

PURE  
HEALTHY  
HOME  
LEATHER

PURE

Healthy  
Home  
Leather

富睿纺织（上海）有限公司

FURUI TEXTILE(SHANGHAI)CO.,LTD

Company profile



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# Preface

The market for waterborne PU(WPU) has grown rapidly over the past few years. The main reason is the growth of alternative demand for solvent-based PU. Europe is the largest market for WPU, accounting for 35% of global demand in 2014. The combined annual growth rate is expected to be well above the global average. In 2014, the global WPU market exceeded \$4.3 billions. CAGR (compound annual growth rate) is more than 9 percent, the industry continues to grow is obvious. In 2017, Government issued the 13th Five-Year Plan of the National Environmental Protection Standards, for further improve the environmental protection standard system, and give full play to the positive role of standards in improving environmental quality and preventing environmental risks. Fu Rui is also in line with the transformation of the market and enterprises in environmental protection obligations to spare no effort.



# Micro Fabric-Micro Feel

Water resistance, perspiration resistance, aging resistance, wear resistance, flex resistance, high temperature resistance, low temperature resistance, waterproof, anti-pollution ability, easy to maintain, non-toxic and environmentally friendly, tasteless, mildew-proof and mothproof



# Micro Fabric

## Application:



### Shoes

Good physical performance, good molding effect, soft feel, delicate creases, suitable for men and women fashion shoes, casual shoes, sports shoes, etc.



### Bags

Leather texture, leather style, can completely replace the leather.



### Clothes

Water-based environmental protection materials, low voc, high flame retardant, good weather resistance, light resistance and other physical properties

# Strength

## 01 Product Advantages

- ◆ Environmental Friendly
- ◆ Professional
- ◆ Diversification

## 02 Technical Advantage

- ◆ R&D Team, High-standard Lab – close cooperation with company like BASF, Stahl and Covestro.



- ◆ Cooperate with University of Science and Technology of China
- ◆ Cooperate with Sichuan University



中国科学技术大学  
University of Science and Technology of China



四川大学  
SICHUAN UNIVERSITY

# Environmental Friendly

**Use water-based and solvent-free polyurethane for raw materials. No DMF and other solvents**



无环境污染



加工过程无害



对人体无害



可生物降解



**Pollution-free and non-toxic for environment and staff.**

**Harmless for clients when they use the product.**



**Biodegradable products, no extra burden to the environment**

# Opportunity

01

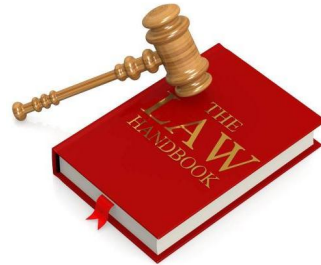
**Macro Environment**



- Increasingly serious environmental issues
- Customer need for Environmental Friendly and “No DMF” product

02

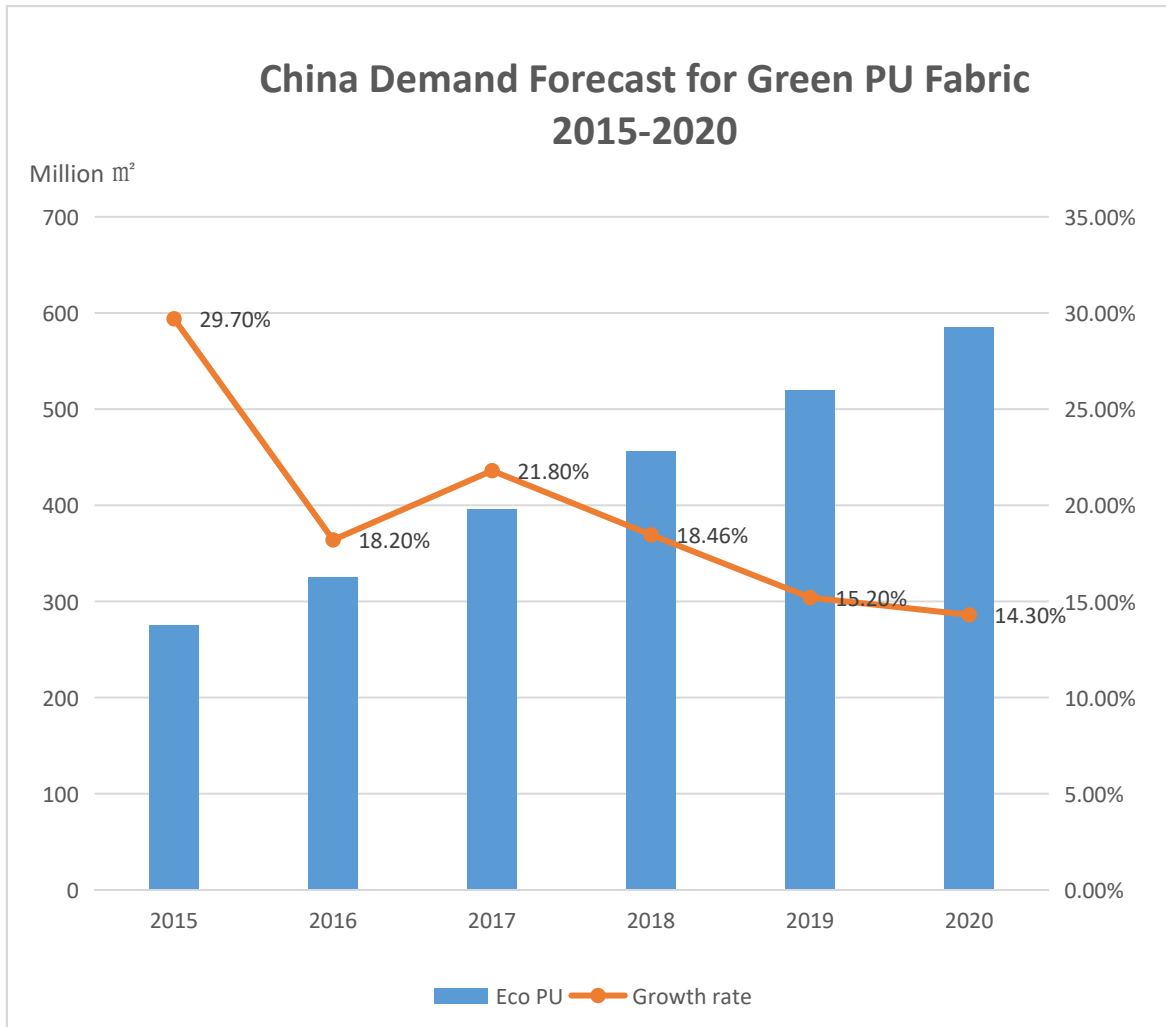
**Policy**



- Increasingly strict domestic and international policy



# Forecast

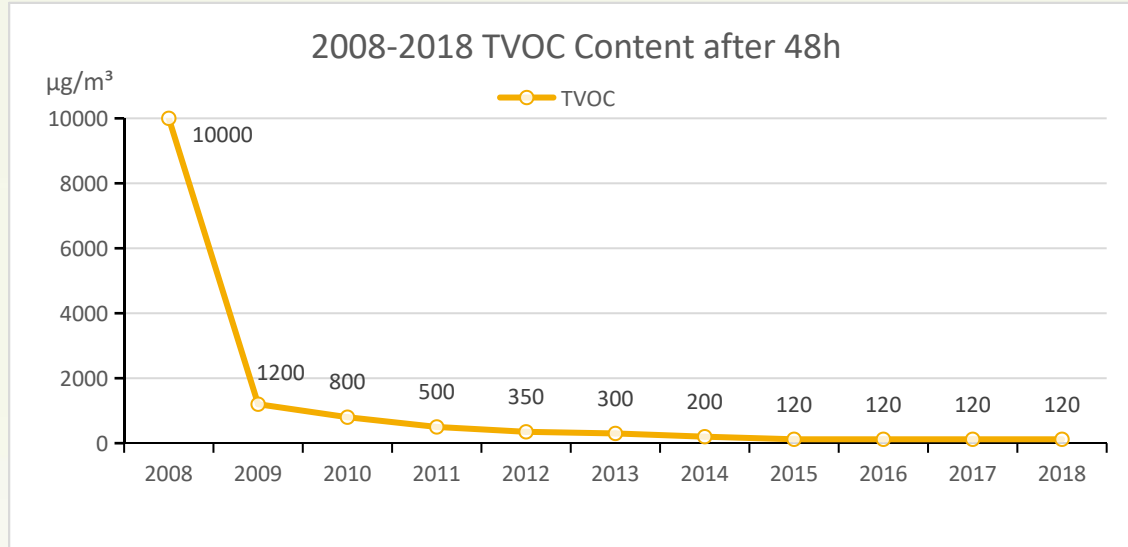


The market for green PU fabric will experience a sharp increase between 2015-2020 in China Market.

Compound growth rate for green PU coated fabric between 2015 and 2020 is 16.30%.

In 2020, the market demand for green PU coated fabric will be 585million m<sup>2</sup>

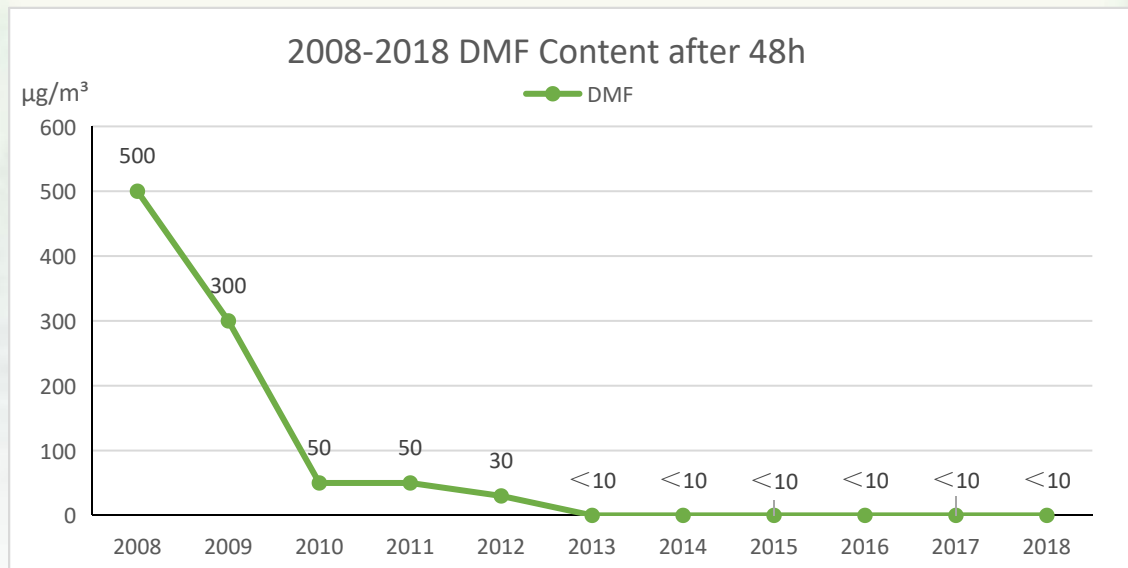
# TVOC&DMF 含量



These changes demonstrate our transformation from solvent-based products to waterborne PU.

TVOC content decreased from 10,000 µg/m<sup>3</sup> to 120 µg/m<sup>3</sup>.

The DMF content decreased from 500 µg/m<sup>3</sup> to less than 10 µg/m<sup>3</sup>.



Since September 2016, the raw materials and the production process of the products are no longer DMF or other dissolved agent.

# Facility



**Transfer Coating Line**



**Direct Coating Line**



**Microfiber Line**

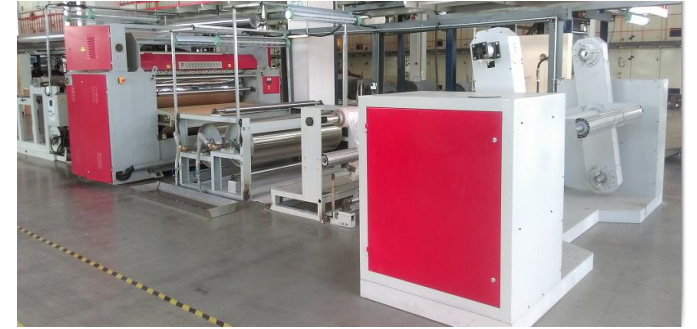
# Facility-processing



**Printing Machine**



**Lamination**



**Hot Lamination**



**Continues Tumbling**



**Vaccum Embossing**



**Embossing Machine**

# Facility



**Automatic charge mixture system**

# Discharge treatment equipment



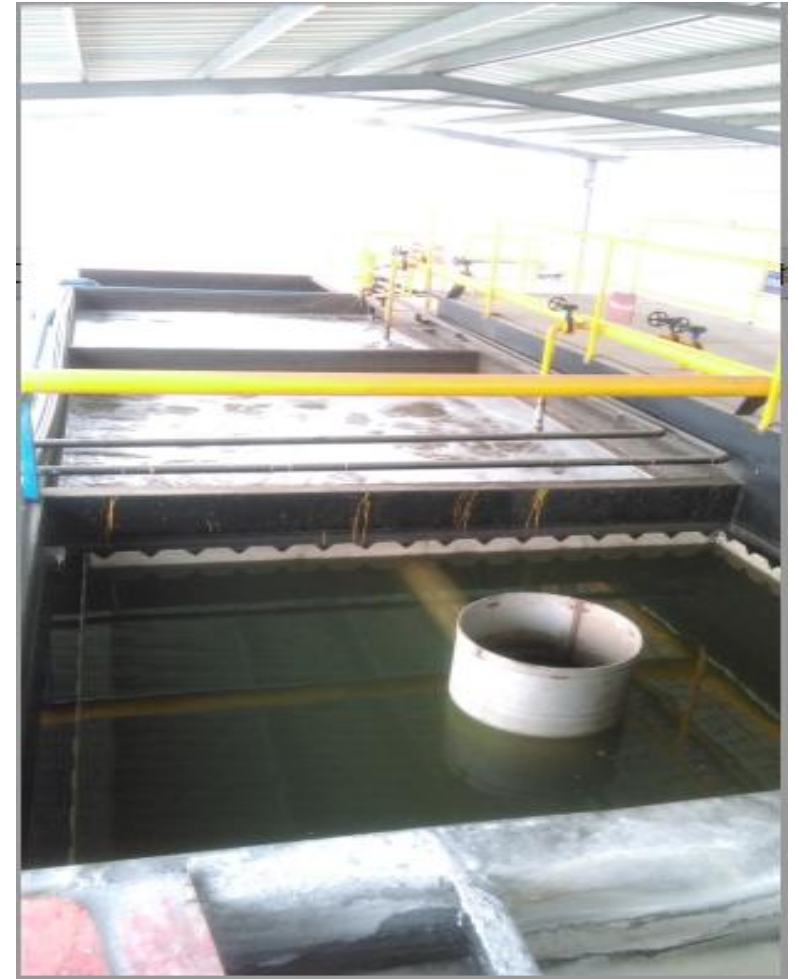
Sewage treatment equipment

# Discharge treatment equipment



Sewage detection room

sewage treatment facility



# Discharge treatment equipment

Exhaust gas collection and treatment facility





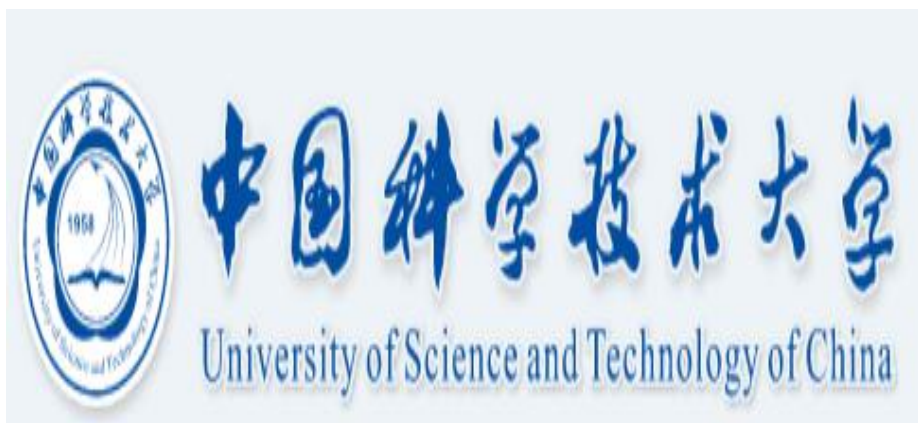
# Chemicals management

1. Designate specific people to collection all MSDS information and TDS
2. According to newest instruction of customers, update chemicals list on time, for tracking any time
3. Necessarily adopt excellent suppliers, constant update suppliers' information and chemicals list information
4. Monitor the sewage and trash during the production process
5. Avoid cross contamination



# University-Enterprise cooperation

1. Set up R&D center with University of Science and Technology of China in 2007
2. Set up R&D center with SICHUAN UNIVERSITY in 2015
3. Actively engage in research with relevant colleges and universities



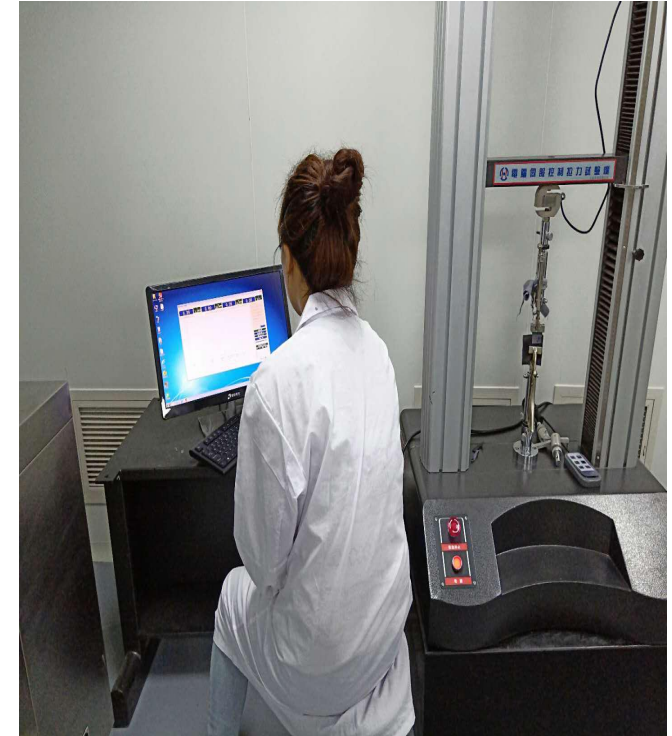
四川大學  
SICHUAN UNIVERSITY

# Quality Control and Facility

- IQC (Incoming Quality Control)
- PQC (Process Quality Control)
- FQC (Final Quality Control - 100% check)
- Final Inspection



# High-standard Lab



- ITTC assisted with the design of the Lab
- Training Program with ITTC



**Thanks**