



DRIVING THE INNOVATION

For better Separation

Sunresin New Materials Co. Ltd., Xi'an
-----World biggest juice resin manufacturer

SUNRESIN

Sunresin Park

Headquarter



R&D

Engineering Centre
Joint Lab with NanKai University



Special Resin Factory

Production base for special and new resin categories



System Engineering Park

Equipment System & Logistic Base



Gaoling Factory

Production base for Adsorbents and Specialty resins



Pucheng Factory

Production base for Standard resins



Puritech, Belgium

European base for Multi-channel valve production



Suncycle Plant

Solid Waste Treatment and Re-utilization Base



About Sunresin

- 1) China biggest special resin manufacturer, generally driven by R&D and Innovation.
- 2) Producing more than 200 types of resins, supplying Resins to more than 25 applications
- 3) Solution company covering design, equipment, resins, after sales for each client
- 4) In 5 applications, Sunresin market share topped the world No 1
- 5) Only resin company listed in stock market in World (stock code: 300487)



Typical applications 1-3



1. Juice treatment

World biggest juice resin and solution provider.
sunresin treated world 70% apple juice and many other juice like citrus, grape, pineapple, cherry etc, now working with around 120 juice plants around the world



2. Pharmaceutical resin

*Biggest pharmaceutical resin supplier in China
In area of Cephalosporins C purification, sunresin takes a market share of more than 90% in China.



3. Enzyme carrier

*World biggest supplier for enzyme carrier
Enzyme carrier is widely used in pharmacy, biotechnology and food. Especially for immobilized enzyme, our enzyme vector has greatly improve the production efficiency of Chinese 7-ACA industry.

Typical applications 4-6



4. Herbal extraction

*China biggest herbal extraction resin supplier(around 70%)

With a wide product range, our resin is highly effective for the extraction of stevia(90% TSG 90 market share), flavonoids, alkaloid ,polyphenol etc, as well as the pigment decolor and impurities removal from herbal.



5. Precious metals

*For gallium recovery from bayer liquor, now sunresin technology package and resins contributes around 90% of the world gallium capacity

*Resins and process speically developped for Nickel, Cobalt, Scandium, Lithium,Uranium, gold, copper, mecury, rare earth etc



6. Membrane caustic soda

*Topped No 1 in market share of China from 2009 (92 factoreis)

Enjoyed excellent technical advantage in this part, our resin could meet the high standard of purification for secondary brine, as well superior mechanical strength.

Typical applications 7-9



7. Waste water treatment

- * Enjoys more than 60% market share for Organic Chemical Waste water
- * Purification resin for H₂O₂ is the only one that could reach electric and pharm grades in China.



8. Water treatment

- * WQA certificated, widely used in drinking water, juice factories etc
- * Cover whole range of product line, meet the requirement of different industries
- * Mixed bed with color indicator is available, unique in China.



9. SEPSOLUT equipment

- * Widely used in applications like gallium recovery, juice treatment, pharmacy, amino acid ,organic acid extraction etc
- * Integrated technical solution was available
- * We tailored system design for each customer.

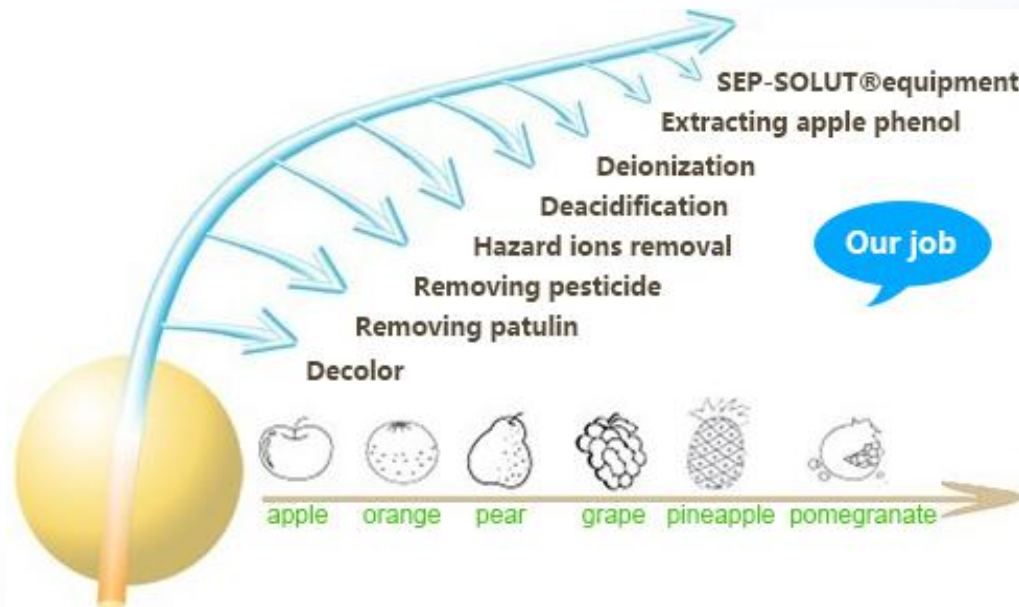


Juice resin and Equipment

-----World biggest juice resin supplier

SUNRESIN STRENGTH

As the **pioneer** for Juice resin, Sunresin has been enjoying very high market share in juice treatment resin market since company set up.



Sunresin is now supplying juice resin to more than 120 juice factories in China and world wide

Sunresin facts

Some important figures:

- 1) Sunresin enjoys more than 98% market share for China&turkey juice resins
- 2) 100% citrus&lemon and pineapple resin and lines was from Sunresin
- 3) More than 120 juice factories are buying resins and lines from us.
- 4) we made customized design for each factory.
- 5) Our treated juice was widely delivered to nearly all countries, US, EU, Japan, Russia..
- 6) Typical bottling companies for reference: Coca-Cola,Nestle,Kraft Foods

Certificates:

FDA, Kosher, Halal,NSF, WQA, Pony, TUV



Patents for juice resin

1.Authrozied NO.CN100490682C

An equipment for treating citrus with high pulp

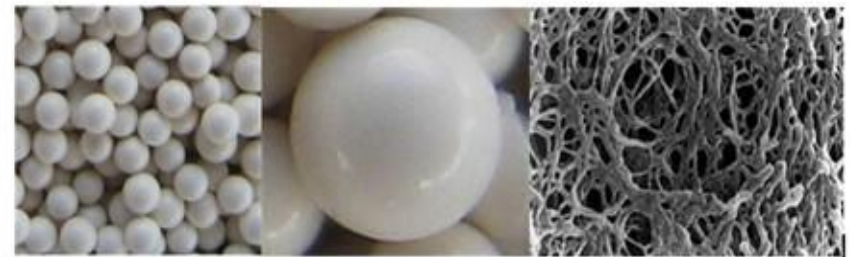
2.Authrozied NO.CN201682999 U

An method of removing pesticide from Juice

3.Authrozied NO.CN201976700 U

An equipment for enhancing resin capacity for juice

Adsorbent under different observation Methods



Eyes

Magnifier

Scanning electron microscope



Resin advantage in juice application



- ❑ Remove patulin, pesticide
(unique for removing carbendazim, omethoate, Dimetoate)
- ❑ lower running cost
- ❑ Eliminate activated carbon, perlite, kizelgurh, paper filter...
- ❑ Improve color value greatly

- ❑ much better transmittance, turbidity etc
- ❑ much better juice stability
- ❑ less juice loss in production (higher yield)
- ❑ much lower labor intensity
- ❑ factory much clean for visitors



For apple&pear juice

Resin functions:

- ☐ Remove pesticide
(Carbendazim, Dimetoate, Metamidophos etc)
- ☐ Remove patulun
- ☐ Decolour of juice
- ☐ Improve color stability
- ☐ Remove heavy metal ions
- ☐ Deionization juice
- ☐ SEPSOLUT equipment
--apple&pears



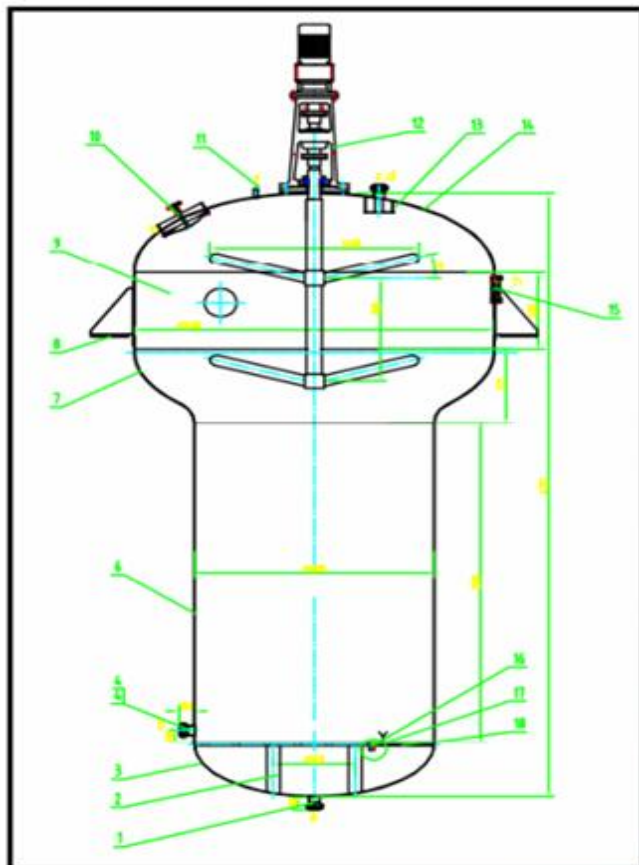
For Orange juice

Resin functions:



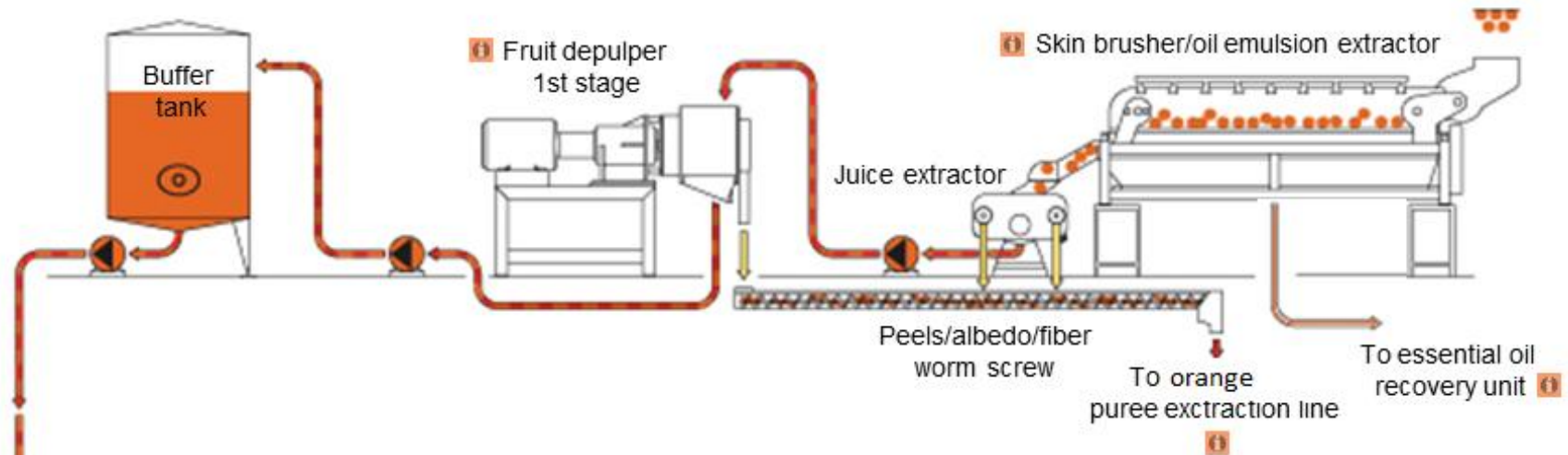
- ❑ Debitter, remove limonin...
 - especially valid for carbendazim
- ❑ Remove pesticide
 - adjust Brix/Acid Ratio
- ❑ Juice deacidification
 - orange juice

For Orange juice

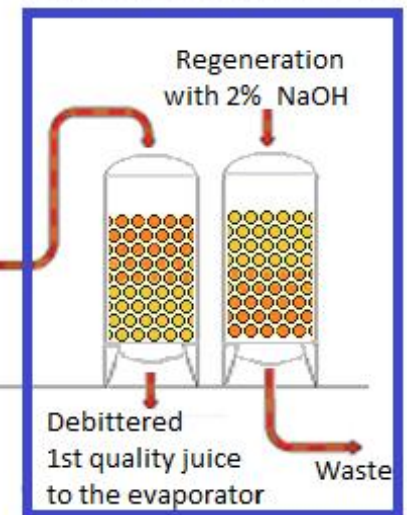


Feed		Product	
limonin	≤ 30ppm	limonin	≤ 5ppm
Pulp	≤ 5%	Pulp	≥ 4.9%
Capacity	≥ 10BV		
Regeneration	2% NaOH		

CITRUS DEBITTER LINE



Sunresin Debitter Line



For red fruits

Resin functions:



- ❑ Remove pesticide of more than 100 types
- ❑ Remove little color
- ❑ Suitable for all major red fruits like cherry, sourcherry, pomegranate juice etc

For Juice of Lemon, Grape, Pineapple



Resin functions for Lemon:

- ☐ Debitter, remove limonin...
- ☐ Decolour of Lemon juice
- ☐ Pesticide removal



For Grape:

- ☐ Decolor, deionization
- ☐ Heavy metal removal
- ☐ Pesticide removal



For Pineapple:

- ☐ Deionization juice from peels

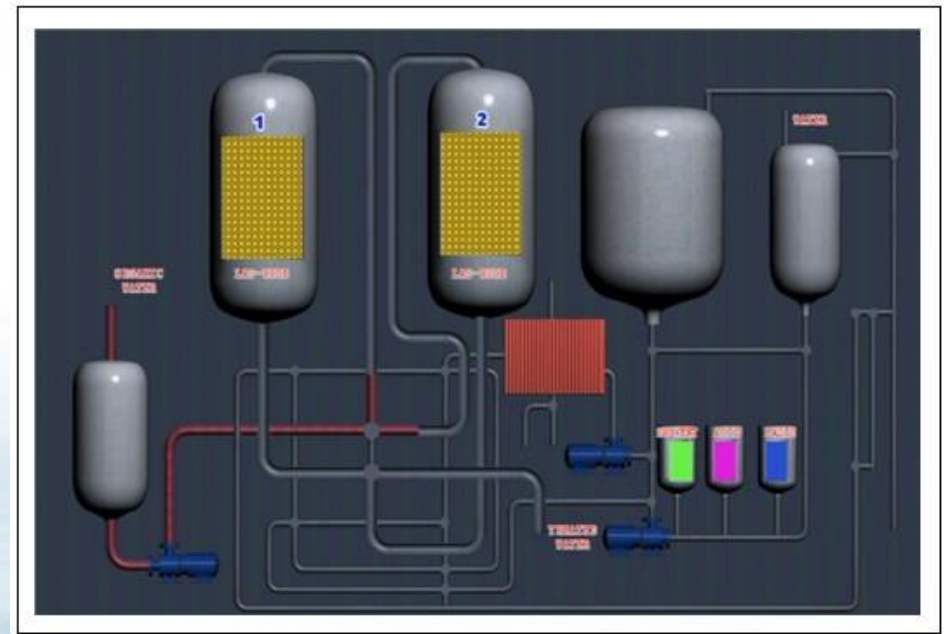
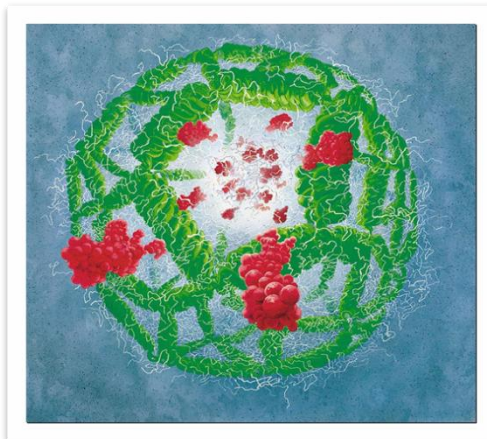


Sunresin Juice Equipment

Besides resins, Sunresin could also supply Juice resin adsorption unit for integrated service

Nos of factories we are serving could be referred as below:

Decolor:	118 juice factories
Patulin&pesticide:	around 60 factories
Deionization line:	35 lines



Sunresin Adsorption Unit

SEP-SOLUT® Apple&Pear juice Adsorption line



SEP-SOLUT® Deionized Juice

Deionized juices : These are sweeteners, colorless, odorless and neutral substances which come from juices, from which all ingredients have been removed except sugar. They have similar composition with the juice of origin without the presence of acids, colourants, metals, etc. They are widely used in food industry as a natural sweetener.

Advantages of deionized juice:

- 1) higher sweet taste, good taste, more clear compared
- 2) higher transmittance
- 3) More safe in nutrition and safety, good flowability
- 4) Suitable for use of people suffered from diabetes mellitus
- 5) Not easily get crystallized under 0 °C
- 6) Typical customer like Pepsi, coca-cola, Nestle and other bottling producer

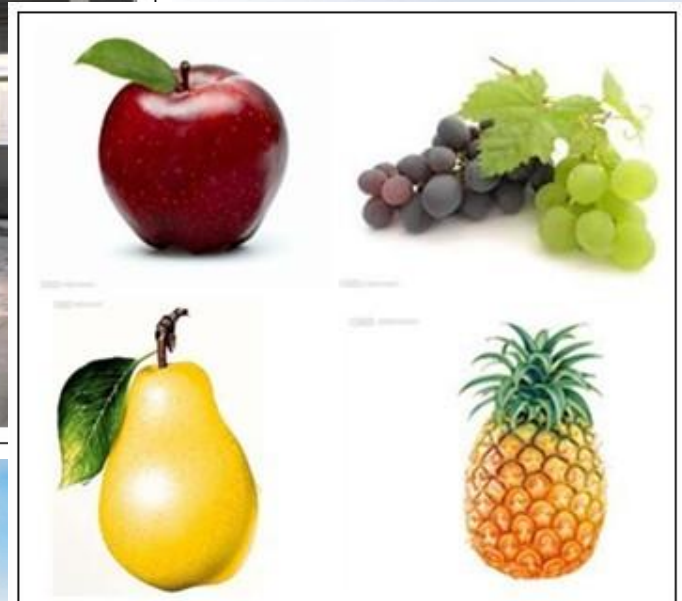


SEP-SOLUT[®] Fixed bed Deionized Juice line



Suitable for deionized juice of:

- * Apples
- * Pears
- * Grapes
- * Pineapples



SEP-SOLUT® Citrus adsorption line



- * Sunresin patented design
- * With a bigger pulp tolerance, maximal up to 5%



SEP-SOLUT® Fixed bed equipment



SEP-SOLUT® Fixed bed equipment



SEP-SOLUT® Fixed bed equipment





Sunresin EPC plant Overseas

Sunresin Lithium project-Zangge(Pic taken in 2018)





Driving the innovation
SUNRESIN
蓝晓科技

创新进取 专业专注



国家火炬计划重







禁止依靠

当心吊物

新工

710









Thanks you!