

# A NeoTerra Wonder Tour

Aren't you even a little curious about  
how NeoTerra tyres are manufactured?



# NEOTERRA

Drive Towards The New World



Where are **NeoTerra** tyres from ?



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NEOTERRA means a new land; the land is full of dream and wonder.  
NT (for short) Series also represents the New Technology.  
NT, a new surprise, just like Columbus discovering the New World.





The **KETER's Exclusive NeoTerra production line** is located in the northwest of China. The year-round dry climate there is conducive for tyre manufacturing process and greatly reduce the quality problems caused by moisture issue.



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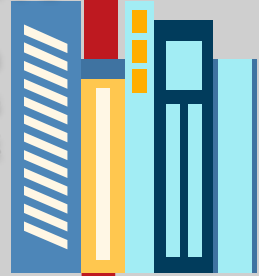
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**Step 1**



# Research and Development

100+ professional engineers in NeoTerra R&D Team  
28+ of NeoTerra PEs are senior engineers  
10+ years of work experience for R&D work



**QUICK** market demands analysis  
**ACCURATE** and effective market judgment  
**PROFESSIONAL** product performance optimization



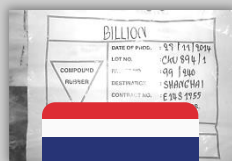
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## Step 2

# Raw Materials Selection

Top material suppliers from all over the world  
High quality raw materials for stable performance



Natural  
Rubber  
From  
Thailand

*Better Heat Release*



BIIR  
From  
Lanxess,  
Germany

*Better Airtightness*



Sulphur  
From  
Eastman,  
U.S.A

*Better Stability*



Acetylene-resin  
From  
Koresin,  
Germany

*Stable Crosslink*



Steel Cord  
From  
BEKAERT,  
Belgium

*Excellent Strength*



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**Metrohm's  
High-end Titrator**



**ThermoFisher  
Fourier Transform  
Infrared (FTIR) Spectroscopy**



**Pour Point Tester,  
Freezing Point Analyzer,  
Cloud Point Detector**



**Us Instron  
Electronic Tensile  
Testing Machine**



**Rubber Processing Analyzers  
RPA2000**



**Wire Twist Pitch Testing Machine**



**Mooney Viscometer MV2000**



**Compression Heat Test Machine**

## Step 3

# Material Testing

All materials are tested strictly to ensure the manufacturing process stability.



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## Step 4

# JAPAN BB430

## Rubber Mix Lines

BB430 Heavy Duty Mixer and mixing downstream Line from KOBELCO(JAPAN).  
The top facility of rubber mixer in the world



INTERMESHING ROTOR

CONSTANT TEMPERATURE MIXING

KOBELCO mixer can better produce high Silica compound, which ensure the high quality level in ECE for EUROPE & SMARTWAY for us.



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## Step 5

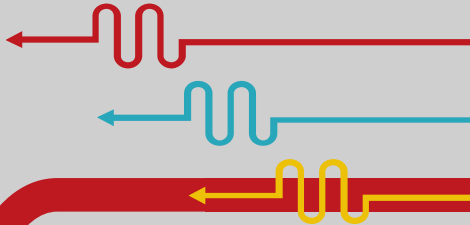


**IHI**

# IHI from JAPAN

## Rubber Calender Lines

IHI is the leading manufacturer of precision calender lines in Japan.  
Calender material with stable tension, uniformed rubberized compound and stable quality product.



**CONSTANT TENSION**  
**AUTOMATIC THICKNESS MEASUREMENT**  
**LARGE DIAMETER ROLLERS**



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## Step 6

# TROESTER from GERMANY

## Extrusion Lines



### TROESTER TREAD Extrusion Line

High Efficiency screw design to ensure the extrusion tightness.

Triples Extrusion to guarantee the correct tread for heavy duty TBR on two stage tire building machine.

### TROESTER Side Wall Extrusion Line

Extra Wide Die head to have right and left side wall at the same time.

Efficient improved tire uniformity and balance performance..



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## Step 7

GERMANY TROESTER Boxer Roller Head Inner Line Production Line

# ONE-TIME EXTRUSION AGGREGATES

For Tread, Sidewall and Apex



ONE-TIME THERMAL RECOMBINATION  
PRODUCT STABLE, SYMMETRY AND LESS AIR BUBBLE.  
ASSURE HIGH QUALITY PRODUCT.

**TROESTER**

EXCELLENCE IN EXTRUSION.



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## Step 8

# GERMANY FISCHER

## Cord Cutting Lines



**German Fischer 90 Degree Body Ply Cutter And Breaker Cutter.**

Pull through feeding and cutting to insure the high accuracy.

Steel breaker edge no spur to effectively improve the tire transition point stress and strain.

For Steel Cord with:	
Thickness of material Thicker material on request	up to 4 mm
Cutting angle	15° to 75° resp. 90° resp. 90° ± x°
Cutting length	up to 6000 mm
Cutting width	up to 650 mm resp. 2000 mm



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## Step 9

# VMI VAST & TOYO

## The Building Machine



 VMI GROUP

### VMI VAST 4 Drum Machine from Netherlands

High Accuracy to improve the overall product quality.  
High automation level, reduce the operator influence to cause the variation of the product.  
High efficiency and can produce 160 tires/shift (8h)



  
TOYO  
MACHINERY & METAL

### Two Stage Tire Building Machine from Japanese TOYO

Bigger carcass drum (18.6% bigger than normal tire building machine) effectively increase the heavy duty ability of tire.  
Tread Over Sidewall building technology to improve the uniformity of the tires.



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## Step 10

# VULCANIZATION



The last step to get a new **NeoTerra** Tyre



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## Step 11

# Testing-X-Ray

X-Ray Testing Machine  
*YXLON, France*

100% automatic testing and evaluation on defect to avoid artificial missed judge.



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## Step 12

# Testing-Dynamic Balance Machine

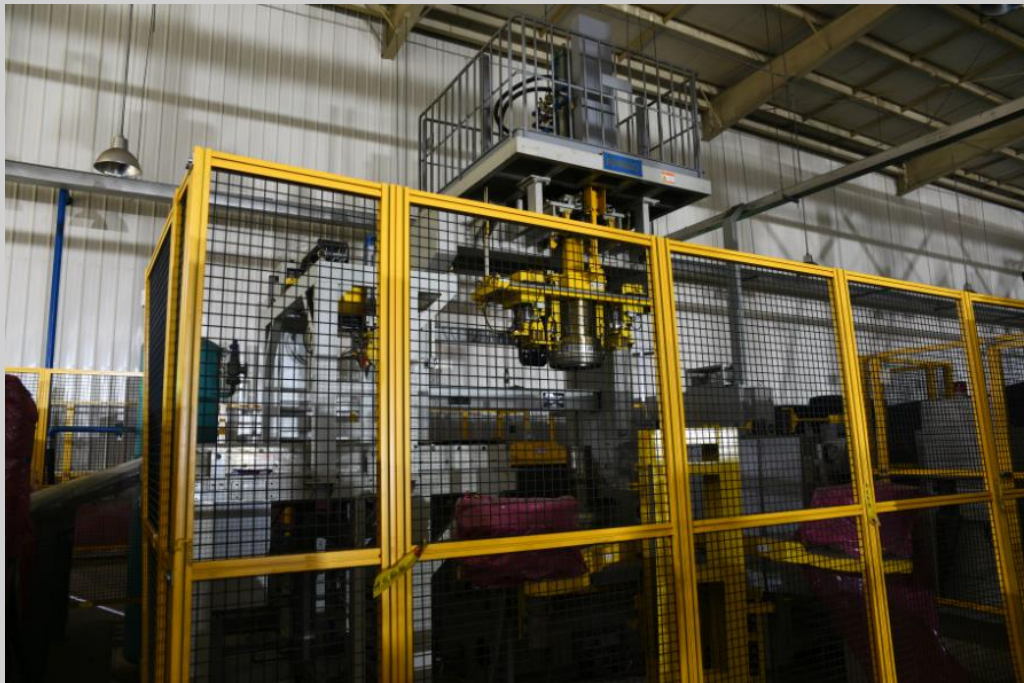


In terms of Dynamic Balance, **NeoTerra** is better than normal brands, for example the size of 11R22.5 and 315/80R22.5 are 220g (while normal brands are 250g) It is a KEY parameter for comfortability



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**Step 11**

## **Testing-Tyre Uniformity Machine**

USA Micro-Poise / KOBE STEEL . LTD. Uniformity tester  
domestic truck tyres manufacturer exclusive equipment, providing the guarantee  
testing for the steer truck tyres of the buses exported to Europe



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## Step 12

### Testing-Holographic Laser Nondestructive Bubble Testing Machine



Holographic laser nondestructive bubble testing machine is used for **NeoTerra** TBR bubble checking, which is a strict testing usually used for aircraft tyres and Formula-One tyres



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Now, the special **NeoTerra** TBR tyre is coming...

# This

is NeoTerra, from the wonderland,  
the KETER's own production line.

Our promise & warranty:  
Any quality problem you can get

## DOUBLE CLAIMS



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**NeoTerra Wonder Tours is more  
exciting on site!**





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**May NeoTerra  
be with you on your way  
Thanks**