



Company Overview

Sheng Zou in Figures



 **>40 million**
USD turnover per year


 **>2 Billion**
Rubber Packaging Components per year
*(Stoppers, Syringe Plungers, Infusion Discs)

 **>3,000 t**
Raw Rubber ExxonMobil per year

 **39,846 m²**
Production Area
*(Taiwan, Suzhou, Hefei)

 **300 Employees**

 **50**
Years experience in pharmaceutical packaging components

 **1** is the position Sheng Zou currently stands in China in terms of Quality and products produced

Sheng Zou's History



1997
Suzhou factory
established



2005
Laminated silicone
free option added to
product portfolio



2008
Ready to Sterilize
products implemented



1973
Joint Technology
Venture Daikyo

1968
Taiwan factory
established

2002
Obtaining ISO
9001 certification
for the first time



2007
Kunshan factory
established



2009
Hefei factory
established



Sheng Zou's History

ExxonMobil

2009
Implemented
ExxonMobil
Exxpro Pure
Bromobutyl S Pure +
Formulation



2012
FDA DMF
Registration



2014
ExxonMobil
40+ year Strategic
Partner Supplier

RTU 

2018
Ready to Use
E-Beam Sterilization

2010
Ready to Use
Gamma Ray

RTU 

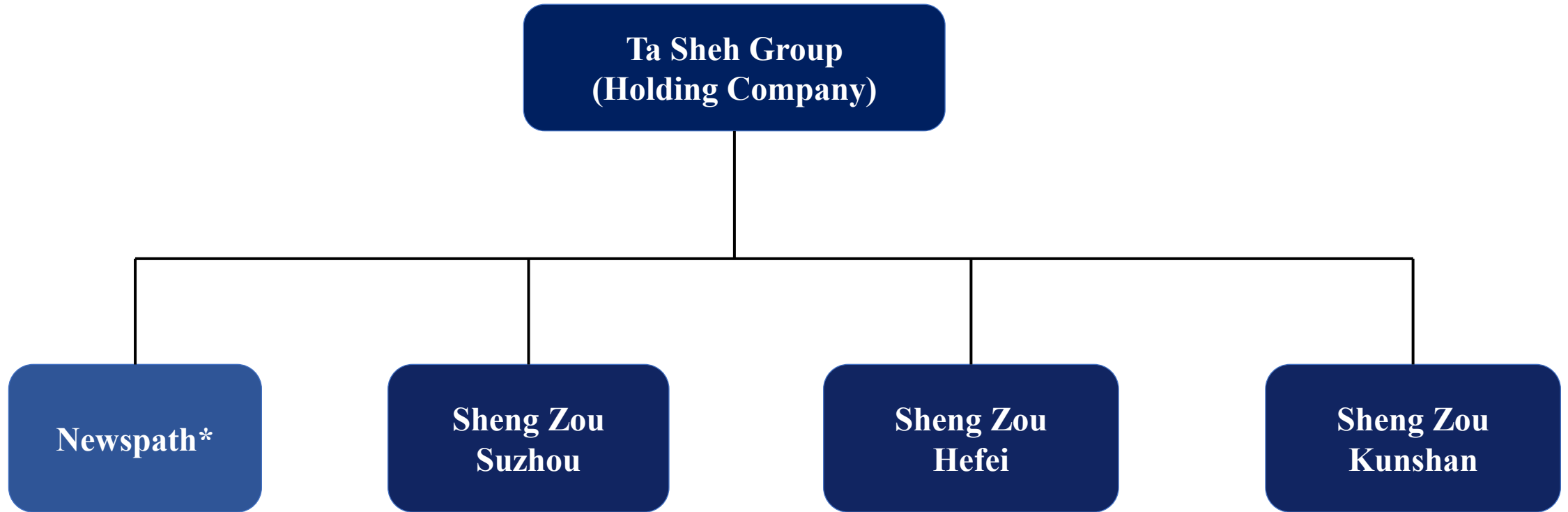
2013
Annual production
of 2 billion Rubber
Stoppers is reached



2015
Obtaining ISO
15378 certification
for the first time

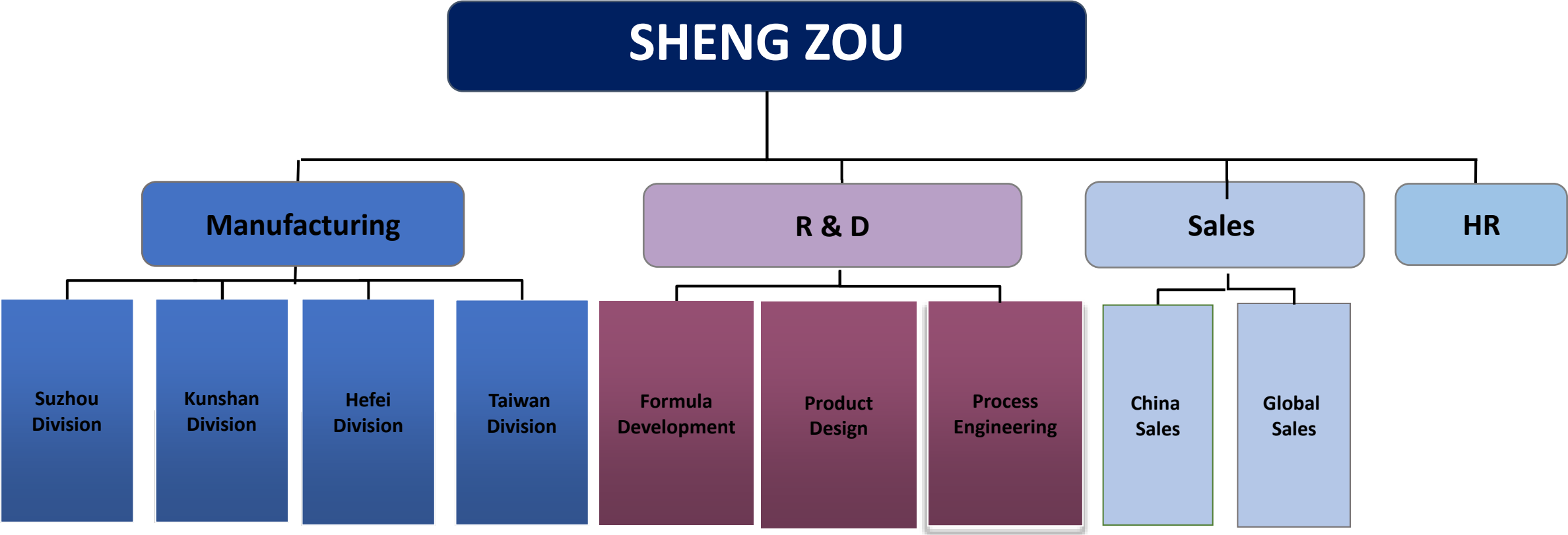


Sheng Zou Group Co.



*Newspath is Sheng Zou's overseas subsidiary trading company

Organizational Chart



Sheng Zou's Beginning

- Beginning January 1st, 1973.
- Technology Venture with Daikyo Seiko, Japan.



Sheng Zou Quality Management



Certifications

- ISO 9001:2015
- ISO 15378:2017
- *FDA Type 5 Certification



Country Specific Requirements

- China NMPA
- China Drug Evaluation (CDE) Registration
- Japanese 17th Edition Pharmacopeia
- Taiwan TFDA
- FDA DMF Registration
- EP 15378 ROHS/REACH, MDR EU 2017/745

U.S. FDA/DMF Registration



DMF#	Status	Type	Submit Date	Holder	Subject
026259	Active	III	2012.07.27	Sheng Zou Pharmaceutical Packaging and Device Technology (China)	Formulation C25 (C25B) Rubber Stopper
026260	Active	III	2012.07.27	Sheng Zou Pharmaceutical Packaging and Device Technology (China)	Formulation C31 (C31B) Rubber Stopper
026329	Active	III	2012.08.08	Sheng Zou Rubber and Plastics	Formulation A03 (A03B) Rubber Stopper
026331	Active	III	2012.08.08	Sheng Zou Pharmaceutical Packaging and Device Technology (China)	Formulation A18 (A18B) Rubber Stopper
026332	Active	III	2012.08.08	Sheng Zou Rubber and Plastics	Formulation A04 (A04B) Rubber Stopper
026333	Active	III	2012.08.08	Sheng Zou Rubber and Plastics	Formulation A01 (A01B) Rubber Stopper
026334	Active	III	2012.08.08	Sheng Zou Pharmaceutical Packaging and Device Technology (China)	Formulation A41 (A41B) Rubber Stopper
026335	Active	III	2012.08.08	Sheng Zou Pharmaceutical Packaging and Device Technology (China)	Formulation K02 (K02B) Rubber Stopper
026336	Active	III	2012.08.08	Sheng Zou Pharmaceutical Packaging and Device Technology (China)	Formulation F22 (F22B) Rubber Stopper
030523	Active	III	2016.04.08	Sheng Zou Rubber and Plastics	Formulation A16 (A16B) Rubber Stopper
030524	Active	III	2016.04.08	Sheng Zou Rubber and Plastics	Formulation C19 (C19B) Rubber Stopper
030525	Active	III	2016.04.08	Sheng Zou Rubber and Plastics	Formulation K03 (K03B) Rubber Stopper
032967	Active	III	2018.08.13	Sheng Zou Pharmaceutical Packaging and Device Technology (China)	Formulation C08 (C08B) Rubber Stopper
032948	Active	III	2018.08.13	Sheng Zou Pharmaceutical Packaging and Device Technology (China)	Formulation C41 (C41B) Rubber Stopper

DMF numbers can be viewed at:

<https://www.fda.gov/Drugs/DevelopmentApprovalProcess/FormsSubmissionRequirements/DrugMasterFilesDMFs/default.htm>

Products

Rubber Stoppers

Chlorobutyl/Bromobutyl/Nitrile/Laminated ETFE&PTFE



13mm

Serum, Powder, Lyo



20 mm

Serum, Powder, Lyo



24 mm

Serum, Infusion



26 mm

Serum, Infusion



28 mm

Infusion



32 mm

Infusion

Infusion Discs

Poly Isoprene



Japan Cap (25mm)



Euro Cap (30mm)

Syringe Plungers

Poly Isoprene, Chlorobutyl, Bromobutyl, Laminated ETFE&PTFE



Single Use Syringe Plunger Stoppers

0.5ml, 1ml, 2ml, 5ml, 10ml, 20ml, 30ml, 50ml, 100ml



Prefilled Syringe Plunger Stoppers

0.5ml, 1ml, 2.25ml, 5ml

Cartridge Plunger

Chlorobutyl/Bromobutyl/Laminated ETFE&PTFE



7.25mm

Cartridge Combiseal

Chlorobutyl/Bromobutyl/Laminated ETFE&PTFE Rubber Disc



From 1ml to 3ml
Mono Layer & Bi-Layer

Current Global Market - 2020



- **Current Markets**

- Greater China 60%
- Southeast Asia 30%
- Africa 5%, Europe 3%, Americas 1%, Australia 1%



\$40M USD
Sales in 25 countries

Multinational Customers



Audited and approved supplier by Pfizer corporate.



Audited and approved supplier by Roche



Audited and approved supplier by Merck.



Audited and approved supplier by B. Braun.



Audited and approved supplier by Baxter.



Audited and approved supplier by Merial Group / Boehringer Ingeheim.



Audited and approved supplier by Biomerieux.

Multinational Customers



Audited and approved supplier by Otsuka Group.



Audited and approved supplier by Meiji.



Audited and approved supplier by Square Pharmaceutical.



Audited and approved supplier by Royal Nutrition.

Mainland China Customers



Yangtze River Pharmaceutical Group



Shuang He Pharmaceutical



Sino Pharmaceutical Ltd.



Heng Rui Pharmaceuticals



Re Yong Pharmaceuticals



Fosun Pharmaceuticals



Walvax Biotechnology Co., Ltd.

Taiwan Customers



Taiwan Biotech Co., Ltd.



Nang Kuang Pharmaceutical Co., Ltd.



China Chemical & Pharmaceutical Company (CCPC)



Chi Sheng Pharma & Biotech Co., Ltd.



Standard Chem & Pharm Co., Ltd.



Yungshin Pharm IND. Co., Ltd.



Taiwan Otsuka Pharmaceutical Co., Ltd.



Genovate Biotechnology Co., Ltd.



TTY Biopharm Co., Ltd.



ScinoPharm Taiwan, Ltd.



Centers for Disease Control, R.O.C. (Taiwan)



National Health Research Institutes

Corporate Capacity



Division	Established	Product	Capacity (pcs/monthly)	Phase 2 Expansion
Taiwan	1968	Plunger	25 Million	N/A
Suzhou	1997	Stopper/ Plunger/Disc	100 Million	200 Million <small>*TBD</small>
Kunshan	2007	Assembly Cap	4.2 Million*	N/A
Hefei	2013	Stopper/ Plunger/Disc	200 Million	400 Million <small>*2025</small>

*2 plastic injection machines.

Advantages



• Quality

- Product quality complies with international standards
- Formulations designed for customer requirements



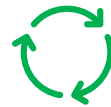
• Technique

- Customer focused design
- Expert R&D team



• Service

- Fast and full assistance
- Post-sales service in 48 hours
- Proactive communication
 - Weekly project updates
 - Meeting scheduled deadlines



• Supply

- 4-6 week lead time (Southeast Asia)
- In house stock for consistent and fast supply
- Competitive pricing

Benefits & Opportunities



• **Global Manufacturing Alliance**

- Sheng Zou's Production Capability
Rubber Stoppers, Infusion Discs & Syringe Plunger Stoppers
- Capacity Exceeding 300 Million Pieces Monthly / 4 Billion Pieces Annually



• **Project Development Collaboration**

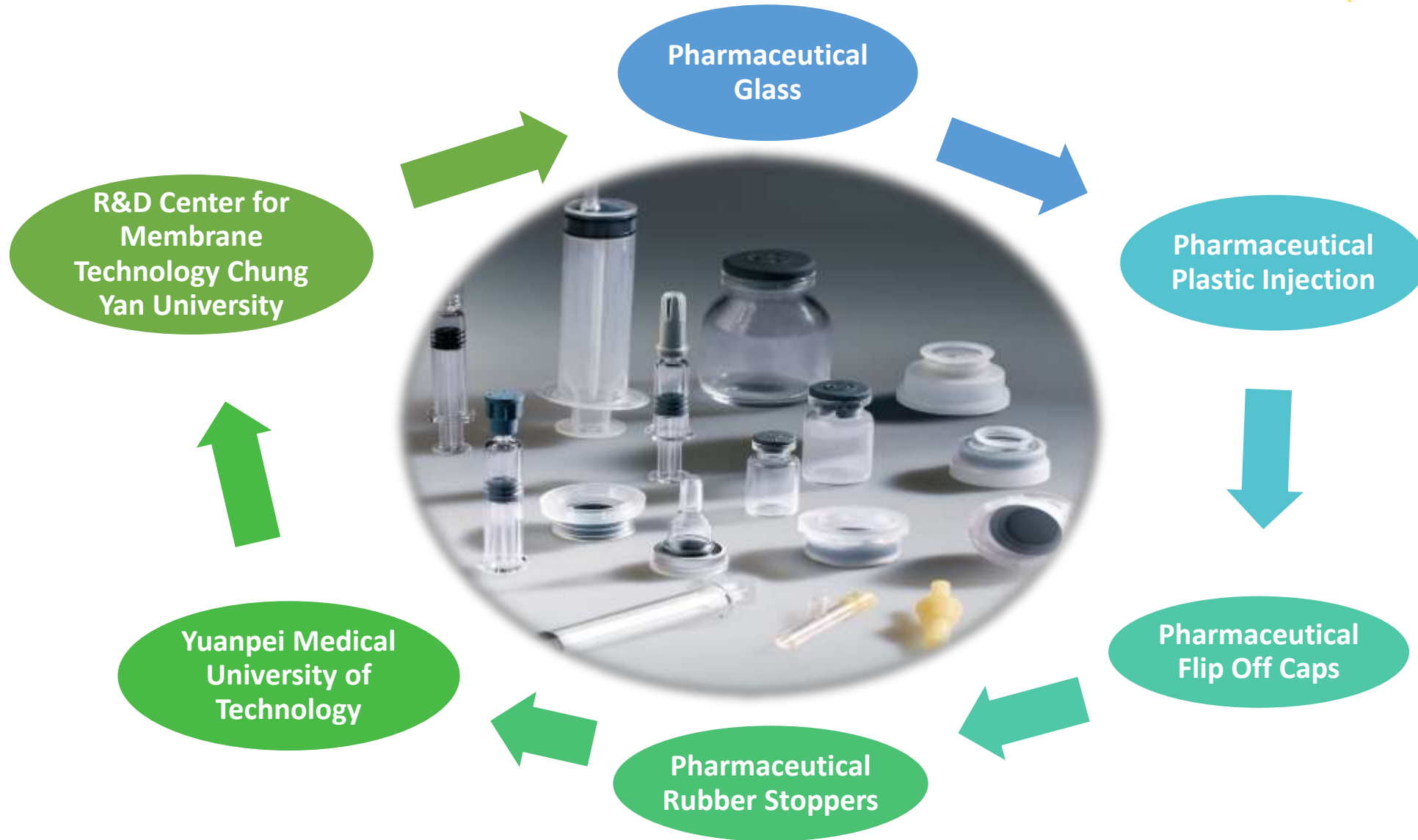
- Strong R&D Team
- Customized Design
- 14 Registered FDA/DMF Formulas



• **Market Area**

- China
- Asia
- Europe
- Others: Africa, Americas, Australia

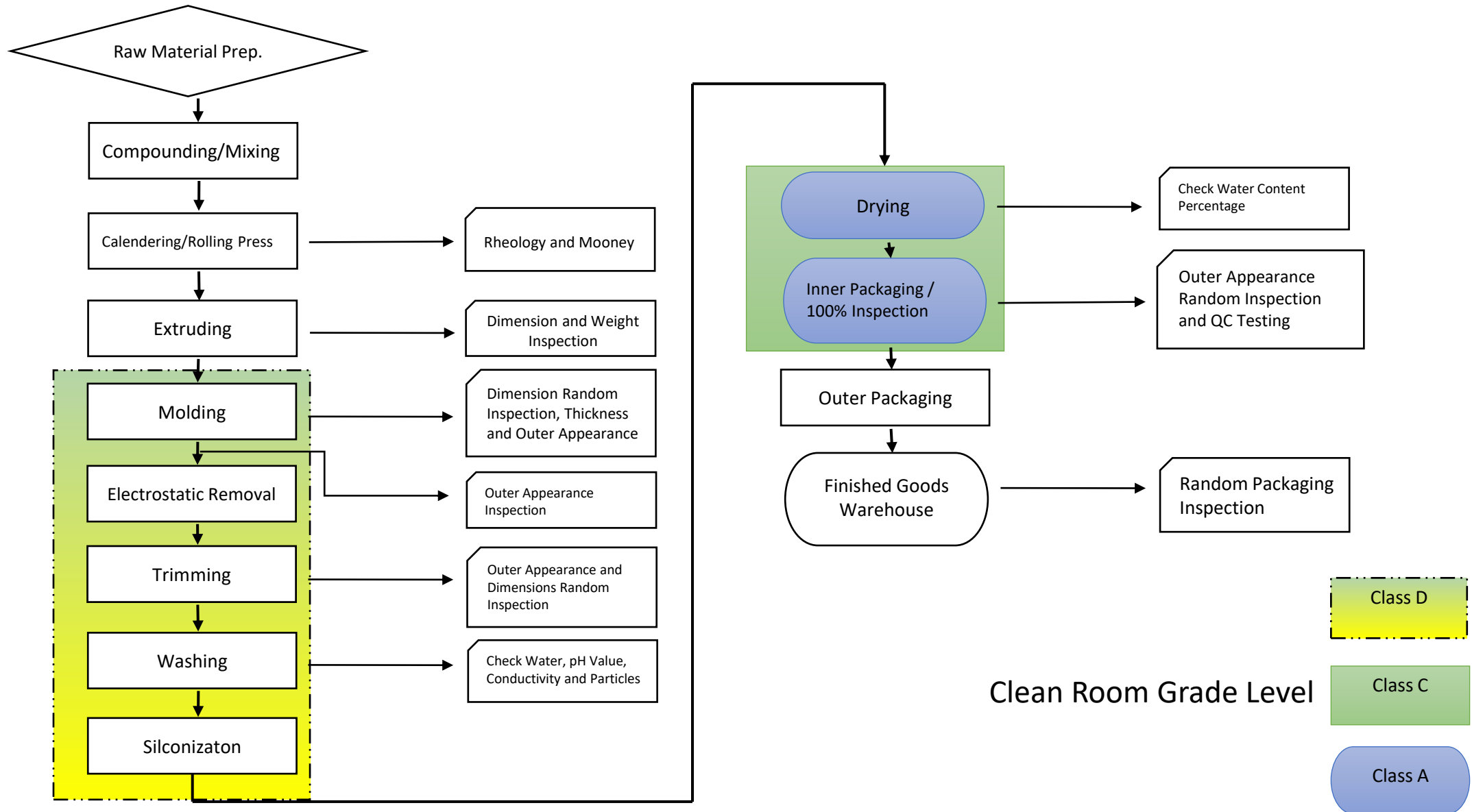
Packaging Partners



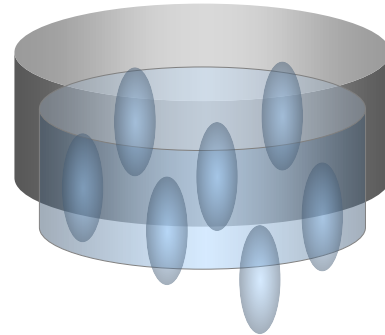
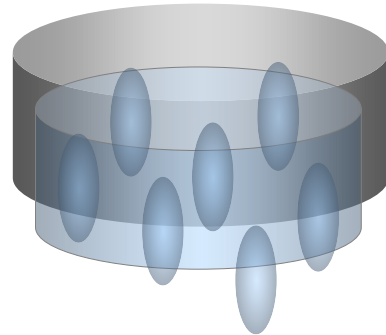
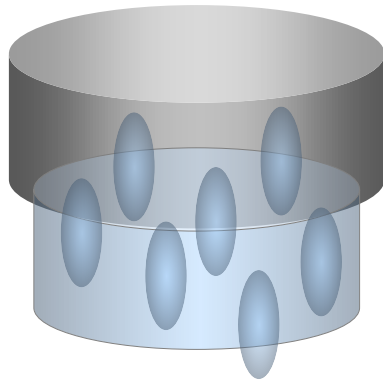
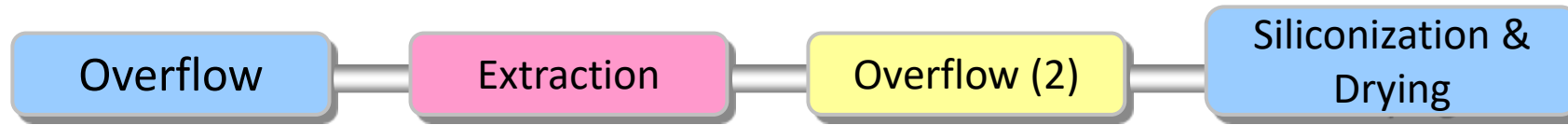


Sheng Zou Manufacturing

Manufacturing Process



Manufacturing – Washing Process



Washing line



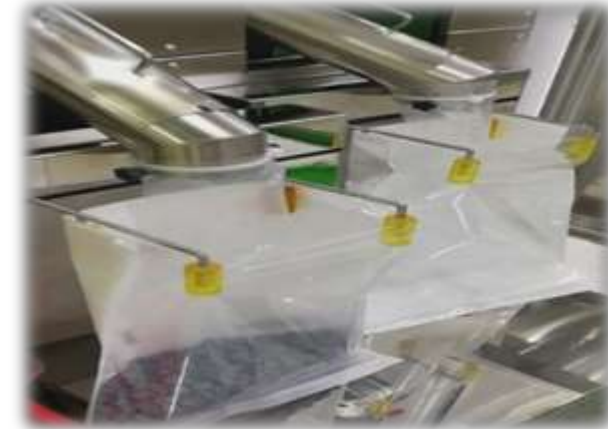
Washing machine

Manufacturing – Inspection

UTP -



Automated
Inspection
Guarantees
100% Quality



Factory Automation

- Molding*



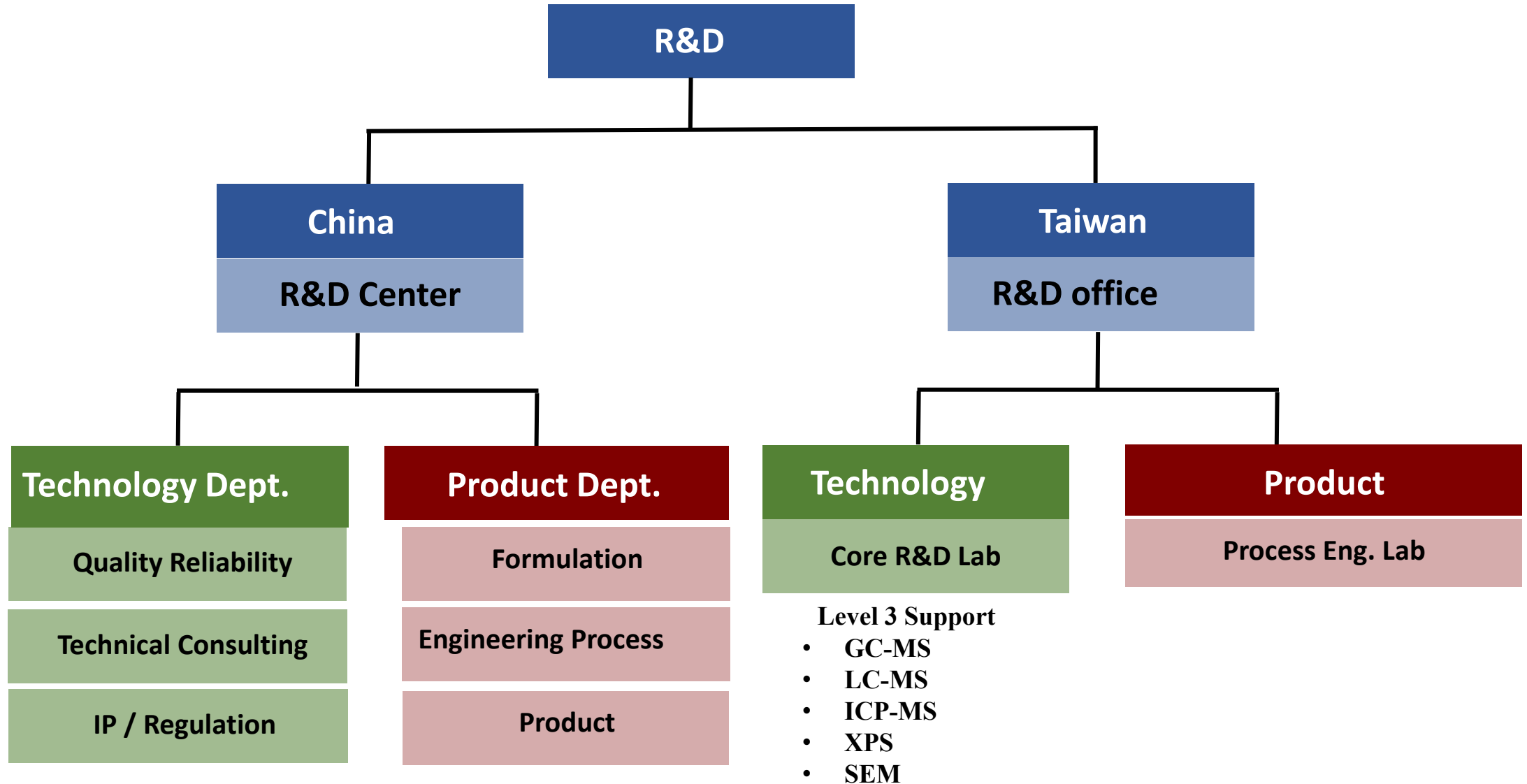
- Inspection & Packaging

- Trimming



Sheng Zou Research & Development

Research & Development (R&D) Team



Focused Development

1: Combiseal

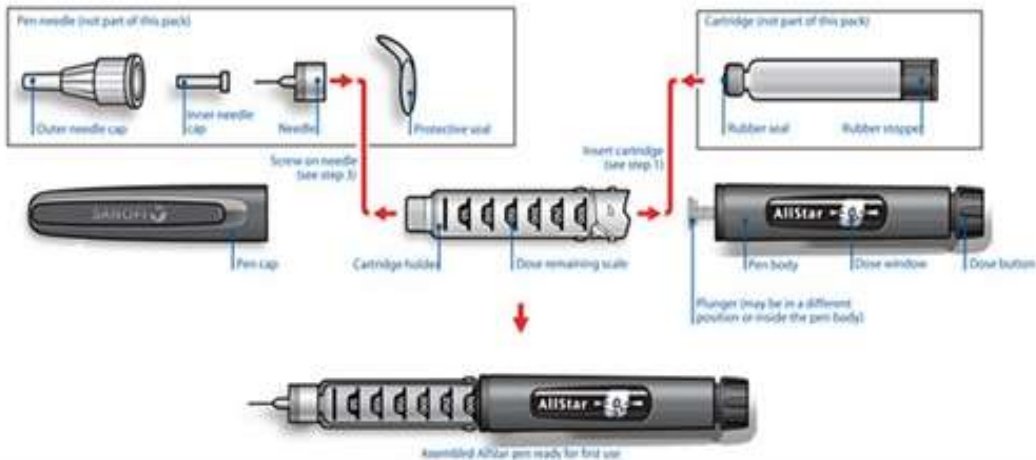


- Insulin
- Follitropin

2: Euro Caps



- Glucose
- Sodium Chloride



Focused Development

3: Japan Cap

Type 1: Nested Cap



Type 2: Film Cover

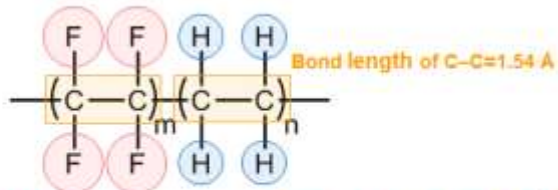


Type 3



4: Laminated Expertise

Ethylene-tetra-fluoro-ethylene(ETFE)



Atomic radius of F is 0.71 Å

Atomic radius of H is 0.37 Å

Bound energy of C-F is 485 kJ/mol Bound energy of C-H is 413 kJ/mol

The C-C backbone will be protected by Fluorine atom

- ETFE
- PTFE
- FEP

Film
Rubber



Continued Development

Rubber Stopper
RFW (Ready for Wash)
RFS (Ready for Sterilization)

Within 3 years Steam* (2023)
RFU (Ready for use)

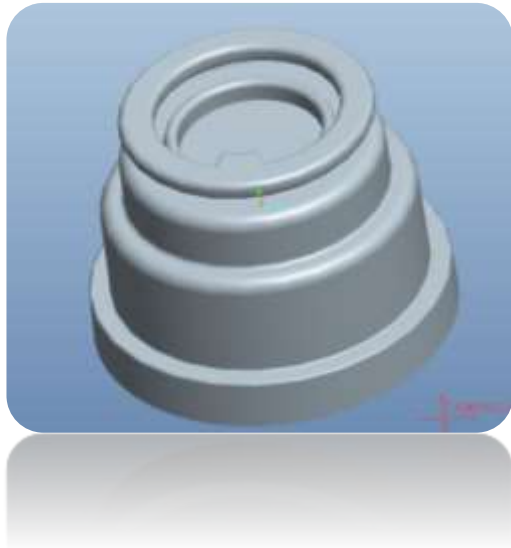
**RFU Laminated
Rubber Stopper**



Ultraclean 6 Washing Process

Future Growth

Global Sealing Caps



Syringe Components



Medical Filters



PuriBlood Leukocyte
Reduction Filter