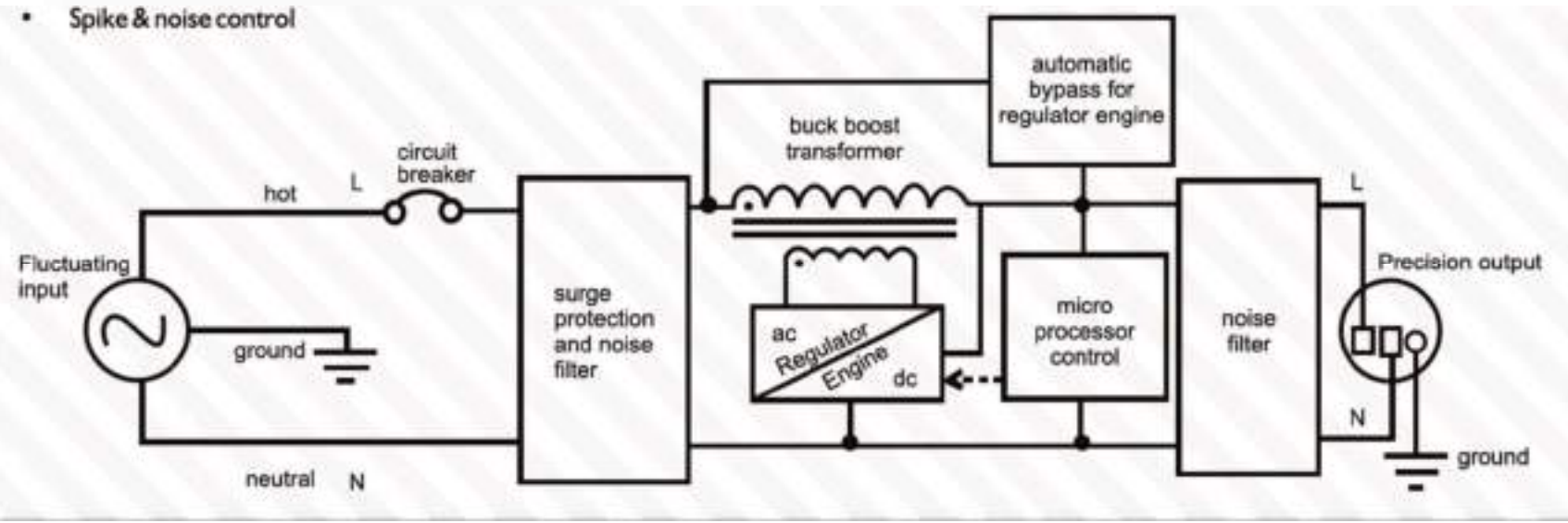
TSi POWER

20
MILLISECONDS
THAT WILL CHANGE
YOUR BUSINESS

**TAKE CHARGE
OF YOUR
POWER**

TSi Power

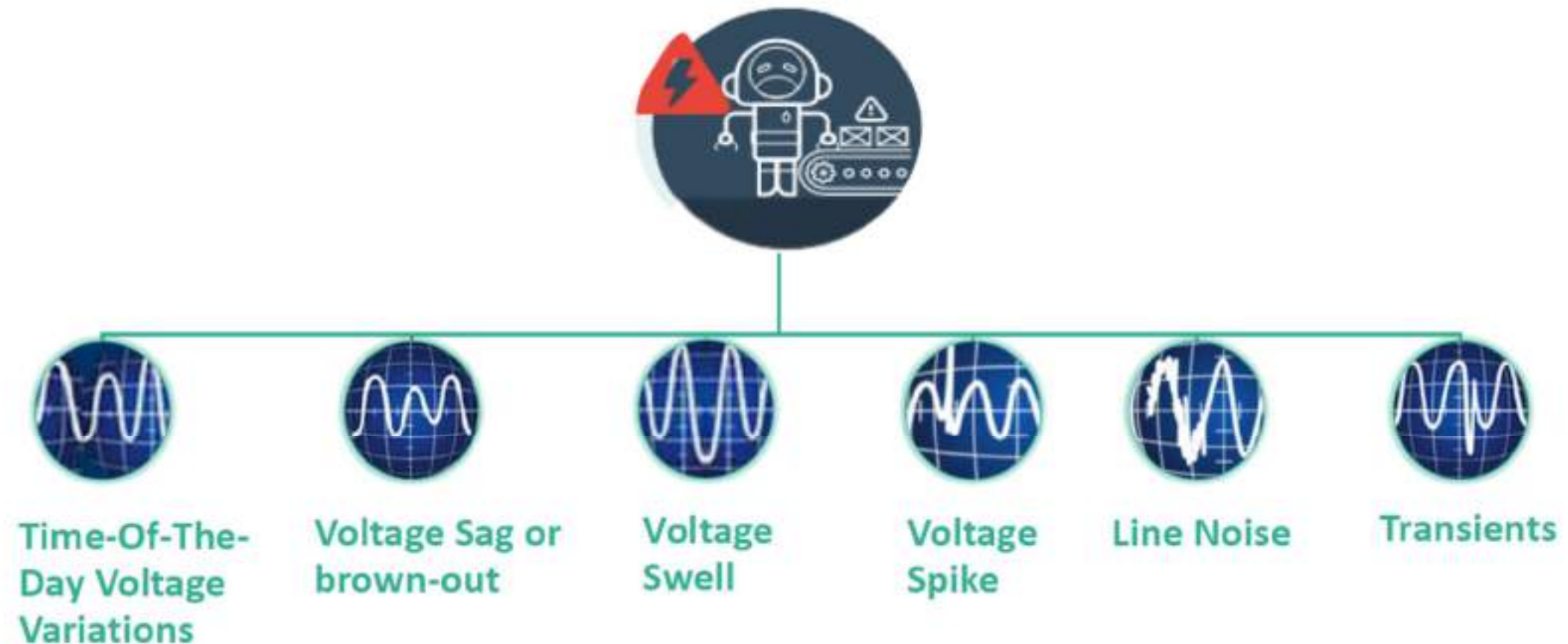
- Spike & noise control



POWER CONDITIONING

Static Power Conditioners

Common Power Quality Problems That Damage Your Machinery



POWER CONDITIONING

Static Power Conditioners

Power Conditioning Technologies Have Not Kept Pace With Power Quality Issues



- You may be surprised to know that **92% of the power quality problems remain unsolved** by conventional methods of power conditioning.
- Power Conditioning Technologies have not kept pace with modern manufacturing Technologies.
- This is the single most important reason for loss of productivity in modern electronic machines.

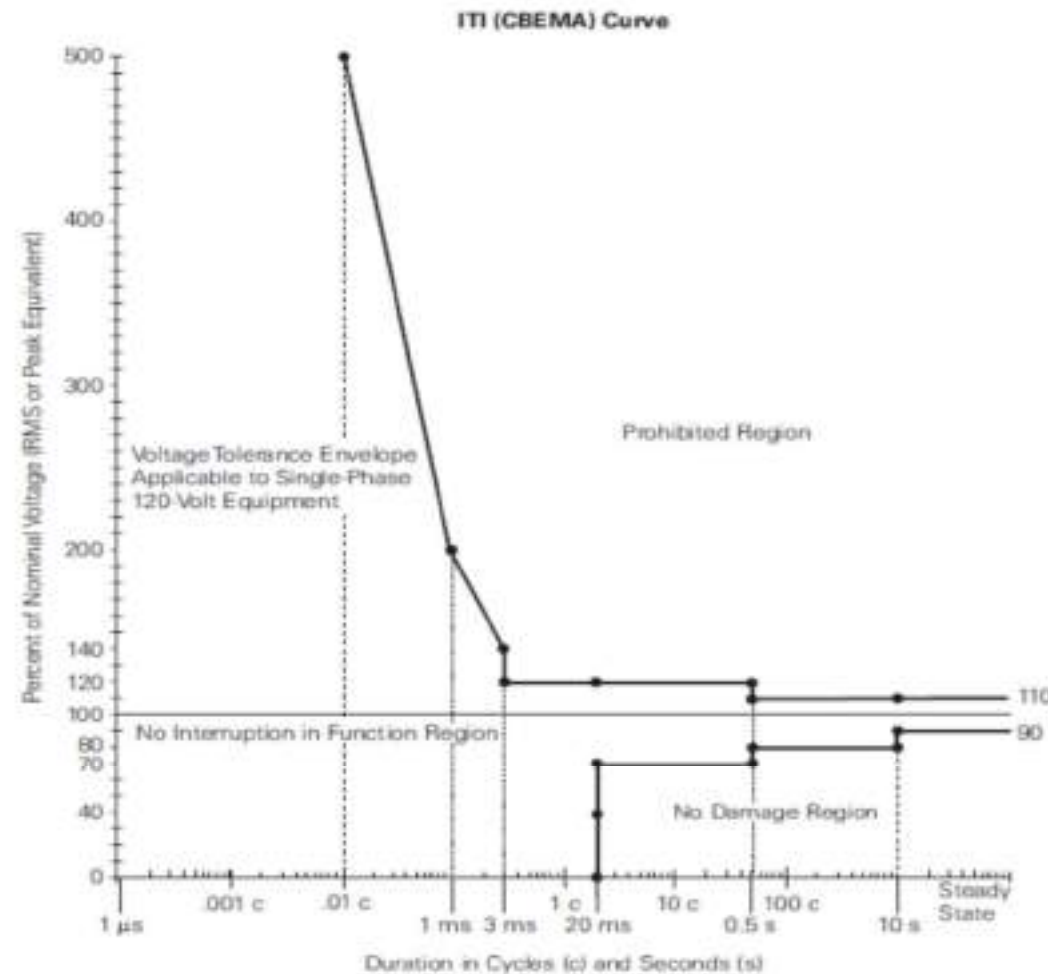
Importance of quality power

Power quality issues may lead to blocked capacity, premature failure of equipment due to electrical and thermal stresses, equipment damage, unplanned outages, poor power factor, etc. As per a paper presented at the International R&D Conclave organised by the Central Electricity Authority (CEA) in February 2018, the direct costs of downtime in India are about \$3,128 million per year, of which about 57 per cent are due to voltage sags and short interruptions, while 35 per cent are due to transients and surges. However, the expenditure required to prevent such events from happening are estimated to be less than 10 per cent of the financial loss. Both consumers and the distribution utilities suffer from equipment failure and thus from the high cost of operations and maintenance due to compromised equipment quality.

POWER CONDITIONING

Static Power Conditioners

Why 20 Milliseconds?

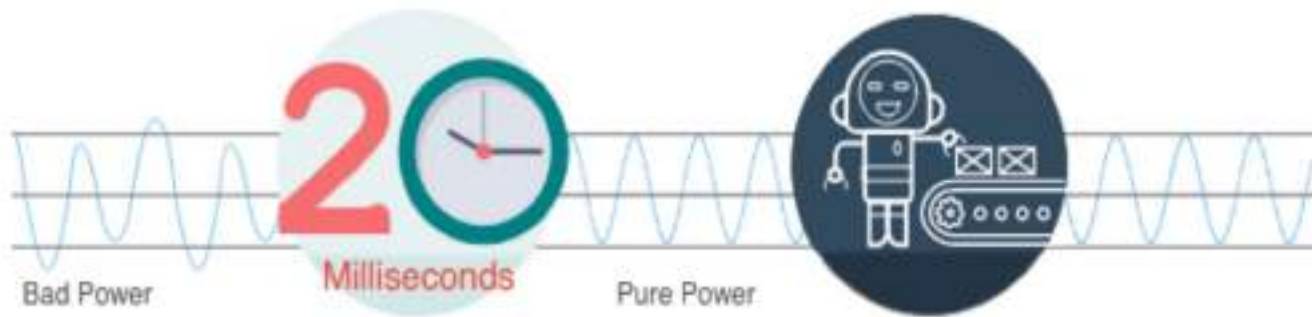


Because Modern Machines Demand Precision Voltage Supply as per ITI Curve

POWER CONDITIONING

Static Power Conditioners

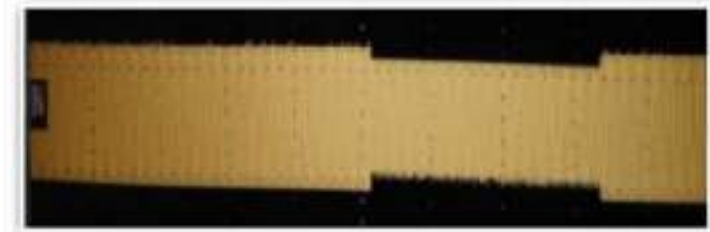
TSi's Secret For Powering Modern Electronic Machines



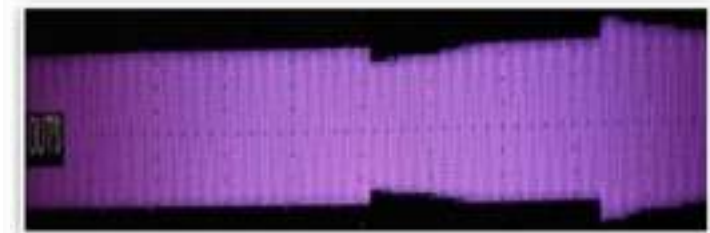
Time slot available to correct all voltage disturbances and convert bad power into precision power, conforming to ITIC Curve for Electronics.

PWM Static Voltage Regulation technology corrects all Disrupted Voltages & Bad Quality Power and supplies 'Pure Power' leading to no downtime in the production line.

TSi-VRP During Sag Event



Input Sag



Output of Servo Stabilizer during and after Sag



Output of TSi-VRP during and after Sag

POWER CONDITIONING

Static Power Conditioners

APPLICATION AREAS



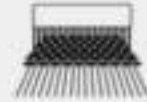
CNC & Robotics



Auto & Auto Ancillary



Oil & Gas



Textile Spinning,
Processing, Knitting,
Weaving



Engineering Process
Industry



Wood Cutting



Radar &
Telecommunication



R&D, Testing,
Diagnostics



Plastic Processing



Printing & Packaging



Security Surveillance



Building Management

POWER CONDITIONING UPS Systems

PRODUCT OVERVIEW



Line Interactive
600 VA – 2 kVA



**Online Single
Phase**
1 kVA – 20 kVA



**Online Three
Phase**
10 kVA – 800 kVA



Modular
10 kVA – 21 MVA



POWER CONDITIONING UPS Systems

35 years
Experience

5
Manufacturing Units

47
Sales Offices

600 VA to 21 MW
Product offer

255
Service Centers
COCO – Company Owned
Company Operated

1700+
Employees

> 1,000,000
Active Installed Base

GLOCAL
Global Expertise. Local Knowledge.

POWER CONDITIONING UPS Systems

LARGEST Service Infrastructure



250+
SERVICE CENTRES

1200
People strong service team

900
Field Technicians

POWER CONDITIONING UPS Systems

PRODUCT LINE UP – SINGLE PHASE



PREMIUS
1 - 10 KVA



DAKER DK PLUS
1 - 10 KVA



ONFINITI
1 - 10 KVA



HP MAX
7.5 - 20 KVA

POWER CONDITIONING UPS Systems

PRODUCT LINE UP – THREE PHASE



HPi33
10 - 40 KVA



KEOR T EVO
15 - 60 KW



KEOR HPE
60 - 500 KW



KEOR HP
100 - 800 KVA

POWER CONDITIONING

HT/LT Transformers and AVR



HT AVR (Automatic Voltage Regulator)

Global's Users:

- Tata Motors Ltd.
- Nissan Motors
- JBM Group
- Coca Cola Ltd.
- Samsung India
- Britannia Industries
- Moser Baer India
- Reliance Industries
- Carrier Aircon
- Pepsi Ltd.
- Escorts Ltd.
- Indo Autotech Ltd.
- Sietz Technologies (Escorts Group)
- Hamdard Group
- Supreme Industries
- Neelkamal Plastic Ltd.



Distribution Transformer with Inbuilt HT AVR (Automatic Voltage Regulator)

POWER CONDITIONING – Busbar Trunking System

Advantages:

- Busbar systems need less space than cable systems, especially for high ampere rates
- Busbars have sheet metal body. This helps transferring the generated heat out through metal housing. Cooling is better than cable systems.
- Busbar systems do not burn, do not carry flames and do not generate poisonous (halogen, etc.) gas incase of fire. Cable systems can burn and enable fire to split out in the buildings
- With robust structure, short circuit stand is much higher than cable systems (For example; for 3000A busbar 264 kA peak and 120kA/rms)
- The compact structure and steel sheet housing allows much lower electromagnetic field around busbar system than cables. High current rated busbars (4000A – 5000A) can be safely installed by the data cables
- Busbar systems have lower voltage drop compared to Cables
- Reduce number of CABLE TRAYS & DISTRIBUTION BOARDS. It is possible to feed loads (machinery, floors, etc.) directly with tap-off boxes, Reduce the DIMENSIONS of MAIN PANEL BOARDS - Reduce number of the MCBs
- Busbar systems are consisted of fully certified standard elements and designed to eliminate possible human mistakes.
- Busbars cannot be bitten and damaged by various rodents which may live in the buildings.

POWER CONDITIONING – Busbar Trunking System

Lighting



- ✓ Extruded Aluminum housing.
- ✓ Built-in-reduced torque with a housing that acts as a path-earth.
- ✓ 2 - 4 - 6 conductors plus earth (housing). All of them on one face window-outlet
- ✓ **STRONG** joints
- ✓ ONE MILLION lengths sold in 10 years

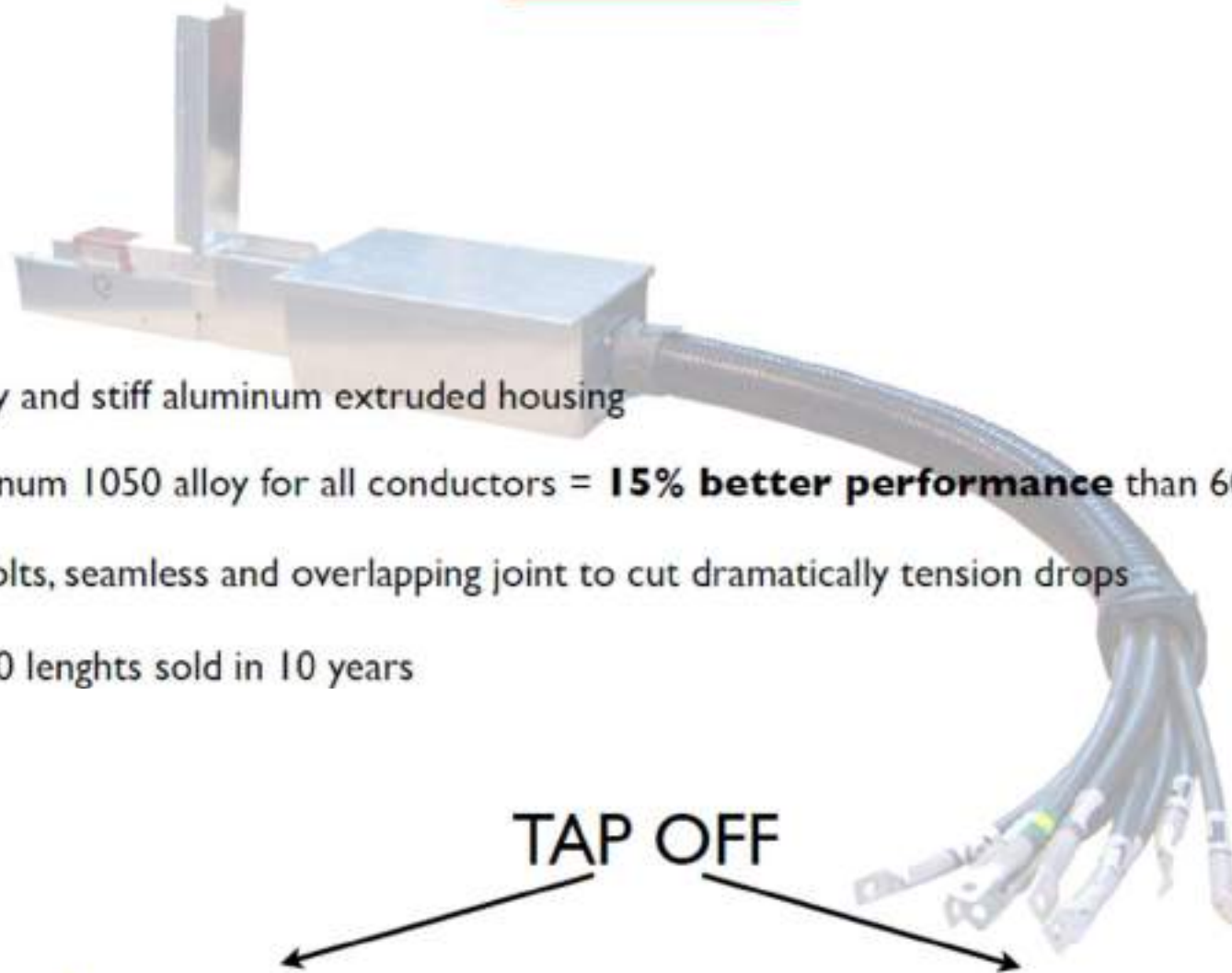
TAP OFF

✓ 6-Pole available

✓ **STRONG** and reliable

POWER CONDITIONING – Busbar Trunking System

Power



- ✓ Sturdy and stiff aluminum extruded housing
- ✓ Aluminum 1050 alloy for all conductors = **15% better performance** than 6060 alloy
- ✓ No bolts, seamless and overlapping joint to cut dramatically tension drops
- ✓ 400000 lengths sold in 10 years

TAP OFF

- ✓ From 16A to 300A matching all the ratings

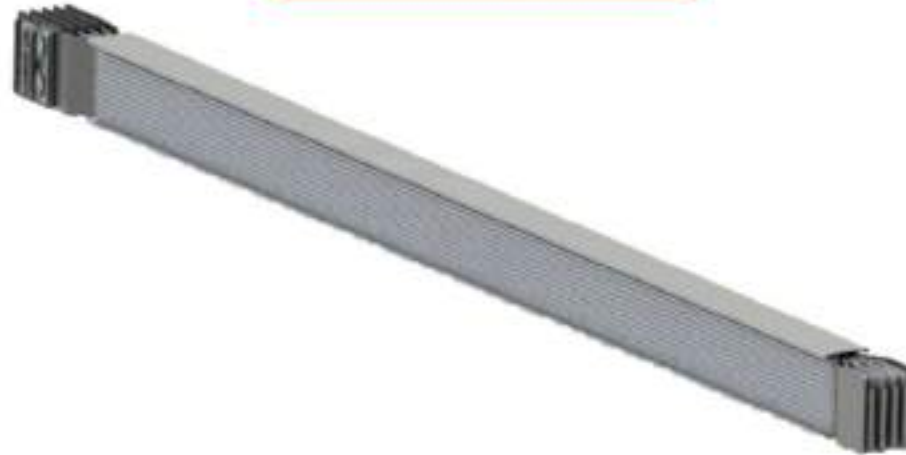
- ✓ Solid extruded case

POWER CONDITIONING – Busbar Trunking System



POWER CONDITIONING – Busbar Trunking System

Sandwich



- ✓ Unique Aluminum alloy with a patented design conductors to be shared from 1000A to 4000A with only 2 housing dimensions
- ✓ 5000A special single conductor
- ✓ **Super compact** dimension for end flange and elbows
- ✓ Easy joint

TAP OFF



✓ 4 POLE available

✓ STRONG and reliable

POWER CONDITIONING – Busbar Trunking System

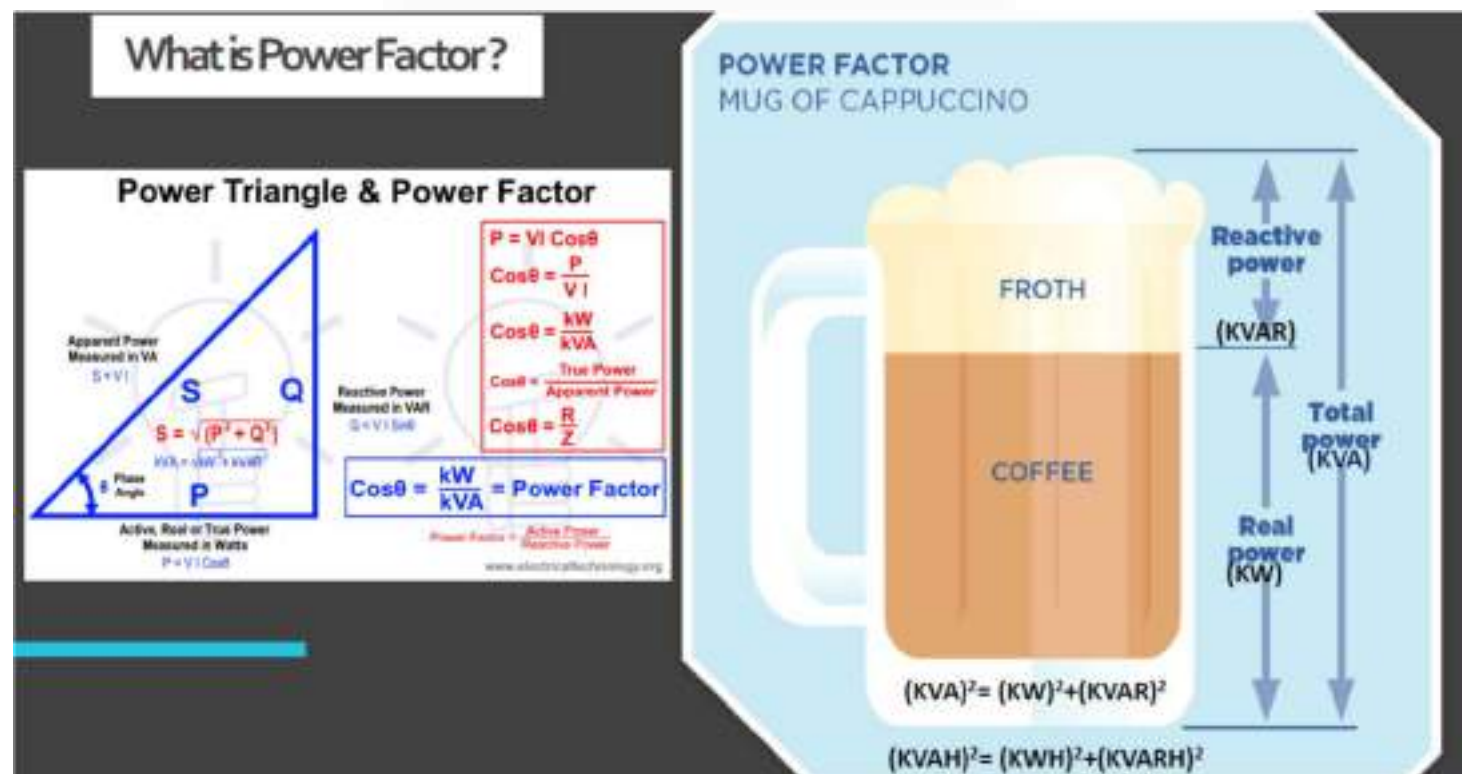


POWER CONDITIONING – Static VAR Generator



Energy Conservation with SVG thru Accurate Reactive Power Compensation

POWER CONDITIONING – Static VAR Generator



PF :	1.00		
BILLABLE DEMAND :	960.00		
OPEN ACCESS ENERGY RCVD :	0.00		
LOAD FACTOR :	73.30		
LOAD UNIT :	KVA		
CONSUMPTION UNIT :	KVAH		
CUMULATIVE READINGS			
READINGS	LAST MONTH	CURRENT MONTH	CONSUMPTION
KWH	2884589	2912185	413940
KVAH	2963412	2991023	414165



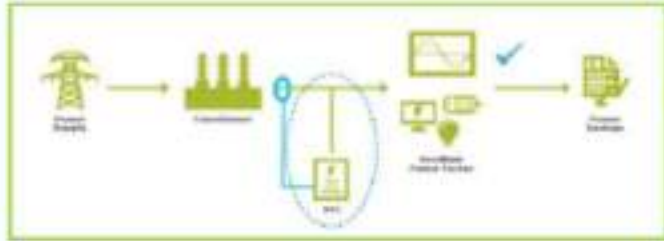
POWER CONDITIONING – Static VAR Generator

Comparison

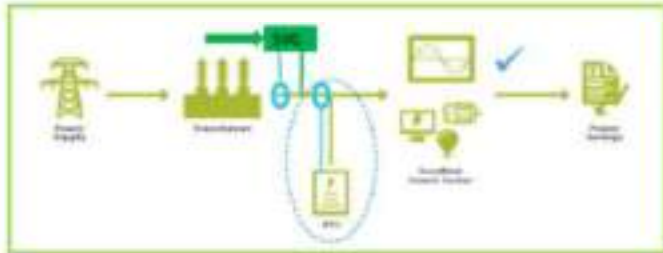
Automatic Power Factor Correction (APFC)	Static VAR Generator (SVG)
<u>With Steps:</u> Employ switching IN and OUT fixed value capacitor banks and there by achieves the desired PF at the grid end of the supply	<u>Stepless:</u> Uses scalable IGBT based inverter to produce infinitely achieve the desired set point.
<u>Single Phase Sensing:</u> Normally APFC Relay works on R Phase Current Sensing & provide 3 Phase Equal compensation based on R Phase reactive Power requirement	<u>Three Phase Sensing:</u> SVG works on all three Phases (R ,Y & B) current Sensing & provide Individual compensation based on respective Phase reactive Power requirement
<u>LV Sensing:</u> Normally APFC senses the current on LV Side & reactive power of MV Transformer is not taken into consideration.	<u>MV /HVSensing:</u> SVG system senses the three phase current on MV/HV side & hence reactive power of transformer is taken into consideration
<u>Slow in Response:</u> Generally slow to respond and are an electro mechanical system and may take considerable time to achieve the desired result.	<u>Fast & Dynamic :</u> Takes 15msec to completely respond to the need and only 50ms to dynamically respond.
<u>Unidirectional :</u> Only corrects inductive load PF	<u>Bidirectional :</u> Correct both an inductive(lag) and capacitive (lead) load .
<u>Harmonic Resonance & Amplification :</u> with Capacitor Bank Resonance condition can occur & Capacitors (without detuned reactor) amplify Harmonics	<u>No Resonance & Amplification of Harmonics :</u> SVG can Operate Efficiently up to 12 % THDv.
<u>High Maintenance :</u> Require frequent switching of the stages to achieve correction for changing power factor and are subjected to frequent failures.	<u>Low Maintenance :</u> Needs little maintenance & Monitoring. The service life is expected to be greater than 11 years.
<u>Monitoring on Panel :</u> No monitoring possible due to lack of communication	<u>App Based Monitoring :</u> Dynamic monitoring using IoT with Wi-Fi connectivity (Optional)
<u>No Phase Balancing Option:</u> Not Possible to Balance Phases	<u>Phase Balancing Permissible :</u> Current in three phases can be balanced

POWER CONDITIONING – Static VAR Generator

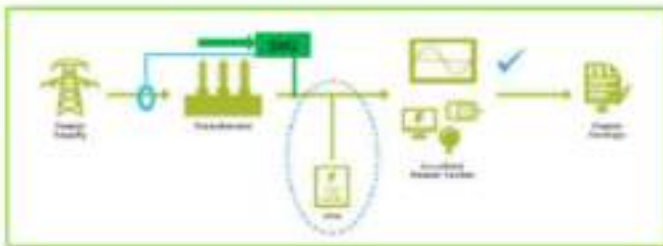
SVG has capability to connect the sensing in MV/HV



System with APFC (CT Sensing LT side)
(2-10% Energy Losses)



System with SVG (CT Sensing LT Side)+ APFC
(0.1 % to 1 % Energy Losses)



System with SVG (CT Sensing HT Side)+ APFC
(0.01 % to 0.1 % Energy Losses)

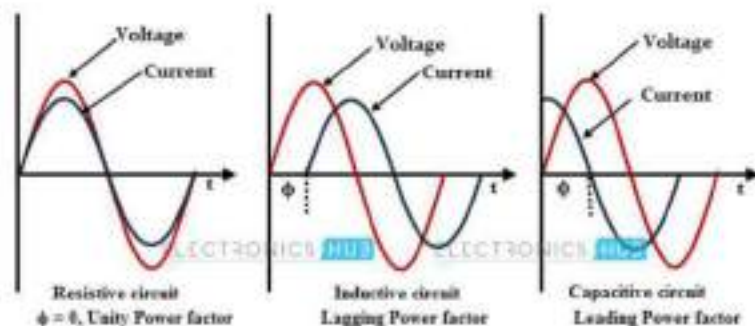
POWER CONDITIONING – Static VAR Generator



POWER CONDITIONING – Static VAR Generator

SVG corrects both inductive & capacitive reactive Power - Bidirectional

A load that has a **lagging power factor** is, by convention, said to be receiving **reactive power** from the source. A load that has a **leading power factor** is, by convention, said to be delivering **reactive power** to the source. ... Therefore, **lagging reactive power** is positive and **leading reactive power** is negative. SVG **Compensates both inductive and capacitive loads**



SVG can operate efficiently up to 12 %THDv & APFC resonates & amplify Harmonics

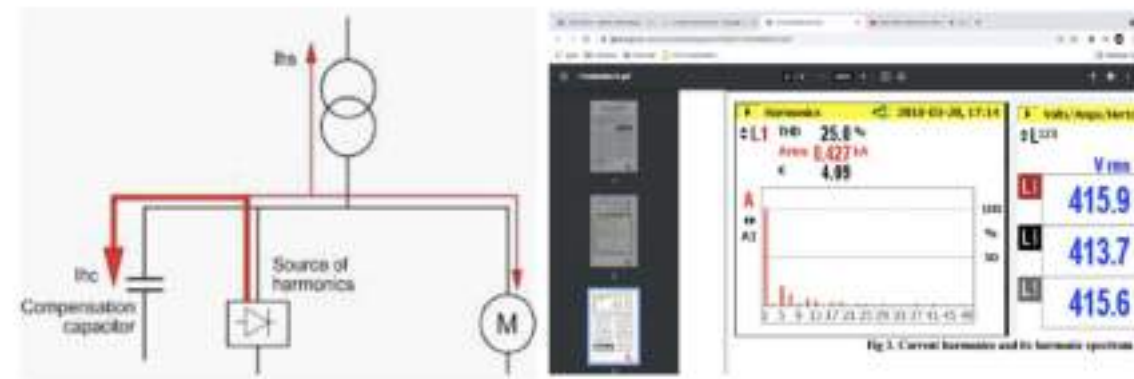
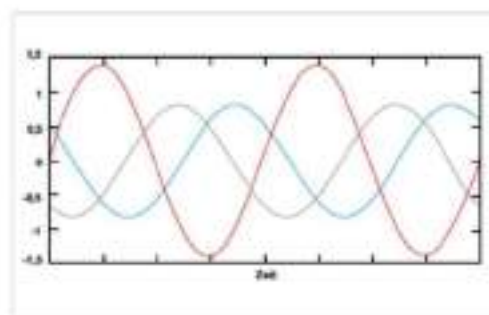
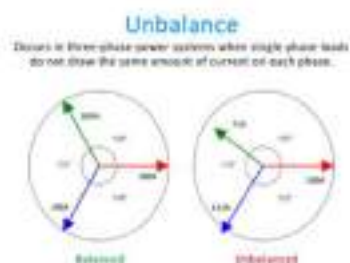


Fig 3. Current harmonics and its harmonic spectrum

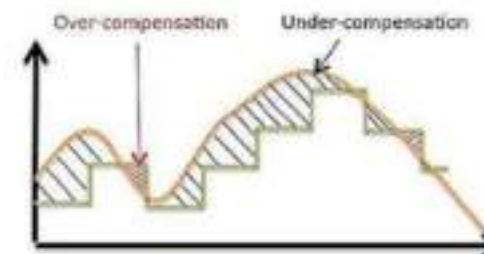
SVG Senses & Compensates Phase wise Reactive Power

A traditional switched capacitor type PFC system measures one phase and then provides stepped kVAR compensation to all phases based on the measurements taken from the one phase being measured. The other two phases all receive the same compensation, irrespective of what the other two phases actually need. The Gensave **SVG** measures all 3 phases and provides specific dynamic kVAR compensation each phase.



SVG Generates exact reactive power (Step less Response)

It operates by detecting the load current on a real-time basis through external CT's and determining the reactive content of the load current. The data is analysed and the SVG's controller drives the internal **IGBT's** by using pulse width modulation signals to make the inverter produce the exact reverse reactive current of the corresponding load reactive content. This is injected to the grid to compensate the reactive content of the load current. By adjusting the output voltage amplitude and phase angle or by directly controlling the AC side current, the SVG can absorb or generate var according to the load reactive power or the grid



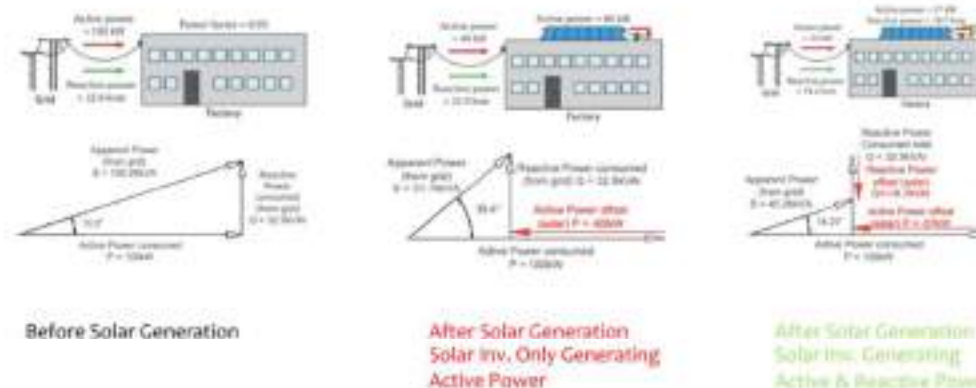
POWER CONDITIONING – Static VAR Generator

SVG compensates dynamic reactive power of transformer with load change

The **reactive power** drawn by **power transformer** could be as high as 5% of the **transformer** rating when supplying full load current. **Power** factor at the primary of the **transformer** is usually lower than what is measured at the secondary due to this **reactive power** requirement of **transformer**.

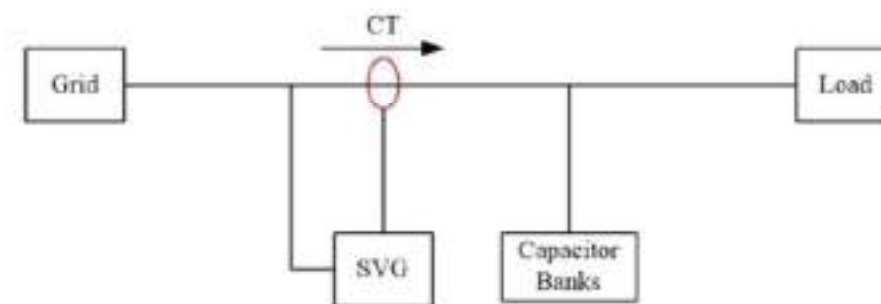
Rated power (kVA)	Reactive power (kvar) to be compensated	
	No load	Full load
100	2.5	6.1
160	3.7	9.5
250	5.3	14.7
315	6.3	18.4
400	7.6	22.9
500	9.5	28.7
630	11.3	35.7
800	20	54.5
1000	23.9	72.4
1250	27.4	94.5
1600	31.9	126
2000	37.8	176

SVG Provides extra reactive power required after addition of Solar Power Plant



SVG Collaborates with existing APFC Panel

No Need to remove or replace existing APFC Panel
 APFC is responsible for course reactive compensation
 SVG manages fine reactive compensation



POWER CONDITIONING – Static VAR Generator

SVG is Virtually Maintenance free & Far Safer

- 100% solid state with latest generation IGBTs.
- Electronics free from contaminated air flow
- Long life cooling fans are simple to replace
- Capacitor free. No Need for constantly checking capacitors for degradation or failure
- Low risk – no swollen or leaking capacitors. Reduced fire risk.
- No contactors to replace
- Design service life of more than 100,000hrs, without maintenance. That's more than 10 years operation in a plant that operates 24/7. Capacitor based systems can last as little as three years.
- High power density means less precious switchboard room is use



POWER CONDITIONING – Static VAR Generator

SVG standard Module rating & Mechanical Dimensions



SVG Modules

SVG Module Standard Rating:

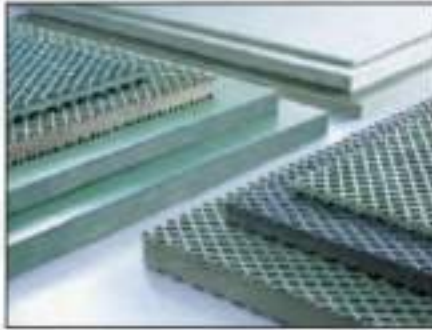
- 1) 30 KVAR – 500 x 191 x 585 - 36 Kg
 - 2) 50 KVAR – 500 x 191 x 585 - 36 Kg
 - 3) 100 KVAR – 500 x 286 x 557 - 48 Kg
- 1) It can provide any rating by paralleling modules of same or different ratings
 - 2) Mounting can be Rack mounting or Wall Mounting

Vibration Isolation Solutions

KEY TECHNOLOGIES:

- Vibration Isolation Solutions
 - Machining Centres
 - Precision Measuring Instruments – CMM, Balance, Microscope etc.
 - Isolation Foundation
 - Vibration Analysis Services

VIBRATION ISOLATION SOLUTIONS



■ Insulation Plates

Rubber vibration isolation pads have proven to be a very effective solution against vibration and structure borne noise problems in a variety of industries. You can choose from different sizes and types as well as sets of isolation pads e.g. for foundation isolation.



■ Leveling Elements

Bilz leveling feet and machine mounts are ideal for mounting machines that require isolation from vibration and structure borne noise. These maintenance free machine mounts ensure precise alignment of machines and are available in many different types, sizes and in combination with various isolation pads.



■ Precision Leveling Wedges

Bilz precision leveling wedges offer optimal support and rigidity of the machine bed even at high loads due to their large contact surface. They are available in various sizes and dimensions, as well as free-standing, bolt on (to the machine) or bolt through (to the foundation) options.

VIBRATION ISOLATION SOLUTIONS



■ FAEBI® Rubber Air Springs

FAEBI® rubber air springs made of high quality elastomer, which can be used for effective shock and vibration isolation of machines and assemblies. On request and for critical applications, the system can also be combined with mechanical or electro-pneumatic level control systems.



■ BiAir® Membrane Air Springs

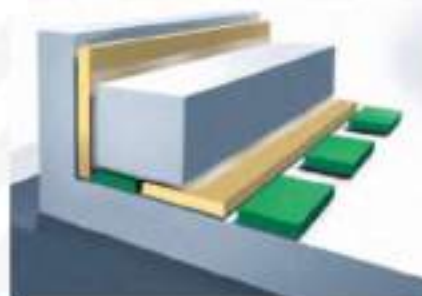
With their low natural frequency and adjustable damping BiAir® membrane air springs are ideally used for vibration isolation of sensitive and high precision machines. They are available with mechanical or electro-pneumatic level control systems.

ISOLATION FOUNDATIONS WITH

FAEBI®



Insulating Plate Sets



BIAIR®



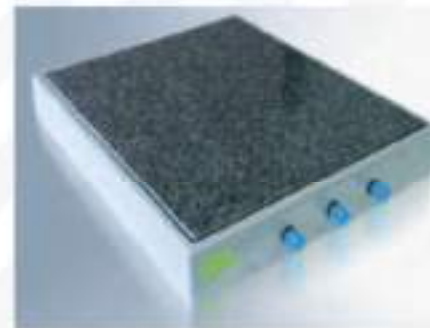
Bilz is your experienced partner for foundation isolations. We offer a variety of vibration isolation systems for foundation isolation including: vibration isolation pad sets, FAEBI® rubber air springs, and BiAir® membrane air springs with level control.

VIBRATION ISOLATION SOLUTIONS



■ Isolated Tables

Our laboratory tables are vibration isolated workplaces and can be specially manufactured to your individual specifications. With their highly efficient membrane air springs and level control they offer the perfect base for small measuring and testing machines and equipment such as microscopes, scales, etc.



■ Bilz - VITAP[®]

Bilz VITAP[®] isolated platforms are the ideal solution for small instruments or where space is limited. They are made of robust, powder-coated metal housing with integrated FAEBI[®] rubber air springs or alternatively BiAir[®] membrane air springs.



■ Vibration Measurement & Analysis

Our highly experienced sales engineers are happy to visit your facility to measure the vibrations on the floor that are created by your machines or the ambient vibration conditions in order to find your optimal vibration isolation system for various types of equipment, e.g. CMM-Coordinate Measuring Machines.

ERGONOMIC SOLUTIONS FOR MANUFACTURING

KEY TECHNOLOGIES:

- Spring Balancers
- Hoists
- Air Balancers
- Overhead Rail Systems
- Jib Cranes
- Manipulators

ERGONOMIC SOLUTIONS FOR MANUFACTURING

SPRING BALANCER

- Guaranteed maximum operation life
- Minimum downtime, Maintenance free operation
- Excellent working force increases productivity (Contribution to minimize operator fatigues)
- Great Profits to customers through no stoppage of production lines compared with other copy products
- Advanced built-in operation safety
- Easy & quick maintenance



- **More than 50 years experience**, continuous Kaizen

ERGONOMIC SOLUTIONS FOR MANUFACTURING

SPRING BALANCER

Only ENDO, Global leader of Spring Balancer, satisfies customer's requirement by developing and improving the products.

- Tool Hose Balancer
- Snapback prevention
- Braking Balancer
- Square Balancer
- ECO Balancer
- EWF-C, etc...



ERGONOMIC SOLUTIONS FOR MANUFACTURING

AIR BALANCER

- Suitable for precise positioning
- No Electricity, No Lubrication required
- Float mode is available
- Chain type for safety required application
- Full-auto module is available
- MSD as Patent Pending (JP)2008-284586
- Product Range: 50kg – 280 kg



ERGONOMIC SOLUTIONS FOR MANUFACTURING

SMART BALANCER – AUTO WEIGHT BALANCING

Maneuverable, Ergonomic and “Magical”



2 modes of operation to increase work efficiency and safety

Manual operation Balance an object directly



Manual operation controls an object directly with little effort. It is possible to easily adjust the level of an object to the position you want it.

Grip operation Hoist an object by the grip switch



Grip operation hoists an object with the grip switch control. It handles heavy objects efficiently with less burden on the operator.

Controlled by Electricity

Driven by Air

Fall-arrest system will be activated when the power sources cut off.

Operation modes are switched automatically. A beep and light will alert the user. (Manual switching is also available)

Manual Grip

Magical balancer is a perfect choice when you need assistance with...

- Positioning in assembly shops
- Setting workpieces to machines
- Material handling with a jig
- Changing a mold etc...

Application at our factory!

We try our Magical Balancer on our production line.

■ Product handling



Manual operation sets the jig smoothly

Grip operation lifts up the product

Magical balancer assists carrying and packaging the product. The product is set into a frame in a package with Manual operation. The operation is performed with no shock and no damage to the product.

■ Setting a workpiece to a lathe machine



Manual operation helps the operator to set a workpiece to a lathe machine

Magical balancer supports precise adjustment. It eliminates the inching process and frees the operator from direct handling of heavy workpieces.

ERGONOMIC SOLUTIONS FOR MANUFACTURING OVERHEAD X-Y RAIL SYSTEMS - ALUMINUM

- Reduces the accumulation of dirt and grime on internal rolling surface
- Strong backing for increased productivity
- Low investment costs
- Flexible design allows extensions, modifications of existing line and against building obstruction
- Reduction in internal transport time
- Reduction in operator's fatigue
- Comfortable and easily handled and manipulated without traveling noise
- Clean, maintenance free operation because no lubrication required
- Standard fittings are bolted not welded construction.
- So easy, fast and safe to install and take down For relocate by reusable all parts.
- The track is self-cleaning and won't corrode or flake off. It is corrosion resistant, which makes it great for outdoor use.



ERGONOMIC SOLUTIONS FOR MANUFACTURING OVERHEAD X-Y RAIL SYSTEMS - STEEL

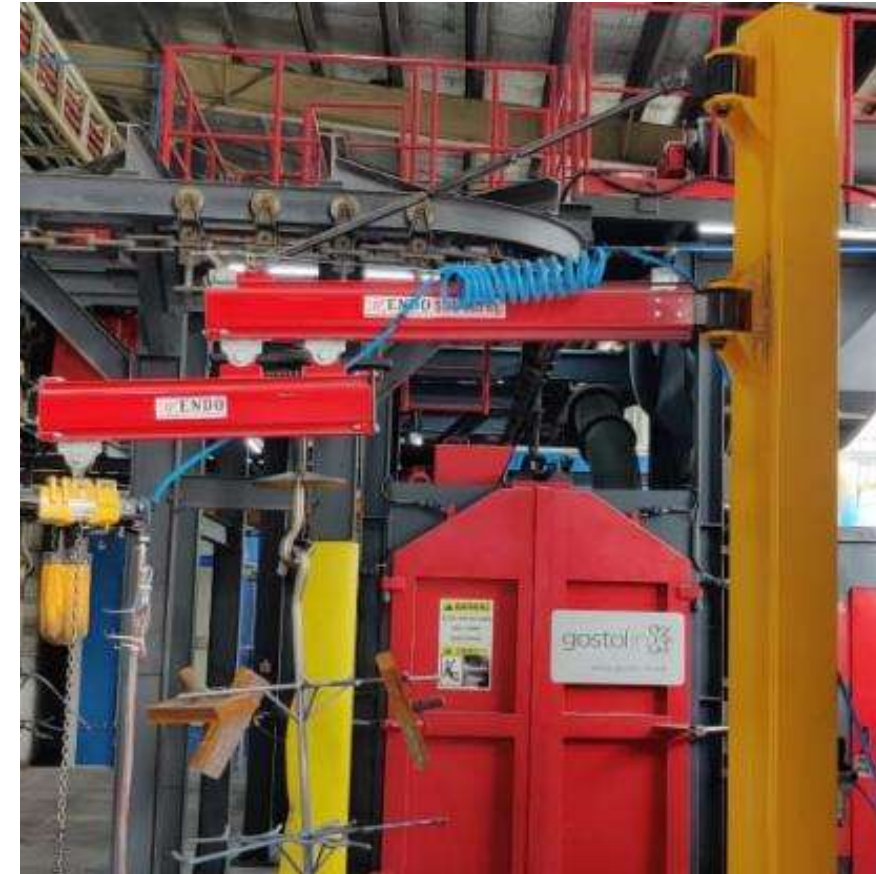
- Power Free Rail system is totally different from the conventional electric hoist in operation mechanism. It can be moved left and right with power freely.
- It is safe and smooth to operate easily to the improvement of productivity.
- The system is composed of unit parts so that the system layout can be made without restriction.
- The unit part can be reutilized when the line was modified.
- It is possible to transfer material in 3 dimensions X, Y and Z directions without difficulty.



ERGONOMIC SOLUTIONS FOR MANUFACTURING

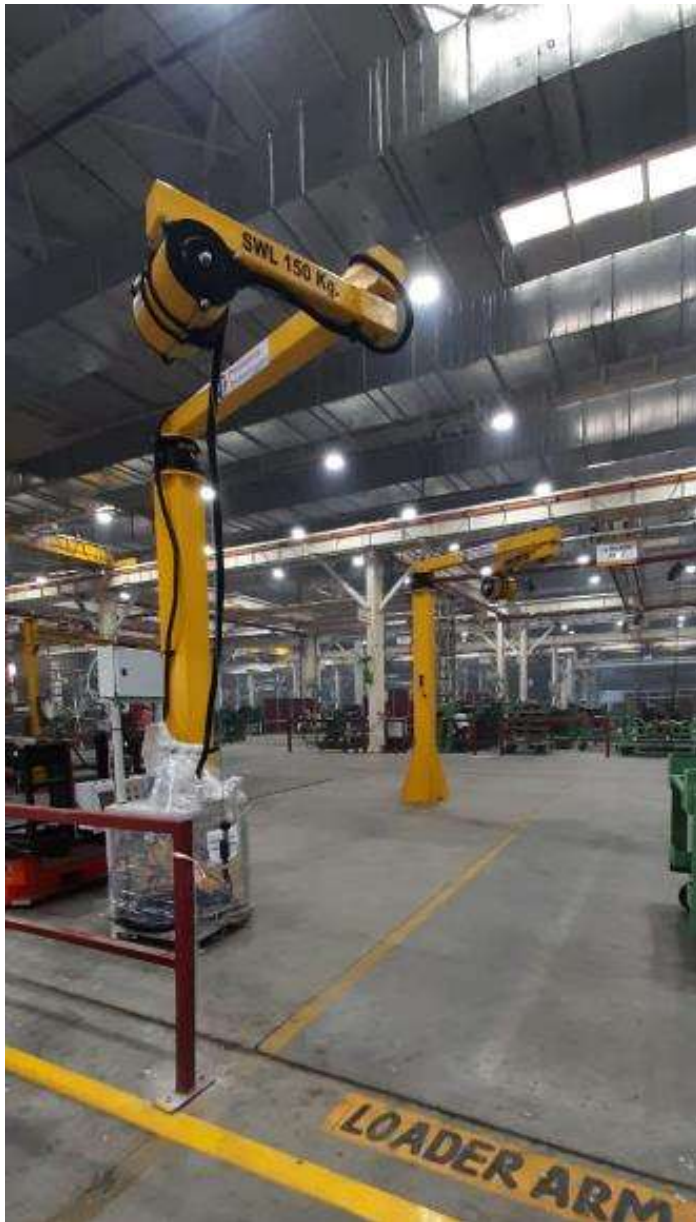
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- The slewing range covers 360°.
- Light and fast load handling.
- Ease of operation and high operating safety and reliability.
- Load capacities up to 2,000 kg.
- Simple installation using fittings included in the system
- Fitted With Electric Chain Hoist/Air Hoist.



ERGONOMIC SOLUTIONS FOR MANUFACTURING

JIB CRANE



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Prestigious Technologies

PRESTIGIOUS TECHNOLOGIES PVT. LTD.

Address : 3F/06, Ozone Centre, Plot No. 9, Sector-12,
Faridabad - 121 007 (Haryana)

Landline : +91 129 4079222

E-mail : asood@prestigious.co.in

Web : www.prestigious.co.in