EVERPADS
PRODUCT CATALOGUE

MACHINERY SPARE PARTS MANUFACTURERS
We are proud to be the world-leading machinery parts manufacturers.



**Rubber Buffer for Vibratory Roller** 



OUR PROMISE

Quality • Service • Integrity

### **TABLE OF CONTENT**

Introduction	01-02
Roller & Challenge	03-08
EVEPADS Rubber Elastomer Solutions	
- Testing and Evaluation	
	09-15

### EVERPADS Rubber Buffers. Premium Parts for Premium Performance.

After 60 years of rubber experience and 30 years of road machinery, EVERPADS continues to innovate solutions that make us the best at manufacturing premium spare parts without the premium cost. EVERPADS is the world's leading aftermarket spare parts manufacturer for heavy equipment—a reputation we don't take for granted.

We understand our customers' challenges in completing their projects on time and on budget. It's what led our founder Leo Chiang, in 1995, to use his advanced knowledge of high-grade solid rubber tires to invent the first bolt-on rubber track pad. Mr. Chiang knew equipment owners needed reliable, cost-saving solutions.

Thirty years later, our mission continues: Produce high-performance and cost-efficient products for any construction environment, ultimately making our world better. We do this by manufacturing the best-designed products that can almost double or more service life because of our superior rubber technology and focus on quality in contrast to competitors that have entered the market and concentrated on low-cost pricing with inferior rubber materials.

### **Key Benefits for Our Customers:**

- Expansive Manufacturing Plant. No Outsourcing.
- Highest Quality Grade of Materials. 100% Natural Rubber.
- Proprietary Rubber Compounds with Formula E Technology.. Exclusively Ours.
- Quality Control Laboratory. Complete Customer Satisfaction.

In summary, our customers get premium spare parts without premium costs.

**EVERPADS** Corporation.

**EVERPADS**阿尔卑斯



## VIBRATORY ROLLER

Rubber Buffer for Vibratory Roller

Rubber elastomers are an essential component of vibratory rollers, but they face numerous challenges that can reduce their effectiveness and lifespan. At EVERPADS, we understand the importance of durable and effective rubber components in vibratory rollers, which is why we have developed a range of innovative rubber elastomer solutions that can help you overcome these challenges.

These types of mechanical stress can cause fatigue and wear on the rubber elastomers over time, leading to a reduction in their effectiveness and lifespan.



### RUBBER BUFFER

Vibratory Roller

EVERPADS Corporation.

The Formula E Rubber Buffer series for rollers operates in surface compaction construction, providing up to 3x the service life of the standard buffer and working high-weight rollers and centrifugal force.

Up to 3,200 working hours in surface compaction operations.

- 3x the service life of standards: low heat generation technology
- Withstands higher centrifugal force load
- Adds more than 3,200 working hours

The challenge of vibratory rollers' rubber elastomers is maintaining their durability and effectiveness over time. Vibratory rollers use rubber elastomers as a crucial component of their system to effectively compact soil, asphalt, and other materials during construction and roadworks.

- High temperatures: Rubber buffer in roller are subject to high temperatures due to the mechanical stress generated by the equipment's operation. This can lead to thermal aging and degradation of the rubber components, reducing their performance and lifespan.
- 2. High vibration frequency loading: Vibratory roller generate high-frequency vibrations that can cause fatigue and failure of rubber components over time. This can lead to equipment downtime and increased maintenance costs
- 3. High centrifugal force: Vibratory roller are subject to high levels of mechanical wear, which can cause tearing, cracking, and other forms of damage to the rubber components, compromising their performance and lifespan.

# REVOLUTION

Vibratory Roll

### Challenge:

### Degradation of Rubber Elastomers in Vibratory Rollers Under High Temperatures and Mechanical Stress

In vibratory rollers, high temperatures can cause rubber elastomers to degrade due to the combination of thermal aging and mechanical stress. The intense vibrations generated by the roller's operation can increase the temperature of the rubber components, accelerating the thermal aging process.

This can lead to a reduction in the mechanical strength and elasticity of the rubber, causing it to become brittle and prone to cracking. Over time, the rubber may also lose its ability to absorb shock and vibrations, leading to reduced effectiveness and increased wear on other components of the roller.

The effects of high temperatures on rubber elastomers in vibratory rollers are further exacerbated by the harsh operating conditions of construction and roadworks environments. Exposure to UV radiation, chemicals, and other environmental factors can increase the rate of degradation and reduce the lifespan of the rubber components.

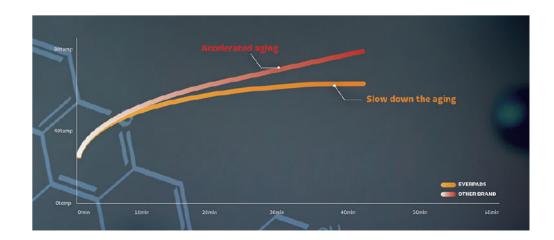
### Solution:

### **EVERPADS Low-heat Generation Soulution for Vibratory Roller**

EVERPADS develop low-heat generation solution to tackle the challenge of high temperatures causing rubber elastomer degradation in vibratory rollers. Our technology was developed through the reformulation of rubber molecules to control the rubber temperature at 63 Celsius or 145 Fahrenheit. By significantly slowing down the rubber aging speed, our technology effectively maintains the physical properties of the rubber, reducing the risk of brittleness and cracking that can occur as a result of thermal aging.

### REVOLUTIONIZING DURABILITY:

FORMULA E LOW-HEAT GENERATION RUBBER TECHNOLOGY - EXTENDING LIFESPAN AND REDUCING MAINTENANCE COSTS IN ROLLERS



## MAXIMIZINO EFFICIENCY

יוסו מיסו א וייסווכו

# CH<sub>3</sub>

CH<sub>3</sub>

CH<sub>3</sub>

### **MAXIMIZING EFFICIENCY:**

THE SPECIAL RUBBER COMPOUND - A TEAR-RE-SISTANT INNOVATION FOR OPTIMAL PERFOR-MANCE AND LONGEVITY IN ROLLERS.

### Challenge:

### **Intense Mechanical Stress in Rubber Component**

Rubber elastomers are also subject to intense mechanical stress during compaction operation. This can cause tearing and other forms of damage that can compromise the performance and lifespan of the equipment.

- Compression: The rubber is compressed between the roller drum and the surface being compacted, which can cause deformation and strain.
- Shear: The rubber can experience shear stress when the roller drum changes direction, causing the rubber to twist and bend.
- Tension: The rubber can experience tension when it is stretched as the roller drum rotates.
- Abrasion: The rubber can experience abrasion as it rubs against the surface being compacted or other components within the vibratory roller.
- Impact: The rubber can experience impact stress if the roller drum hits a hard object or encounters a sudden change in surface elevation.

### Solution:

### **Tear Resistance Compound**

Our tear-resistance compound is formulated with advanced materials and engineered to optimize the performance of rubber compound under intense mechanical stress. This technology significantly improves the durability of rubber components, reducing the risk of tears, cracks, and other forms of damage that can lead to equipment failure and increased maintenance costs.

Our team of experts works closely with Roller OEM manufacturers to select the most appropriate tear-resistance compound for their specific applications, taking into account factors such as equipment specifications (weight), operating conditions, and environmental factors. With EVERPADS' tear-resistance compound, customers can enjoy improved performance, extended lifespan, and reduced maintenance costs for their vibratory rollers.

## BENCH **FORCETESTING METHOD**

### **Rubber Fatigue Testing**

Fatigue testing evaluates the ability of our rubber elastomers to withstand repeated stresses and strains, ensuring that they can perform effectively over an extended period.

### **Tear Resistance Test**

We also conduct rubber pulling tests to assess the tear resistance capability of our rubber elastomers. This testing allows us to ensure that our products meet the highest standards for tear resistance, providing maximum protection against wear and tear.

### **Shear Force Testing**

We conduct sheer force testing to evaluate the extracting force of our rubber elastomers, ensuring that they meet the specific requirements of our clients' applications. By conducting these comprehensive testing procedures, we can provide our customers with the assurance that our rubber elastomers are capable of performing effectively under even the most demanding conditions.







### **SOPHISTICATED QUAL-ITY CONTROL AND BENCH FORCETESTING METHOD**

At EVERPADS, we understand the critical role that testing and evaluation play in ensuring the reliability and performance of rubber elastomers used in vibratory hammers. As part of our commitment to quality and durability, we conduct a range of rigorous testing procedures on all of our rubber products. Our fatigue testing evaluates the ability of our rubber elastomers to withstand repeated stresses and strains, ensuring that they can perform effectively over an extended period.

- Rubber fatigue testing
- Tear Resistance test
- Sheer force testing

# EM/ODM

### **Building your Project**

The time it takes from initial communication to product launch is merely 1 MONTH. EVER-PADS saves our clientele time and money. We are the manufacturer with the best technology that allows our clients to be #1.

- 1. We schedule a meeting with you and our team of developers where we discuss your needs and requirements.
- 2. The development team then calculates the compound rubber to meet your specified
- 3. We conduct tests with sheer force bench for maximum extracting and displacement.
- 4. We communicate the results with you.
- 5. You test the new rubber buffer with the new machine.
- 6. You communicate your results with us.
- 7. We make any revisions necessary.
- 8. Product launch!

### **Rolling Out Ready Designs**

Your unique vibratory hammer/compactor requires unique solutions and that is exactly what you'll get with our ODM solutions. You will also experience:

- 1. Our experts will be with you from beginning to end.
- 2. You will have immediate access to our patent designs.
- 3. Our tailor-made rubber compound technology will meet your specific requirements.
- 4. We offer the utmost professional experience.
- 5. You will be able to give your customer consistent quality, positioning you at the top of the competition in your market.
- 6. Our patented key technology adds value to your hammer or compactor.

### **Customizing your Solution: Sheer Force, Dimension**

If you can dream it, we can deliver it. Our clients trust our OEM/ODM solutions because we consistently deliver complete solutions. No matter what your needs are, we can meet them, and we offer solutions that are tested and validated.

### **Branding and Personalization:**

We help you improve your brand image by putting your own logo designs on the products.

### Fit and Function:

Ensuring the perfect fit and function is essential. After you have communicated all of the specifications and needs, our expert will go through a 3D planning system to accommodate your vibratory hammer and roller. Multiple quality control and sheer force testing approvals are utilized to guarantee that every product meets the maximum sheer force, and offers a complete solution.

### **Specialized Environment Design:**

Our clients work in various environments, including bridges, residential, and non-residential construction projects. Your work might entail constructing a project on rough, dusty terrain, or on the ocean where durability must withstand wet and salinity conditions and extreme temperatures. From department buildings to infrastructures, efficiency and safety are paramount. Therefore, specialized rubber buffers need to be functional and reliable. In these highly regulated and time-sensitive construction projects, failure is not an option. Neither is churn. EVERPADS manufacture and development provide designed solutions that withstand wide temperature ranges, sand and dust, high humidity, shock, and vibration.

### **EVERPADS**

### **RUBBER BUFFER OEM/ODM SOLUTION**

### The Opportunity:

The most concern of machinery manufacturers or dealers is customer satisfaction (quality of your machine), scalability (ability to expand), and stability (parts supplier deliverability).

### The Solution:

At EVERPADS Intelligence Manufacturer OEM Solutions, we understand that you want to take your machine to market with reliable products, support, and technology to differentiate it from the competition. Doing so will increase your potential for success and that is why partnering with us is the best decision you can make. Together, we can design the combination of capabilities to make you #1.

### EVERPADS Corporation.











IC0401 Series

IC0601 Series

IC0701 Series

IC0801 Series









IC0901 Series

IC1001 Series

IC1101 Series

IC1201 Series









IC1301 Series

IC1401 Series

IC1501 Series

IC1601 Series



### HEADQUARTER

### EVERPADS CO., LTD.

Tel: +886 4 2358 2531/2000 Fax: +886 4 2358 9090

Add: No.83,32nd Road,Taichung Industrial Park,Taichung, 40768,Taiwan ROC

Email: service@everpads.com

### USA BRANCH

### **EVERPADS INC.**

Tel: + 1 215 420 7086 (toll free) Fax: + 1 888 928 7237 (toll free)

Add: 320 Constance Dr, Suite 5 Warminster, PA 18974

Email: america@everpads.com

### **EUROPE BRANCH**

### **EVERPADS B.V.**

Tel: + 31 10 415 7820 Fax: +31 10 415 6414

Add: Calandstraat 81, 3125BA, Schiedam, the Netherlands

Email: everpads.bv@everpads.com

www.everpads.com