

# TRILoS

“ Our mission is to provide high quality equipment and precise solutions to maximize your capabilities. ”

“ More than Equipment ”

# TRILoS

**TRILoS** · GLOBAL

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## ES50

TRILOS ES50 is the basic unit of lab scale. We developed this mini-unit which is special for the low flow rate, normal accuracy requirement customer. ES50 is with the simplified structure design, portable dimension, infinitely variable speeds and mechanical gap adjustment.



## Features

1. Highly precise (less than 5um, depend on materials)
2. Easy-cleaning roller
3. Manual adjustment
4. Protection cover, hopper(optional)
5. Infinitely variable speeds

## Parameters

Flow rate ( L/hour )	0.02-5
Roller diameter ( mm )	50
Roller length ( mm )	160
Rotation ratio	1:3:9
Roller material	AL <sub>2</sub> O <sub>3</sub> /ZrO <sub>2</sub> /stainless steel
Scraping knife material	AL <sub>2</sub> O <sub>3</sub> /ZrO <sub>2</sub> /stainless steel /PVC
Power(Kw)	0.2
Dimension(mm)	320x250x250
Weight ( Kg )	20



## ES80

TRILOS ES80, Three rollers mill, a medium type of our Instruments, has a wide range of flow, between 0.02L/hour and 20L/hour. It is compact but exquisite, User-friendly and easy to operate. Gap modification and menu options make a communication with consumer.



## Features

1. High precision (less than minimum 1um, depend on materials )
2. Touch screen
3. Adaptive scraping knife system
4. Cooling system
5. Easy-cleaning roller
6. Dual mode
7. Protection cover, hopper(optional)

## Parameters

Flow rate ( L/hour )	0.02-20
Roller diameter ( mm )	80
Roller length ( mm )	200
Rotation ratio	1:3:9
Roller material	SiC/AL <sub>2</sub> O <sub>3</sub> /ZrO <sub>2</sub> /stainless steel
Scraping knife material	AL <sub>2</sub> O <sub>3</sub> /ZrO <sub>2</sub> /stainless steel /PVC
Power(Kw)	1.1
Dimension(mm)	720x550x550
Weight ( Kg )	70



## ES120

TRILOS ES120 is the milling equipment for massive production in the lab. The maximum flow rate reach to 60L per hour. ES120 use the similar electronic controlling system as ES80 which will provide the perfect solution of accuracy for massive production. With the application of accessories, the unit could adapt variable working requirement and different materials. The multi-safety devices provide a full-time security guarantee.



## Features

1. High precision (less than 1um, depend on materials)
2. Touch screen
3. Adaptive scraping knife system
4. Cooling system
5. Easy-cleaning roller
6. Dual mode
7. Protection cover hopper(optional)

## Parameters

Flow rate ( L/hour )	0.5-60
Roller diameter ( mm )	120
Roller length ( mm )	450
Rotation ratio	1:3:9
Roller material	SiC/AL <sub>2</sub> O <sub>3</sub> /ZrO <sub>2</sub> /stainless steel
Scraping knife material	AL <sub>2</sub> O <sub>3</sub> /ZrO <sub>2</sub> /stainless steel /PVC
Power(Kw)	1.1
Dimension(mm)	1250x850x600
Weight ( Kg )	350



## PHILOSOPHY OF TRILOS

### Refined

You are person who notices the details in life. The kind of person who holds high regards of service and quality in your products.

The refining industry isn't just about the materials; it's about the elegance of breaking down particles into a finer quality and consistency.

We believe refinement should be more than your occupation. We are dedicated to provide you the highest quality machine that you can brag about.

To provide a product that focuses on quality, sophistication, and being the best because you deserve the best qualities in what you do."



### Bespoke

We know that your work has certain unique qualities unlike other industries.

You know molecules and particles that differentiation themselves from each other. Each material is individual and distinctive, like you. We know that your job isn't defined by the masses, so why should you?

We believe that your needs are important. Your company is distinctive, your workers are unique, and your services and products should be tailored to your individual needs.

We are flexible and provide you the strongest solution based on you. Because your plan should be the same as everyone else's. Let us prove how distinguished care can make all the difference."

## SPIRIT OF TRILOS

### Powerful

TRILOS is just like the Triceratops in the prehistoric, strong and powerful. With less than 1um gap of our mill, variable type of material can be handled so easily.

### Agility

Super high sensitive detecting system can feed back all the important parameters information such like pressure, gap to the screen in real time. TRILOS will make the status of your material to be "control by glance".

### Intelligent

"More than equipment" is the manifesto of TRILOS. Intuited interface function with precise controlling can link the communication between the operator and equipment into a free mind.



## SWORD OF TRILOS

### Effective

Our American team has injected the high effective conception in all the designs of TRILOS' equipment. By the harsh quality requirement in manufacture, this could allow the machinery milling continuously with high RPM even for the 5um roller gap. And the shearing force and the pressure still can be maintained very stably.

### High precise

Unique roller relative coordinate position method can be the real-time gap controlling feedback. All users can adjust the gap bias correspond with the outlet of material in line which could improve the D50&D90 value of the materials.



## Wide range applications

Bespoke always is the design concept which TRILOS follow up. But our bespoke is very different from the traditional one.

Variable viscosity from 100 Cp to million Cp, variable application from the printing ink to electronic ink, variable flow rate from 15mL to 100L etc, the equipment of TRILOS will be perfectly fitted.

## Green and low carbon

The power consumption of TRILOS is similar as a domestic appliance.

Accuracy polished roller surface can be cleaned easily and avoid the wastes of material effectively.

## Excellent quality repeatability

We pursue the best quality of every piece of our equipments. Effective modularity is the basis of TRILOS' design in the hardware as well as software.

A multi-loop-controlling system, remarkable PLC frequency conversion with a center coordinate and the accurate parallel rollers from inside to outside, will prove the Excellent repeatability.

## Intuited interface

User-Friendly is an important part of TRILOS' pursuits. Touch screen, making the easier operation, can apply to the parameter modification.

Over 2000 used parameters can be saved in the storage, and can be referred to by users.





## Excellent spare parts

Each of the Three-Roller is manufactured by specific ways. The tolerance of Cylindricity, Coaxiality and circular run-out keeps in a small range. So this instrument can make submicron-sized production.

Kinds of materials are optional, including stainless steel, zirconia, alumina ceramics, silicon carbide ceramics.

## Security

Users' security is the first part of TRILOS' designation all the time. We have analyzed a numbers of cases to develop the individual cleaning system. When the torque is abnormal, the rolling would stop immediately.



## Fields Focused On

High quality with professional service is another aspect of TRILOS' Philosophy. The we focused on are mainly serilux industry and others like following:

### Ink and Paint

1. Flat plate ink
2. Screen printing ink
3. Special ink
4. Security ink
5. Architectural Coatings
6. Industrial coatings
7. Colorant
8. Pigment



### Chemistry

1. Resin
2. Polymer
3. Lubricant & Grease
4. Petroleum derivatives
5. Adhesive
6. Chemical raw material



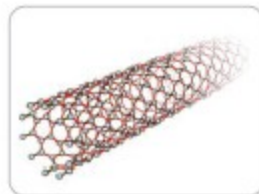
### Pharmacy and medical treatment

1. Medical ointment
2. Dental material
3. Toothpaste



### New materials

1. Composite ceramic slurry
2. Nanometer composite
3. CNT



### Food

1. Edible spice
2. Chocolate
3. Syrup



### Electronic industry

1. Electro conduction paste  
(Ag paste, Al paste)
2. Solder-resisting ink
3. Electronic printing ink
4. Conducting resin
5. LCD module electrical adhesive
6. PV ink
7. Solar cell electrode
8. Electronic Ceramic pastes
9. Electronic packaging material



### Cosmetic

1. Cream
2. Make-up foundation
3. Lip brilliant
4. Tanning cosmetic

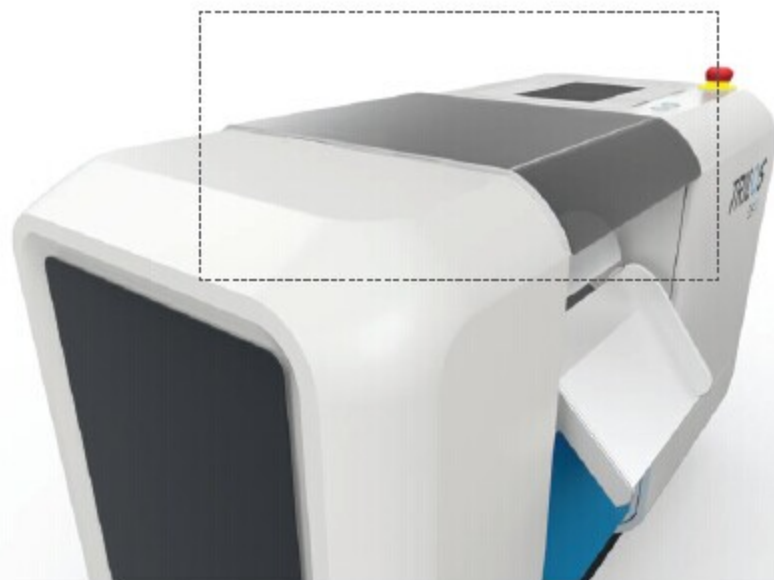


## Our gene

↓ Touch screen, accurate, user-friendly and smart

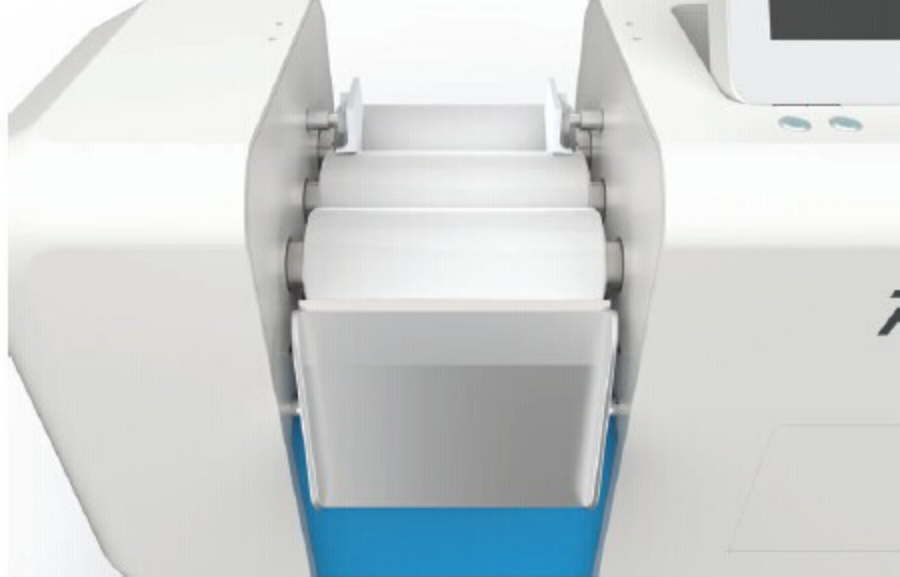


↓ Protection cover, protecting the rollers when machine standby

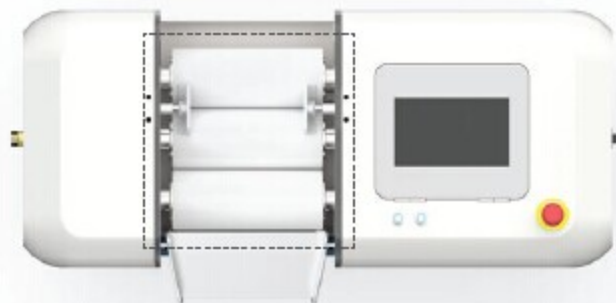


## Our gene

- ↓ With the adaptive scraping knife system, tensions can be set up to get a good outlet.



- ↑ Ultrathin Scraping knife, trying to avoid residual and spinning applies to materials with low and medium viscosity.



- ↑ High precision (less than 1um, depend on materials)