





UTILIZATION OF ADVANCE,
PRACTICAL AGRO SMART AND
ECO-ENVIRONMENTAL FRIENDLY
TECHNOLOGIES IN RUBBER
PRODUCTION



EXCELL IN GREEN RUBBER DEVELOPMENT AND INNOVATION THROUGH S.M.A.R.T

( Specific Method Advanced Realistic Technology )

#### **BADJA BARU GROUP**









## Code of Conduct

## Quality is Our Priority

FOR SDE TSR+ PRODUCT CONSISTENCY





# BENCHMARKING







4. Improve







2. Detect



1. Measure



## BADJA BARU GROUP's PORTFOLIO











Latex Harvesting Technologies



## Natural Rubber

#### **OUR MISSION**

Working towards full strength world class practice to maintain business excellence with a strong sense of global integrity, focus and total quality performance to achieve

long term sustainable business existence, providing prime quality products with ultimate consistency and stability.

Priority care with an infinite sense of our core strength: BUILT BEST TO EXCELLENCE. Respect and concern for our valued customers satisfaction, accountability to our global stakeholders corporate social responsibility and environmental friendly practice as our global goals.

**OUR VISION** 



#### **RAW MATERIAL**

Procure raw materials from a group of reguler suppliers and only clean raw materials will be accepted for processing.

Smallholders are encouraged to use organic **Deorub Liquid Smoke** treatment for coagulation of field latex to improve its quality and for environmental purpose to deodorize bad rubber odour.

BADJA BARU is focused on quality and is implemented under ISO 9001:2008 quality management system.

The products are high quality SDE SIR-10, SIR-20, SIR-20 Compound (SBR1502 and Stearic Acid) and SIR-20 CV

crumb rubber, renowned for their high standard in quality and consistency, and they are also environmentally friendly with the application of "Deorub Liquid Smoke" treatment in our processing line.



AGING BLANKET DRC USING METAL (WOOD-FREE) RACKING SYSTEM



NEW EXPANSION FACTORY FOR AGING CRUMB DRC AND BLENDING SYSTEM



In addition to mechanized production, workers and employees are also important assets for the company which need attention. Appreciation of the Badja Baru company Occupational Safety and Health program was given at the national level in 2006.



#### **EXPANSION IN PROGRESS**

We are growing continously with progressive expansion. In the near future our production capacity will be increased to 20 tons per hour with investment in 4 line dryers and other supporting machines.

#### **NEW 3rd DRYER MACHINE ON BUILD**

For our most valued customers, consistent SDE Product SIR PLUS are produced using our intensive total raw material blending solution.

This year our plant will use **wood-free packaging** as encouraged by our most valuable customers to reduce contamination risk.

PT. BADJA BARU with SDE trademark is also an active member of GAPKINDO South Sumatra.



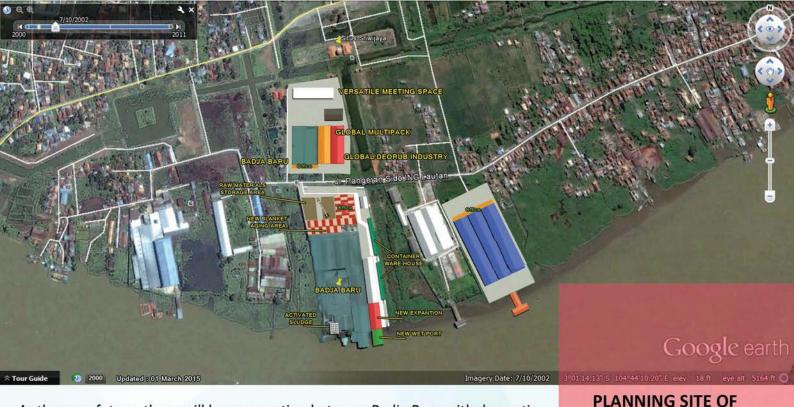
**NEW MIXTURE RUBBER PRODUCTION LINE** 



ACTIVATIVATED SLUDGE WASTE WATER TREATMENT

SDE SIR LABORATORY AND FINISHED GOOD WAREHAOUSE





In the near future, there will be cooperation between Badja Baru with domestic and foreign investors to build a workshop and plastics factory specifically to serve the natural rubber industry.

The Workshop company will be called **PT. TOTALTECH RUBBER ENGINEERING**, and while the plastic company, **PT. MUSI RUBBER PLASTINDO**.

The two factories will be built simultaneously, in the same location, not far from BADJA BARU complex.

#### **INVESTMENT OPPORTUNITY**

Currently, the Government of South Sumatra in agreement with PT. Pelabuhan Indonesia II (Persero) is developing **Special Economic Zones** in Tanjung Carat, Banyuasin.

On 22 October 2015, the government appointed Regional Company of Mines and Energy to sign an MoU with Badja Baru to undertake the developing of Tanjung Api-Api Special Economic Zone by developing an integrated rubber industry with downstream processing and marketing of rubber products and derivatives.

#### **DOWNSTREAM RUBBER INDUSTRIES**

- \* Tire
- \* Rubber Glove
- \* Condom
- \* Footwear
- \* Crumb Rubber
- \* Synthetics Rubber
- \* Carbon Black
- Compound Rubber
- \* Rubber Vehicle Equipment
- \* Electronics
- \* Medical Equipment
- \* Rubber Houshold Appliances

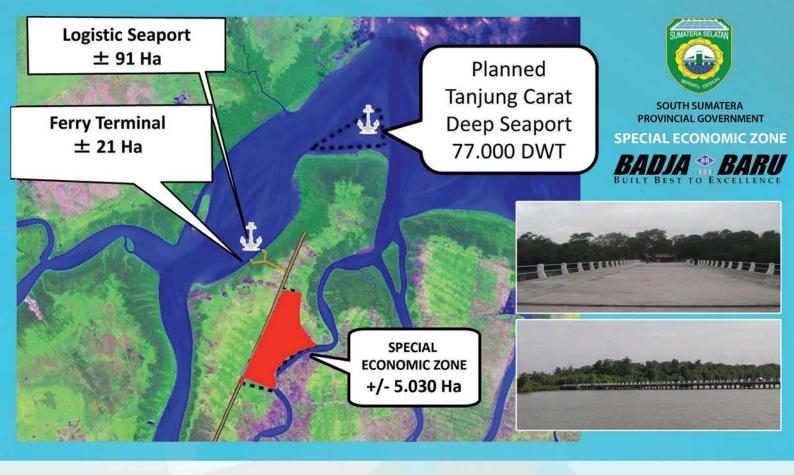
President of Indonesia visited Tanjung Api-Api on December 7, 2014

BADJA BARU GROUP'S

"MINI RUBBER PARK"

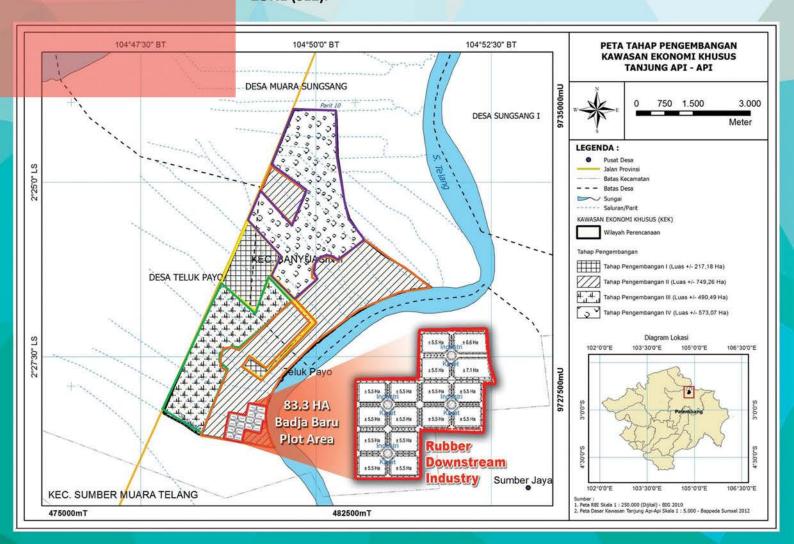


The advantage for investors are in the form of Fiscal Incentives and Non-Fiscal Incentives. Fiscal Incentives include reduction in import duties, value added tax on luxury goods, excise and income tax. Non-Fiscal Incentives include provision to obtain licensing service, land, employment, visa and regional infrastructure. The Special Economic Zones provide great opportunities for business development especially in the rubber business. Therefore, Badja Baru invites all prospective investors to expand their businesses in South Sumatera, which is the largest rubber growing area in Indonesia.



#### SPECIAL ECONOMIC ZONE TANJUNG API - API LOCATION MAP

Tanjung Api-Api SPECIAL ECONOMIC ZONE (SEZ) and Tanjung Carat Reclamation areas are located in Banyuasin region of South Sumatera Province which cover 5,030 hectares. The South Sumatra government will issues permit for allocation of 83.3 hectares of land to Badja Baru in the Tanjung Api-Api SPECIAL ECONOMIC ZONE (SEZ).





## Liquid Smoke

PT. GLOBAL DEORUB INDUSTRY made another breakthrough in Deorub Liquid Smoke technology for use in natural rubber processing. Researchers at SEMBAWA RESEARCH CENTER perfected the process of coagulating field latex using pure Deorub Liquid Smoke. Rubber coagulated with Deorub Liquid Smoke significantly had higher quality and better consistency compared to rubber coagulated with standard traditional acids.





PT. Global Deorub Industry was awarded the Technology Pioneer Industry Award by the President of the Republic of Indonesia Mr. DR. H. Susilo Bambang Yudhoyono, who praised the ability of the company to make a breakthrough technology and innovations which can be manufactured into a commercial product.

The Invention filed with the Ministry of Industry Research and Development of Industry is

"Liquid Smoke for Natural Rubber Industry"

PT. Global Deorub Industry was awarded the Primaniyarta Export Award 2010 as the Exporter of Creative Economic Goods and Services presented by the Vice President of the Republic of Indonesia Mr. Prof. Dr. Boediono M.Ec. PT. Global Deorub Industry was able to develop innovation in the natural rubber industry with environmentally friendly product which can be exported to countries such as Brazil, Cameroon, Thailand, Malaysia and Singapore.



The big event of Global Rubber Conference 2013 awarded the GRC-WICKHAM 2013 presented by Datuk Dr. Abdul Aziz S.A. Kadir as the Secretary General of the International Rubber Research and Development Board (IRRDB) to Badja Baru which has been commercializing the results of research into new innovative products that can benefit the natural rubber is Deorub. Badja Baru hosted the field visit for the GRC 2013.

Liquid smoke is a natural organic substance extracted from palm oil shells. It is naturally non-toxic and can be used for the coagulation of latex in the field as well as in the factories. It greatly reduces the level of bad-smell and acts as a deodorant for rubber and at the same time enhances the quality of natural rubber.

The DEORUB Liquid Smoke is BADJA BARU's social enterprise supporting the rubber industry, developed particularly to minimize the environmental impact of rubber processing plants for the people of Palembang.

Deorub Liquid Smoke has been fully tested and proven to be an ideal alternative coagulant for field latex.



#### **Deorub for TSR Process**

- Environmental friendly
- · Energy saving
- Improve raw material consistency
- Fast processing turnaround
- High DRC, reduce oxidation, better heat resistance
- Efficient factory air pollution control
- Improve quality performance
- Enhance production efficiency
- Increase revenue & profit margin

COAGULATION IN CUP-TREE

With a price comparable to other traditional acids, the benefits of using pure Deorub Liquid Smoke as sole-coagulant for field latex much outweighted its cost many times over.



#### Deorub for RSS Process

- Environmental friendly
  - Energy saving •
- Quick processing turnaround
  - Fast inventory turnover
    - Increase productivity •
  - Superior quality product •
- Higher return on investment .



Begining mid-2010 PT. Global Deorub Industry is introduced a new and improved Liquid Smoke product which is specially designed for the coagulation of field latex called Deorub Super Oxidation Proof (Deorub SOP). This new product is recommended by Sembawa Rubber Research Station Palembang for coagulation of field latex.



DEORUB Liquid smoke was basically invented from the necessity to keep the city of Palembang clean, beautiful and "Eco-Friendly", because the crumb rubber factories in Palembang City processed about 70% of rubber produced in the South Sumatra region.



Jointly patented by PT. Badja Baru and Sembawa Rubber Research Station of Palembang Indonesia, for the application of liquid smoke in the processing of crumb rubber (TSR), ribbeb smoked sheets (RSS) and block skim rubber.













## Metal Pallet



PT. Global Multipack was awarded the Primaniyarta Award 2015 as the Pioneer to the New Markets by the President of the Republic of Indonesia Mr. Ir. H. Joko Widodo at the PRJ Kemayoran, Jakarta, October 21, 2015.

PT. Global Multipack has the ability to develop export markets and penetrate new markets which in every continent reaching 45 destinations in 32 countries of interest especially large rubber buyers.

The Disposable Metal Base (DMBg) is the first disposable packaging system designed in Indonesia specifically for the export of Technically Specified Rubber (TSR). For TSR consumers already committed to other packaging systems, the Disposable Metal Base can supplement or serve as an alternative to the system already in use.

The GMP Packaging system was developed when the Wooden Pallet Base became unfriendly to the environment. In many ways, it directly and indirectly benefits the economy, the society, as well as the environment. Disposable metal pallet base is BADJA BARU social enterprise supporting rubber industry and latest venture into the supporting business for the rubber industry. The Disposable Metal Pallet Base is a product truly designed and manufactured

By the rubber industry For the rubber industry.

The DMBg is made of fully recyclable steel and therefore achieving "Zero Waste" after use.

It is also extremely cost effective as compared to the value of rubber it carries.

PT Global Multipack was awarded the Business Record Award presented by Managing Director Koran Sindo Mr. Sururi Alfaruq and Handi Irawan D. Founder of Tera Foundation, who claimed that GMP is the first packaging product in Indonesia made from steel that supports packaging of natural rubber exports.

Packaging design used disposable and lightweight materials capable of holding the load of rubber exported and very good for handling by containers.





We exported metal pallet to four countries: Cameroon, Cote D'Ivoire, Liberia & Nigeria.



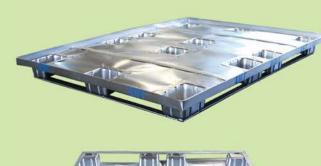


#### Advantages of the Disposable Metal Base:

- 100% wood-free packaging
- Not subject to ISPM-15 regulation
- Supports full four-way entry for easy handling by forklift
- An environmental-friendly, made of fully Recyclable steel.
- Excellent for containerized and breakbulk cargo shipping worldwide
- Designed for wet and dry port loading and unloading
- Suitable for Logistic deployment
- Able to be wrap either by shrink or Lantech Stretching film wrapping system.

The dimensions of DMBg pallet are similar to the conventional shrink-wrap pallet tray, and up to 16 fully-loaded pallets can fit into one 20-foot container or shipped as breakbulk. One stacked of a *DMBg-C* is 80 Units of DMBg, and *640-nested* units per 20ft container. And one stacked of a new *DMBg-CS* (*High Leg's*) is 55 Units of DMBg, *450-nested* units per 20ft container.

#### DMBg type C





#### **Optional Double Dunnage**



Dimension: 1390mm x 1070mm x 90mm

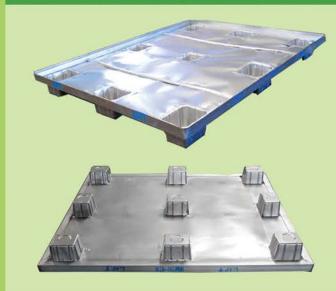
Weight : +/- 18 Kg

Forklift : 4-Way

Handpallet : Not Applicable

All specification subject to change without notice. @ Copyright PT Global Multipack 2013
GMP is a Registered Trade Mark of PT Global Multipack, Palembang - Indonesia.
All GMP Product Designs Are World Wide Patent Pending

#### DMBg type CS



#### **Optional Double Dunnage**



Dimension : 1390mm x 1070mm x 130 mm

Weight : +/- 20 Kg Forklift : 4-Way Handpallet : 4-Way

> PRIMANIYARTA 2015 INDONESIA EXPORT AWARD PIONEER TO THE NEW MARKET









## Breakthrough



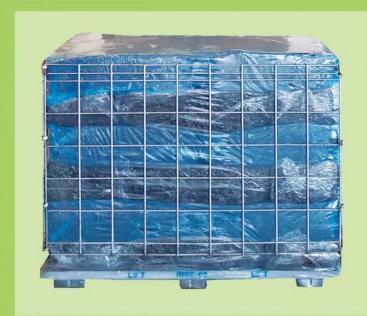
#### **Coldflow Metalbelt SW Packing System**

Global Multipack introduces the new breakthrough how to handle coldflow problem on rubber packaging by using Shrinkwrapped (SW) system for better storage.

Can be used for CV rubber and 7 layers of 42 bales of rubber on shrinkwrapped packaging.

The benefits and advantages of Coldflow Metalbelt are:

- 1. Rubber in SW packaging can solve coldflow problems to maintain its shape.
- 2. Can be stacked into 2 3 piles of rubber pallets on the SW packaging system, which saves warehouse space.

















## Rubber Clone



This project is carried out in partnership with Sembawa Research Center and aims at producing 100.000 planting material for smallholders. A special subsidiary of PT Badja Baru has been incorporated for this purpose: *Global Rubber Clone Nursery*.

Only 40% of the smallholders use clones in Indonesia and the average yield productivity is very low compared to neighbouring NR producing countries. Shortage of good planting materials is the bottle neck in the replanting program launched by the Indonesian rubber sector.

Through this pilot project Badja Baru is able to achieve two main goals:

- Political and social image of the company, that contributes to the long term increase of rubber production in partnership with government institutes.
- Rubber in exchange for planting materials (short-term objective). No direct access to smallholders, but
  planting material can be provided to them through middlemen; this policy might ease the purchasing
  of raw materials for the processing factory.

Field planting commences with bud wood gardens and nurseries. As rubber trees are tapped for more than 20 years, it is important to emphasize on the quality of the planting materials. High quality budded plants are a pre-requisite to high field performance at maturity stage when the plants are tapped. Recognizing this, a zero defect policy should be put in place in the management of the nursery. Maximum culling in the nursery will ensure uniform growth in the field and optimum yield during tapping.

Replanting of rubber plantations with high yielding clones is the key factor to increase in national production. This will ensure Indonesia to be the world number one rubber producer in the future.

Access to raw materials is getting more and more competitive as a lot of processing facilities have been recently installed. It is particularly the case in South Sumatra where processing capacity exceeds field production (1.000.000 tons). Annual production in South Sumatra in 2014 was 1.000.000 tons and it is projected that by 2025 production will be doubled to 2.000.000 tons.

Providing services to smallholders and/through middlemen is an efficient and cheap way to secure the supply of raw materials. This policy could even be extended to some other services: larger nurseries (a total of 4,4 ha is presently used for the project), technical assistance, training centres, sale of equipment and supplies for rubber plantations (tapping knives and stimulants, fertilizers, and Deorub Liquid Smoke ...)









## CSR PROGRAMME ACTIVITIES







CSR Training Program for tapping, processing and marketing of rubber for Smallholders
Supported by Indonesia Eximbank - Jakarta, held on 13 - 15 July 2011 in Sembawa Rubber Research Station







Natural Rubber Seminar 2011 & CSR Training Program for tapping, processing and marketing of rubber for Smallholders Supported by PT. Badja Baru, held on 20 - 22 September 2011 in Sembawa Rubber Research Station







CSR Training Program for tapping, processing and marketing of rubber for Smallholders
Supported by Bank SUMSELBABEL, held on 29 - 30 May 2012 in Sembawa Rubber Research Station









Meetings between suppliers Badjabaru, Sembawa Research Cente<mark>r,</mark>
MS. Lynn Bell (Goodyear SR Sustainability Specialist) and Mr. Jonathan (Goodyear Singapore) about CSR Program









Bridgestone awarded to Badja Baru the Outstanding All Round Performance, Stable Supply, Consistent Quality and Active Role in CSR, at BS Conference held at Arista Hotel Palembang, November 15, 2013





Donations Indonesia Eximbank in 2014 a package of tapping knives and a sharpening stone for BB rubber smallholders





## Rubber Tapping Technologies & Consultancy



PT. Deras Karet Prima (DKP) has been in operation for about seven years since 2011 with the main objective to help alleviate the productivity and income of rubber smallholders and large plantations in Indonesia.

Our special focus is to help uplift the standard of living of smallholders.

#### **OUR PRODUCTS AND SERVICES**

Our products are developed based on matured technologies; effective, economical, safe on the rubber trees and the environment on short and long term usage. The distribution and sale of our products are strongly supported by sound technical advisory services.

We have several products relevant to the rubber industry and our focus is on latex harvesting technologies. The products are basic tapping equipments and utensils plus advanced chemical and gaseous stimulants.

PT Deras Karet Prima has a team of very experienced senior consultants in rubber plantation development and rubber processing. These consultants have been providing consultancy services worldwide since the mid-nineties.

#### The list of our products include:



High latex yield obtained after using products and services supplied by Deras Karet Prima.



Application of Bokashi (Organic Fertilizer)

## The company offers consultancy services as follows:

- 1. Feasibility studies on rubber plantation development.
- 2. Consultancy on management and operations of rubber plantations.
- 3. Training on management and operations of rubber plantations land clearing, nursery development and operations, crop maintenance and tapping operations.
- Consultancy on rubber factory (latex concentrate and block rubber) design and operations specially geared for high quality products and cost saving.
- 5. Design of effluent treatment system for latex concentrate and block rubber factories.
- 6. Improvement of existing effluent treatment system.
- 7. Preparation of documents for certification of rubber factories with ISO 9001:2008 Quality.

  Management System and ISO 14001:2004 Environment Management System.



Our products and services have been well accepted by both the smallholders and plantations in Indonesia. Users of our products and services have benefited in the form of:

- 1. Increased efficiency in tapping operation
- 2. Increased rubber yield
- 3. Lower incidence of tapping panel dryness
- 4. Reduced bark consumption
- 5. Reduction in cost of production
- 6. Better growth of rubber trees
- 7. Longer economic life of the rubber trees.









Tapping training in the field

Transfer of appropriate latex harvesting technologies to Clients of Deras Karet Prima in South Sumatra and Java.

Training of young tappers at Pulau Belitung

For further information, please contact us:

#### PT. Deras Karet Prima

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Visit Our Website:











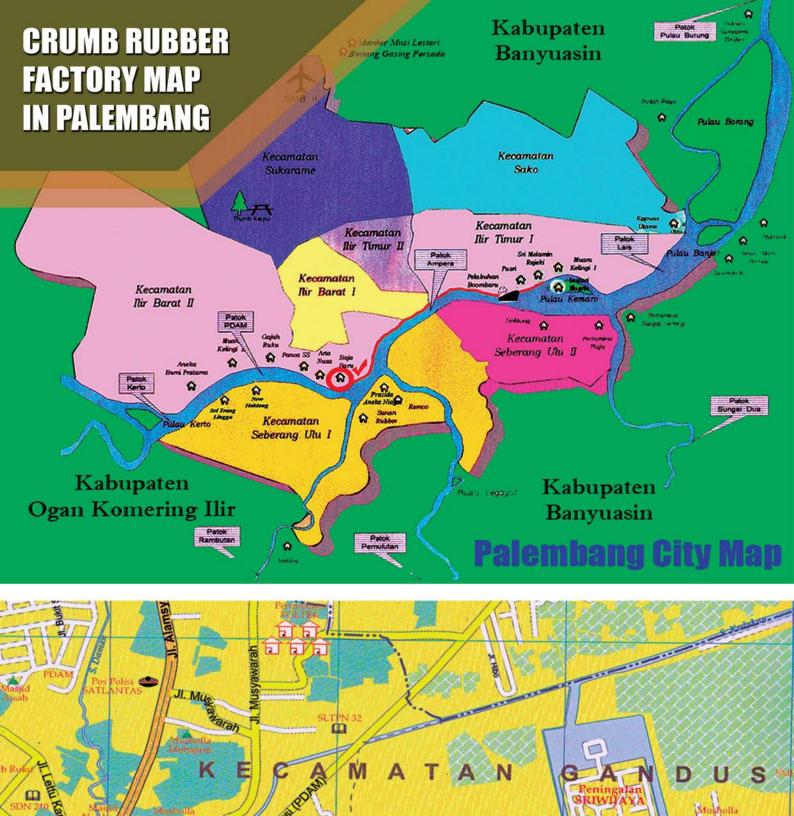


## SIR WAREHOUSE AND LABORATORY



LOADING FACILITY







**Superior Demand Excellence** 





Since July 05, 1969 to 2018 Achievement Milestone Beyond

## "One Million Tons" Rubber Production

Thank You

For your continued support to **Our Most Valued Costumers & Stakeholders** 

#### BRIDGESTONE O Godranikas Confinental 3

















SUMITIOMO TIRES TOYOULSES











### Our Subsidiaries

**PT BADJA BARU** PT GLOBAL DEORUB INDUSTRY PT GLOBAL MULTIPACK PT GLOBAL RUBBER CLONE NURSERY PT DERAS KARET PRIMA (JOINT VENTURE)

#### Our Location & Address

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