

Welcome

Chang Horing Rubber Group





CHR Taiwan

Funded in July 14, 1995, Chang-hua location

2000 moved Changhua coastal industrial park, six production ready

2001 Registration of ISO-9001 (TUV Germany) quality management system

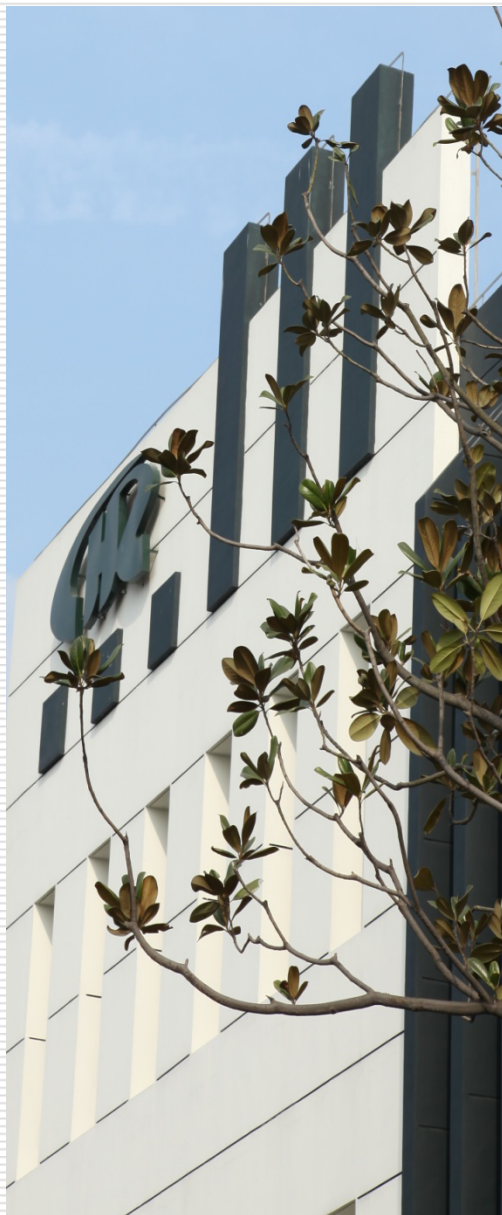
2003 CHR Rubber laboratory was certified by CNLA

2005 expanding factory, 5296 m², two production line settle.

2008 Laboratory certified CNLA change to TAF(ISO17025)

2012 expanding factory and two production line will complete before July 2012





CHR Rubber Group

☆ Taiwan :

- ☐ Chang Horing Rubber Co; Ltd.
- ☐ HonSun Rubber Co; Ltd.
- ☐ HonDow Rubber Co; Ltd.
- ☐ CHR Material Testing Lab.

☆ China:

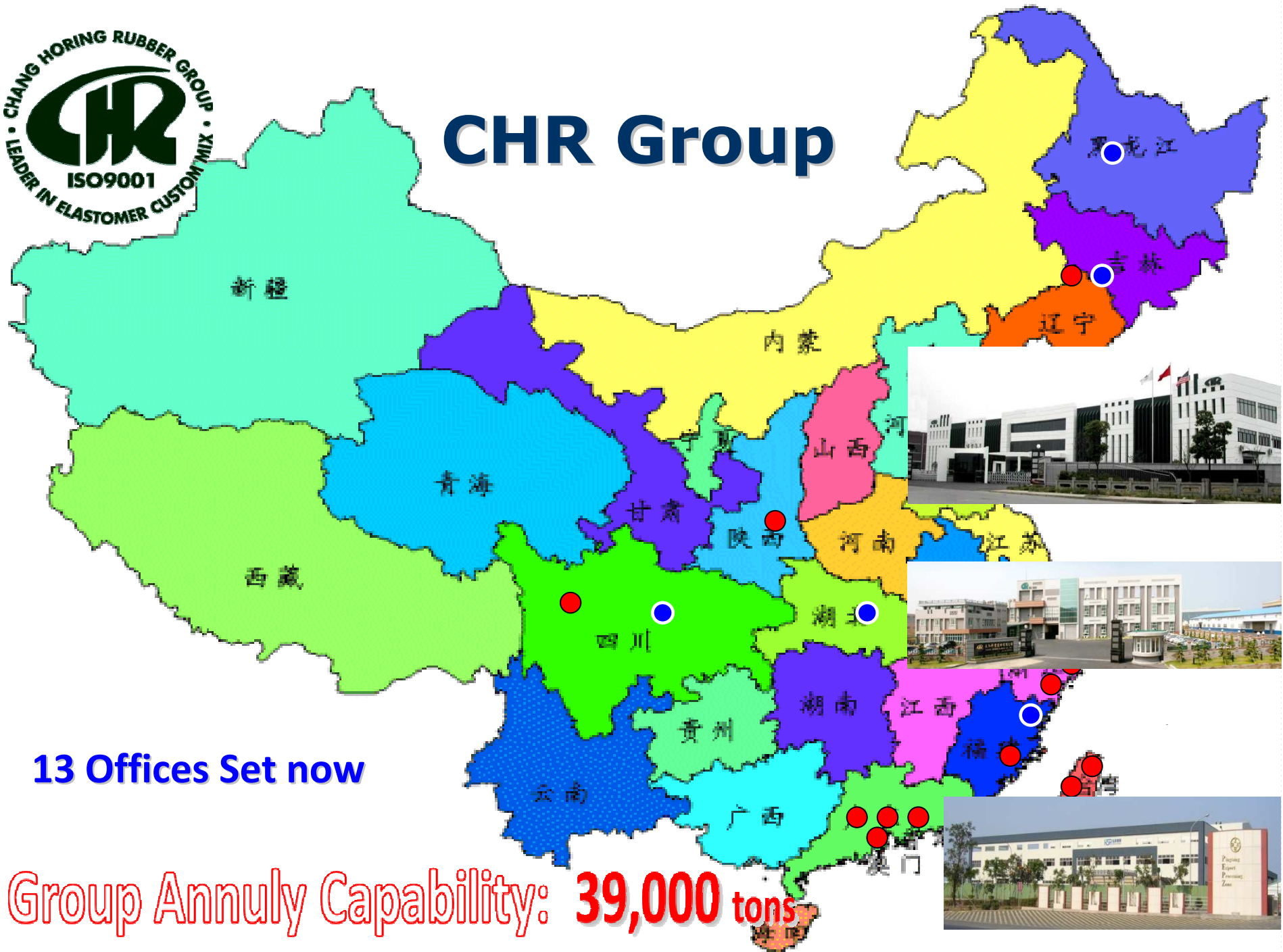
- ☐ Chang Xing Rubber (SH) L.L.C.
- ☐ Prosell (ShangHai) Trading Company
- ☐ Bioicone Trading Company

☆ Global:

- ☐ Asia Development Corp.
 - ☐ EZ Trading Company
 - ☐ Super Logistic Enterprise
-



CHR Group



Group Annuly Capability: **39,000 tons**

Group Annually Capability: 39,000 tons



CHR Taiwan
15,000 tons



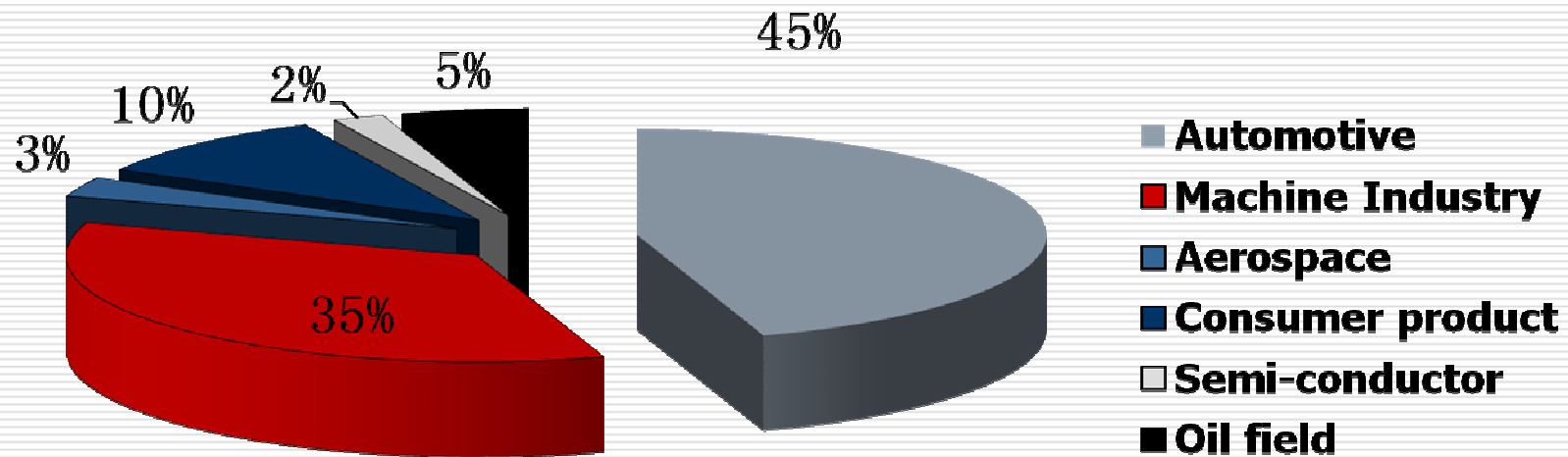
HS Taiwan **HD Taiwan**
10,000 tons **2,000 tons**



CHR China
12,000 tons



Customer Product segment





Quality Slogan ---

***Quality
Technology
Service
Improvement***



CHR provide to.....



- ☐ **Fluor-elastomer**(氟素橡膠)
- ☐ **Nitrile Rubber**(丁腈橡膠)
- ☐ **EPDM**(三元乙丙烯膠)
- ☐ **HNBR**(氫化丁晴膠)
- ☐ **ACM**(丙烯酸酯膠)
- ☐ **VAMAC**(乙烯丙烯酸)
- ☐ **Butyl -IIR**(丁基橡膠)
- ☐ **Natural Rubber**(天然橡膠)
- ☐ **IR**(異戊橡膠)
- ☐ **Chloroprene rubber**(氯丁膠)
- ☐ **SBR**(丁苯膠)
- ☐ **CSM**(氯磺化聚乙烯)
- ☐ **ECO**(氯醇膠)
- ☐ **Silicone Rubber**(硅膠)
- ☐ **Medical Silicone Rubber**(醫用硅膠)
- ☐ **Fluorine-Silicone Rubber**(氟素硅膠)
- ☐ **Millable PU**(聚氨酯膠)
- ☐ **FFKM**(全氟醚橡膠)

Total Rubber Solution

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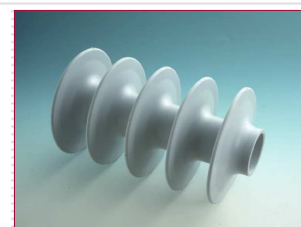


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Franklin Fueling Systems

Our customer parts





Over 2,000 Colors

Developing instruments

- FTIR x1
 - TGA x1
 - FTIR/TGA x1
 - DSC x1
 - GC Mas x1
 - TMA x1
 - Alpha Rheometer x 1
 - Alpha Mooney tester x 1
 - Microscope x1
 - Ozone tester x1
 - GC Mas x1
 - Tensile strength tester x1
 - Low temperature tester
 - *Retraction at Lower Temperatures Tester x1*
TR Tester (ASTM D1329)
 - *Brittleness Point of Flexible Polymers tester x1*
(ASTM D2137)
 - Hardness tester x2
 - ASTM 2240, Shore A
 - ASTM 1415, IRHD
-

Quality Control Device

- ▶ Rheometer Tester
 - ▶ Mooney Tester
 - ▶ Durometer
 - ▶ Densimeter
 - ▶ Dispersion Analyzer
 - ▶ Colorimeter
-

Quality Control Device



Rheometer Tester



Mooney Tester

Quality Control Device

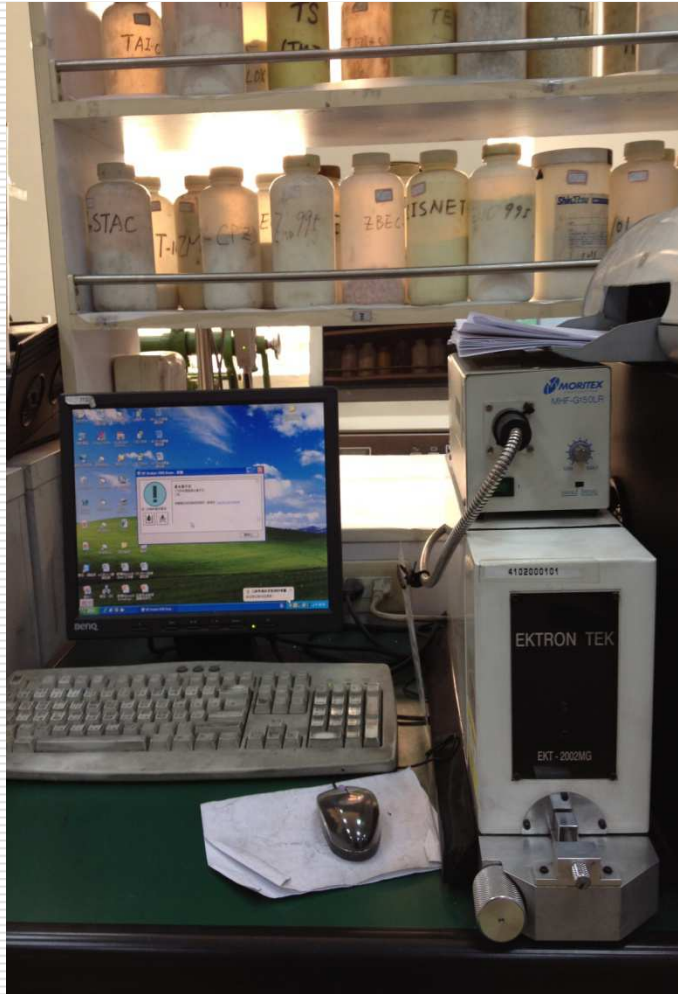


Shore A Durometer



IRHD Durometer

Quality Control Device



Dispersion Analyzer



Densimeter



Colorimeter

Lab Testing Device

- ▶ Tensile Machine
 - ▶ Durometer
 - ▶ Densimeter
 - ▶ ALPHA Curing Press
 - ▶ ALPHA Mooney Machine
 - ▶ TR Tester
 - ▶ Brittle Temperature Tester
 - ▶ Ozone Tester
 - ▶ Rub Tester
 - ▶ Resistance Tester
-

Lab Testing Device



Tensile Machine



Densimeter



Duromete

Lab Testing Device



Ozone Tester



TR Tester

Lab Testing Device



Rub Tester

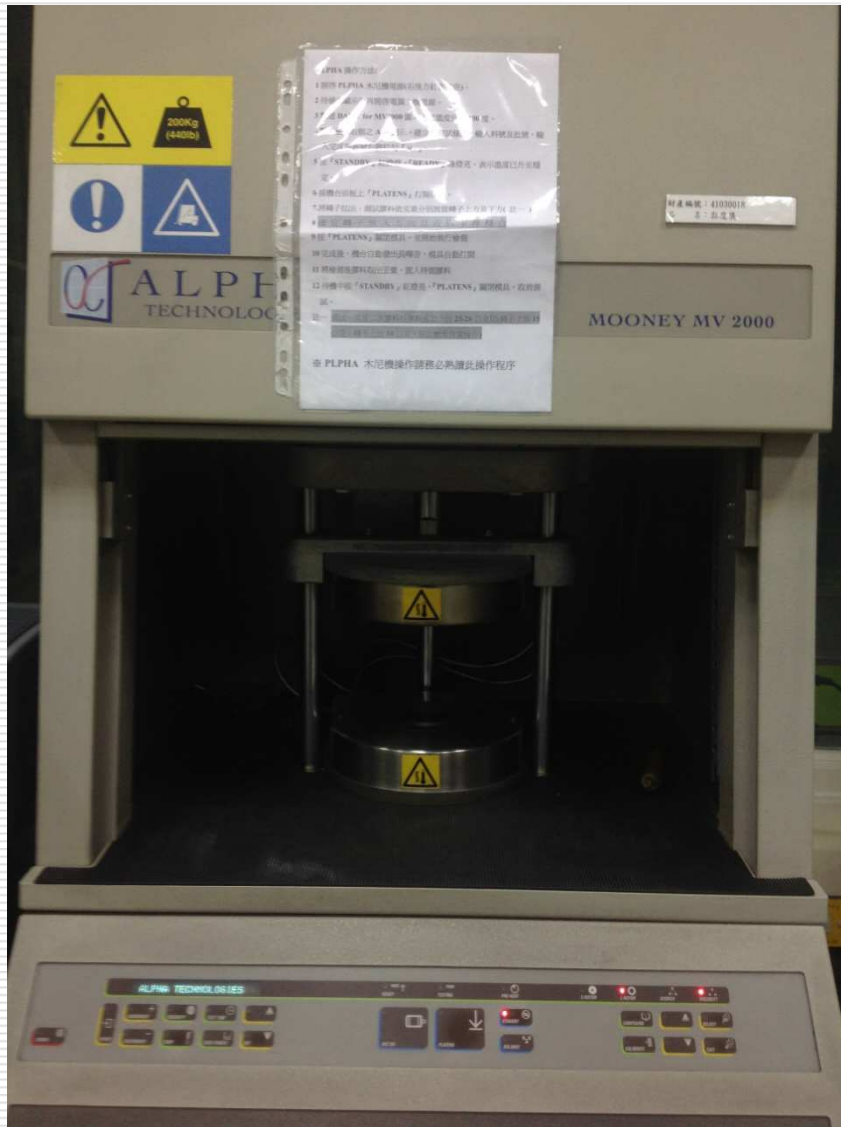


Brittle Temperature Tester



Resistance Tester

Lab Testing Device



▶ ALPHA Mooney Machine

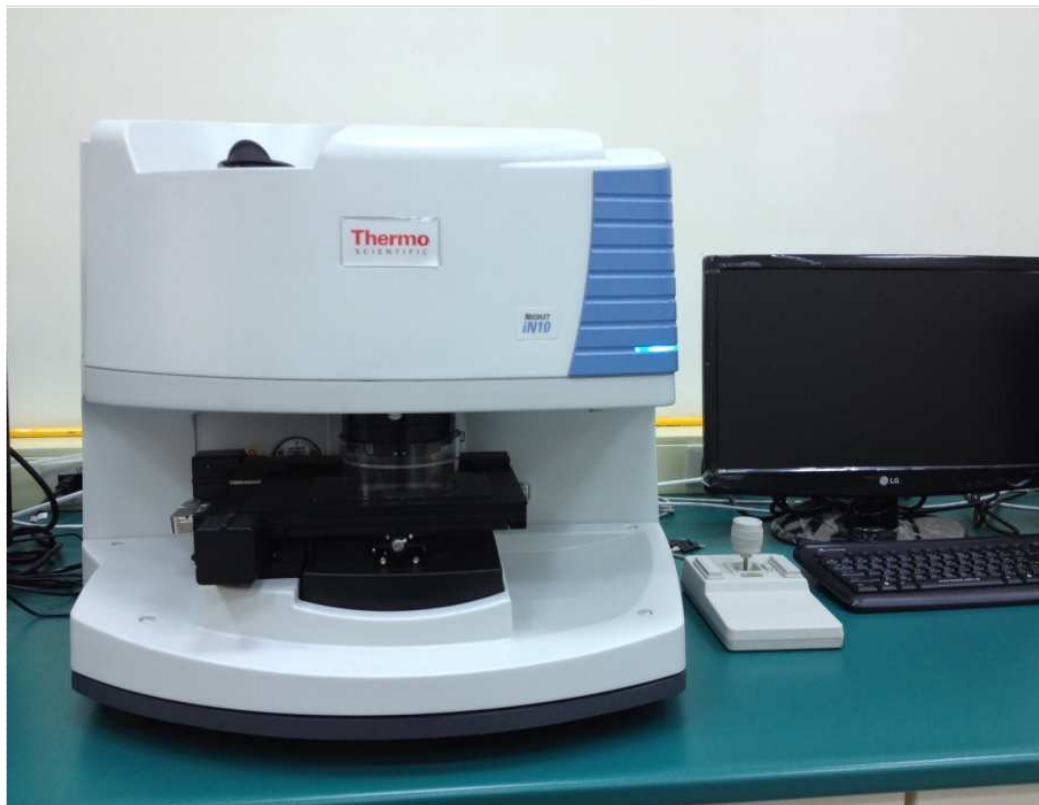


▶ ALPHA Curing Press

Analysis Device

- ▶ TGA: Thermogravimetric Analyzer
 - ▶ FTIR: Fourier Transform Infrared Spectroscopy
 - ▶ DSC: Differential Scanning Calorimetry
 - ▶ TMA: Thermo-Mechanical Analysis
 - ▶ GC-MS: Gas Chromatography- Mass Spectrometry
-

Analysis Device



FTIR



TGA

Analysis Appliance

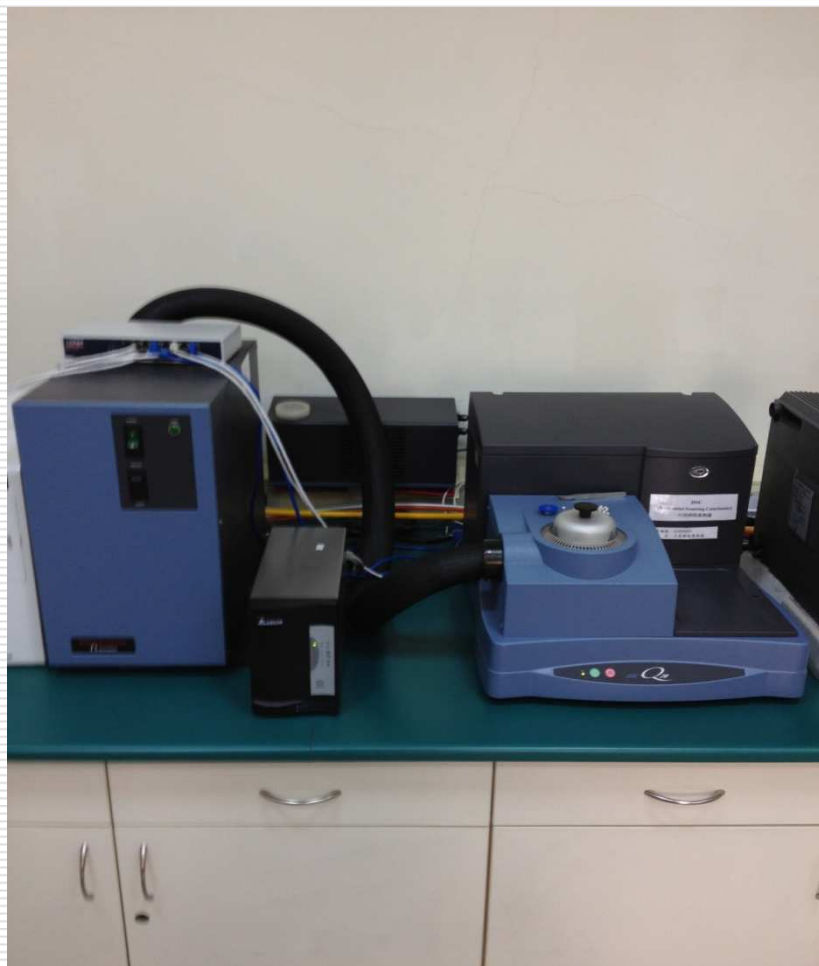
FTIR :

- Determine the Sort of Rubber
- Income Quality Control
- Abnormal Analysis

TGA :

- Cleavage Temperature
 - Composition Ratio
 - Abnormal Analysis
-

Analysis Device



DSC



TMA

Analysis Device



GC-MS

Analysis Appliance

DSC:

- Tg Point

TMA:

- Tg Point

GC-MS:

- Determine the Sort of Rubber
 - Curing System Analyze
 - Oil Analyze
 - Additives Analyze
-

10 Production line ready..

Working Team	Main Products
BB1	Black Color Compounds : NBR, CR, NBR/PVC, SBR Masterbatch
BB2	Black Color Compounds : EPDM, NR, Non- phthalates Masterbatch
BF1	Non-black compounds: EPDM, NBR, ACM, AEM...Masterbatch
BF2	Non-black compounds: EPDM, NBR, ACM, AEM...Masterbatch
BS	Silicone Compound
BK1	Full-compounds, non phthalates
BK2, 3	Full-compounds, NBR, EPDM, CR, ACM, AEM
KF1, 2	FKM Full-Compound

Capacity of each Production line

Working line	Size of mixer	output/2 shift work line
BB1	75L	10 tons/day
BB2	75L	10 tons/day
BF1.2	55L	3.5 tons/day
KF1.2	55L	3.8 tons/day
BS	35L	0.7tons/day
BK1	55L	3.5 tons/day
BK2,3	55L x 2	7.6 tons/day

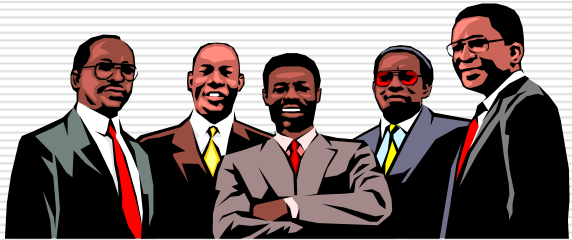


Annually capacities

Over 2,000 tons materials stock

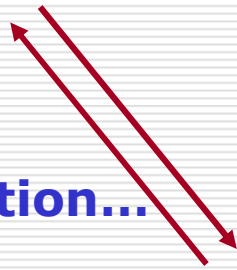


CHR research & development service for customer



End customer

Negotiation...



Rubber Fabricators...

Negotiation..



Rubber support



Thanks

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