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2024.04

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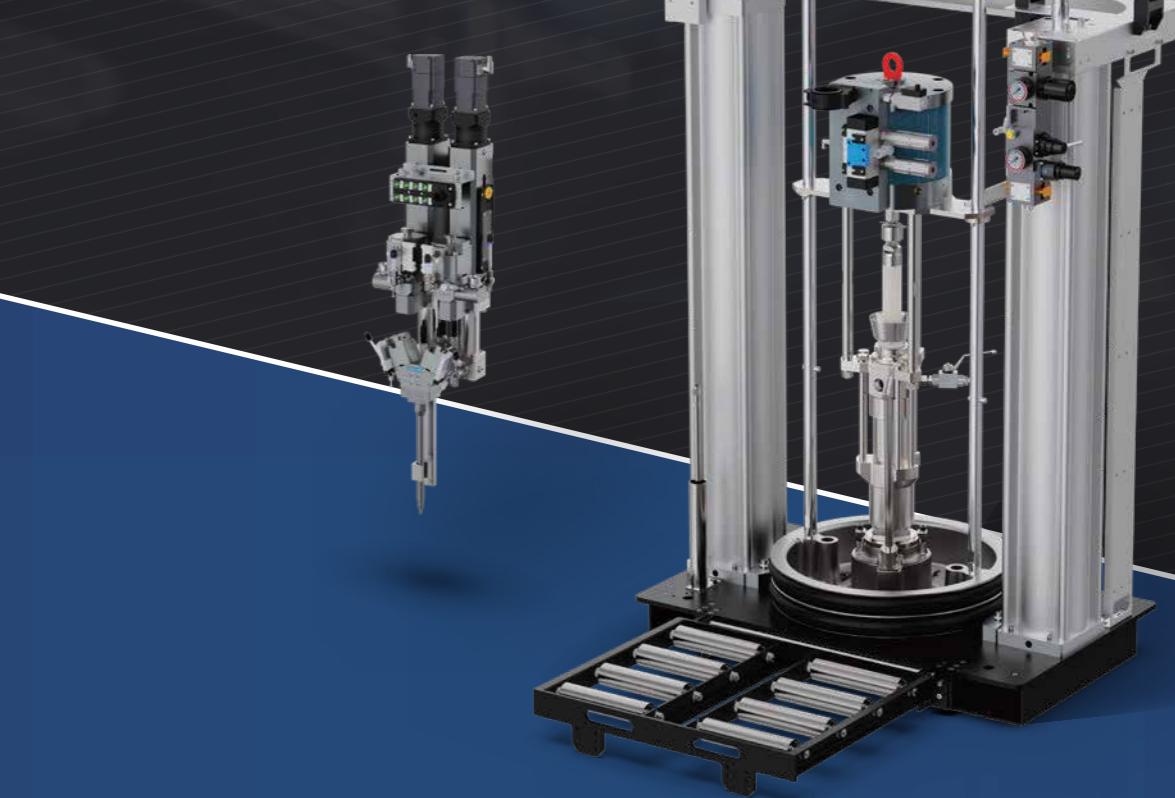
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Centron® 存融

# ADHESIVE DISPENSING AND METERING SYSTEM

涂胶及计量系统解决方案

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# ABOUT US

**Centron® 存融**

**Global leading manufacturer**

CENTRON® is a high-tech enterprise integrating R&D, production, sales and services.

We are committed to providing cutting-edge, reliable and precise products and system solution of adhesive dispensing, dosing, potting and trickling impregnation in EV battery, automotive, electrical motor and controller, automotive parts, energy storage battery, photostatic, transportation, aerospace, 3C elections, etc.



**15+**  
years  
Industry experience



**2000+**  
sets  
Annual production capacity



**100+**  
Trial for customers

# Technology Leadership

# Innovation-driven

# Value co-creation

## | Development History



**2006**

Developed adhesive dispensing products for automotive air and oil filter;  
Developed adhesive dispensing and potting products for photovoltaic;  
Marched into fluid and adhesive industry.



**2010**

Developed progressive cavity type adhesive dispensing system;  
Marched into automotive electronics industry.



**2016**

Developed plunger and piston type adhesive dispensing system;  
Marched into automotive parts industry.



**2018**

Developed innovative adhesive dispensing products to solve multiple technical difficulties in EV battery industry;  
Developed one platform control system for multiple adhesive dispensing application;  
Become market leader in EV battery industry



**2022**

Developed endless metering adhesive dispensing system;  
Marched into automobile industry and provide feeding, metering and adhesive dispensing system solution for final assembly, bodyshop, painting;  
Start business worldwide and establish a global service base.



**2023**

Initiate digital transformation to enhance company overall efficiency and competitiveness;  
Optimize customer experience and make the development sustainable.

## | Our Advantages

### Independent Innovation

With more than 15yrs industries experience, our R&D team develops independently innovative adhesive dispensing products and system, incl. supply system, meter and control system.

### Excellent Service

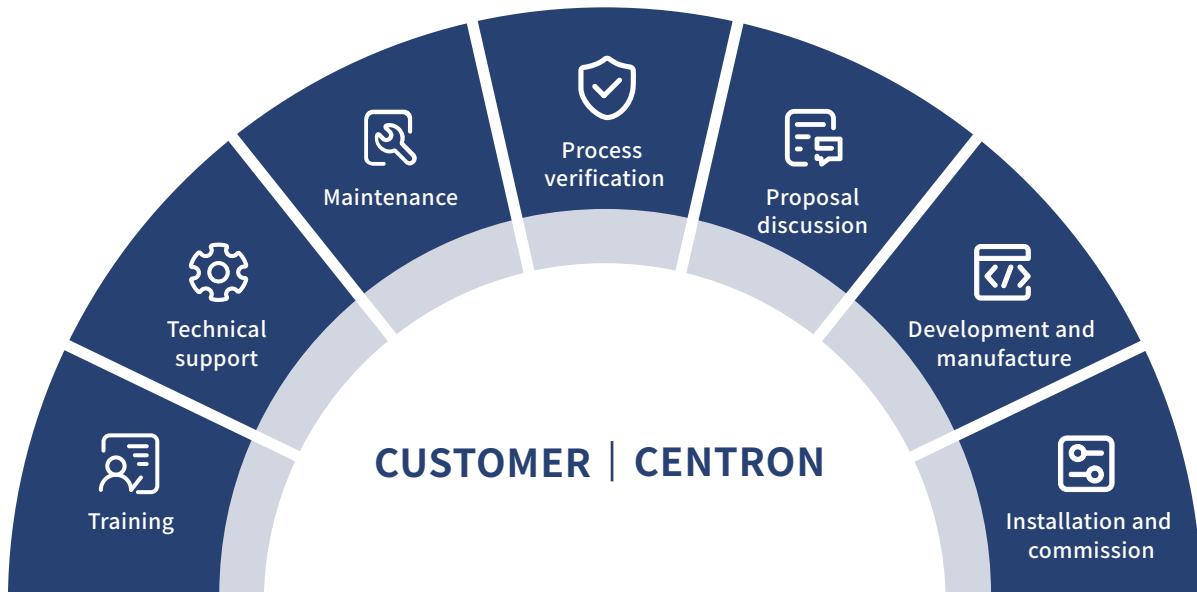
Focus on increasing production process demands of customers, and customize adhesive dispensing system solution. We continually innovate and upgrade our products and system.

### Quality Guarantee

We acquired ISO9001/14001, UL certification. Products are in compliance with GB/T and ISO standards. Relying on creditable quality, our company has won the great confidence and popularity of domestic and oversea customers.



## | Our Service



## | Worldwide Service and Support





**60<sup>+</sup>**

Field engineer



**12**

Regional Service Center

Shanghai/Shenzhen/Changchun/Wuhan/Chongqing/Xi'an/Jinan/Hefei/Fuzhou/Ningbo/Bing/Nanjing/Tianjin



**7**

Spare Parts Warehouses

- China
- Shanghai/Wuxi/Xi'an/Shenzhen
- Hefei/Fuzhou
- Hungary



Response time  
within warranty

**24**

hours onsite

2 hours phone support

## | Cooperation Partner

长安汽车  
CHANGAN



DAIMLER



UAES





# ADHESIVE DISPENSING SOLUTIONS

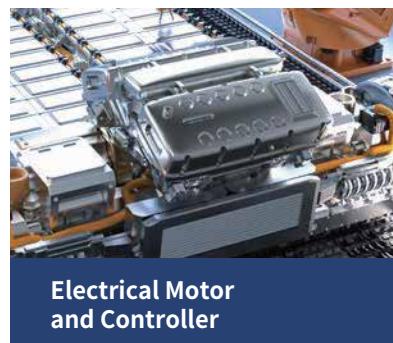
CENTRON® products can be found in a wide variety of markets. We not only provide adhesive dispensing products in dosing, dispensing, potting and trickling impregnation application but also specific solution when you face unique challenge.



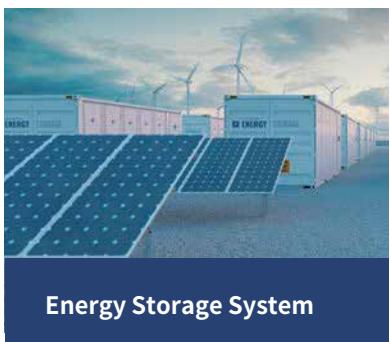
Automobile



EV Battery



Electrical Motor  
and Controller



Energy Storage System



Automotive Parts



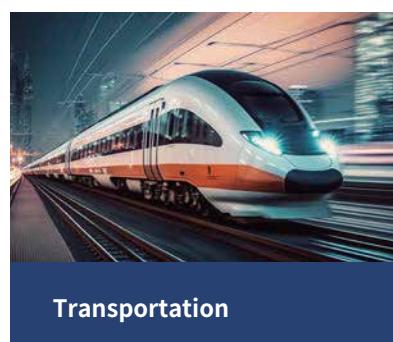
3C Electronics



Photostatic



Aerospace

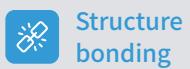


Transportation

## Adhesive Dispensing Solution for Automobile



### Final Assembly



Structure bonding

- Front/rear windshield glass
- Side windows
- Roof module

### Powertrain



Structure bonding



Sealing

- Engine
- Transmission
- Distribution device

### Bodyshop



Structure bonding



Seam sealing



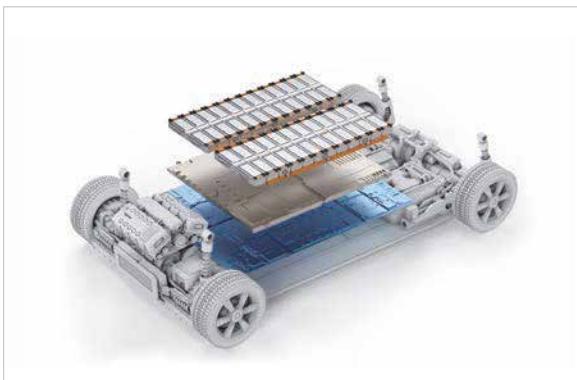
Sealing



Expansion

- Hood
- Roof
- Doors
- Car side
- Chassis
- Trunk

## Adhesive Dispensing Solution for EV Battery



Structure bonding



Potting



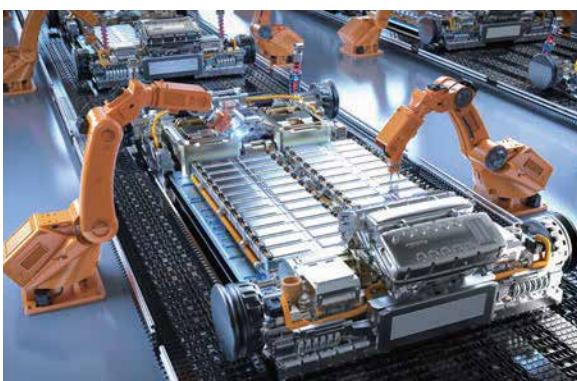
Thermal conductive

▪ Cell

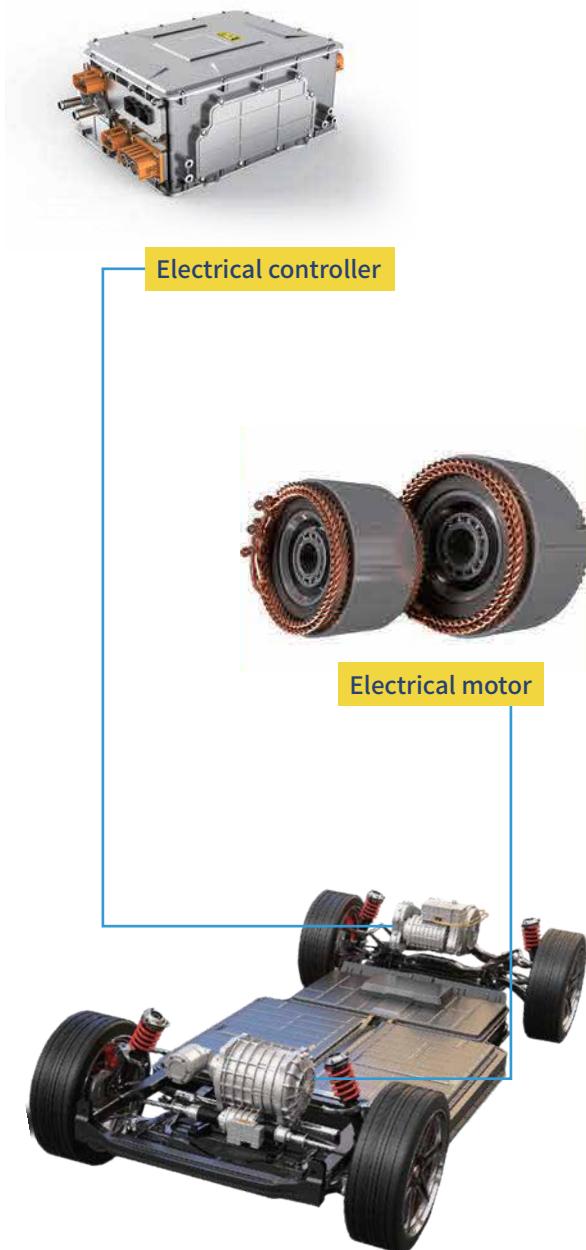
▪ Battery module

▪ Battery pack

▪ Battery tray



## Adhesive Dispensing Solution for Electrical Motor and Controller



- Flat wire motor
- Electric controller
- Electric drive case

## Adhesive Dispensing Solution for Automotive parts



Structure bonding



Sealing

Door panel

Intelligence cockpit

Sensors and electronic components

ABS system casing

Lighting

Audio components

## Adhesive Dispensing Solution for Photostatic



Structure bonding



Potting



Sealing

Junction box

Aluminum frame

## Adhesive dispensing Solution for Aerospace



Structure bonding



Sealing

Rivet and screw

Aerofoil shell

Interlayer

## Adhesive Dispensing Solution for Transportation



Sealing



Structure bonding

Noise and vibration dampening

Large and medium-sized metal and composite structural parts

Seats

Window

## Adhesive Dispensing Solution for 3C Electronic



Potting



Structure bonding



Sealing

LED

Push button on mobile side

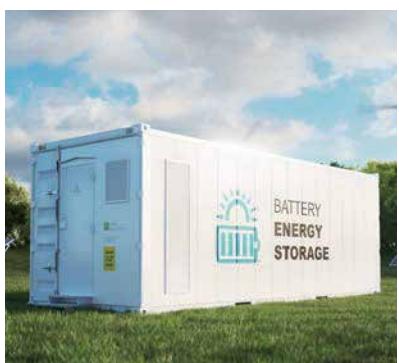
Semiconductor chip

CPU and chips

Screen and shell

Touch screen and LCD

## Adhesive Dispensing Solution for Energy Storage System



Structure bonding



Thermal conductive

Pack

## | Adhesive Dispensing Solutions



### One component adhesive dispensing system

#### Application area



Automobile



Automotive parts



Photostatic



### Two-component adhesive dispensing system (with spare pump)

#### Application area



EV battery



Energy storage system



Car body



Automotive parts



### Two-component adhesive dispensing system (with transfer module)

#### Application area



EV battery



Energy storage system



Automotive parts

# SUPPLY SYSTEM AND PUMPS

01



## BARREL PUMP SUPPLY SYSTEM

Centron barrel supply system and pumps deliver medium to high viscosity fluid directly from original packaging barrel to transfer station or metering system to avoid the risks associated with secondary packaging or transferring.



### Applications

Middle to high viscosity adhesives (viscosity  $\geq 20,000$  cps)

Packaging 20L 50L 200L

#### Control Panel

- Notification for material placement and liquid level monitoring;
- Barcode scanner as a option to prevent loading wrong material

#### Cylinder Motor

- Innovation design
- The noise less than 75dB
- Small fluctuation of reversing pressure (reversing time less than 150ms)
- Pressure ratio: 30:1~68:1
- Real-time operation monitoring to prevent runaway

#### EnPulse Lower Pump

- Pump material is available in carbon steel and stainless steel
- Optional **DuraTec wear-resistant technology** is suitable for high abrasive and filling material for maximize service life and minimum maintenance

#### Platen Design

- Maximum utilization of material to reduce waste
- Durable seal parts and easy to replacement

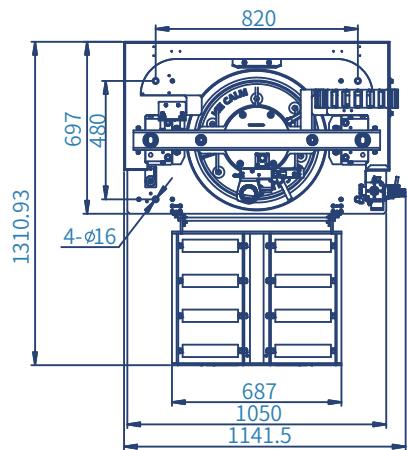
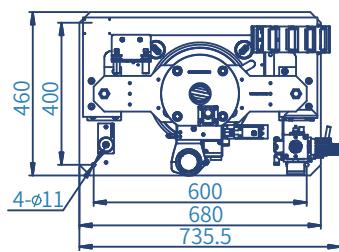
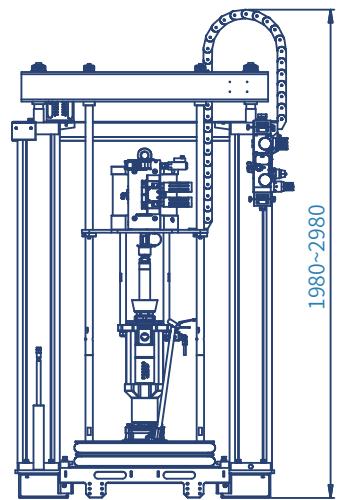
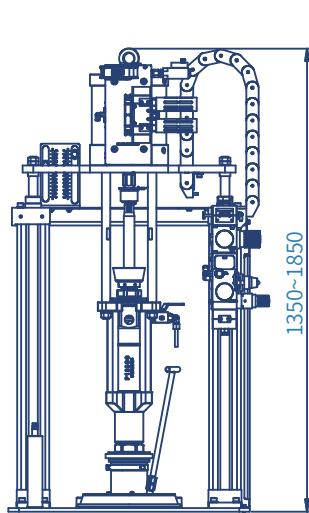
#### Material Table Roller

- Easy and safe drum placement

Displacement 125cc 210cc 250cc 500cc



\*Heating options: platen, pump and hose



20L

200L

### Technical Specifications

Drum Size(L)	20 50 200					
Post Control	Air Control					
Piston Pump Displacement(cc)	125	210	250	500		
Piston Pump Lifetime	Standard/ Wear-resistance	Standard/ Wear-resistance	Standard/ Wear-resistance	Standard/ Wear-resistance		
Piston Pump Material	Carbon Steel/ Stainless Steel	Carbon Steel/ Stainless Steel	Carbon Steel/ Stainless Steel	Carbon Steel/ Stainless Steel		
Pressure Ratio	33:1	57:1	36:1	68:1	30:1	57:1
Motor Type	D150	D200	D200	D280	D200	D280
						30:1

## | Type Designation

C P09 A 1 H

Feed System Type		Lower Pump+Motor+Pressure Ratio			Post		Platen & Seal		Platen Heating	
		P01	P125CS	D150, 33:1	A	080-20L	1	Neoprene	H	Heating
E	Electric	P02	P125CL	D150, 33:1	B	100-200L	2	Fluororubber	N	No Heating
		P03	P125SS	D150, 33:1	C	160-200L	3	Urethane		
		P04	P125SL	D150, 33:1						
		P05	P125CS	D200, 57:1						
		P06	P125CL	D200, 57:1						
		P07	P125SS	D200, 57:1						
		P08	P125SL	D200, 57:1						
		P09	P250CS	D200, 30:1						
		P10	P250CL	D200, 30:1						
		P11	P250SS	D200, 30:1						
		P12	P250SL	D200, 30:1						
		P13	P250CS	D280, 57:1						
		P14	P250CL	D280, 57:1						
		P15	P250SS	D280, 57:1						
		P16	P250SL	D280, 57:1						
		P17	P500CS	D280, 30:1						
		P18	P500CL	D280, 30:1						
		P19	P500SS	D280, 30:1						
		P20	P500SL	D280, 30:1						
		P21	P210CS	D200, 36:1						
		P22	P210CL	D200, 36:1						
		P23	P210SS	D200, 36:1						
		P24	P210SL	D200, 36:1						
		P25	P210CS	D280, 68:1						
		P26	P210CL	D280, 68:1						
		P27	P210SS	D280, 68:1						
		P28	P210SL	D280, 68:1						

## LOWER PUMP



Innovative structure design  
Long maintenance period



Positioning design to easy  
Installation and maintenance



Available to meet high volume  
application



DuraTec wear-resistance technology as  
optional to apply to high abrasive and  
filling material and extend lifetime



Easy install and maintenance  
to reduce down time

## Type Designation

P 250 C L

Pump Type		Pump Displacement(cc)		Pump Material		Lifetime	
P	Plugger	125	125	C	C-carbon steel	S	S-standard
		210	210	S	S-st.st.	L	L-long life
		250	250				
		500	500				

## | DuraTec Wear-resistance Technology

DuraTec wear-resistance technology by Centron uses wear-resistance seal parts and surface material to be designed for delivering high filling and abrasive material. It can be applied to up to 9W thermal conductive materials.

With Centron Dura-Tec product line, Centron provides complete solutions in Thermal conductivity adhesive application, from the material supply to metering system and dispensing valves.

DuraTec wear-resistance can be selected in the above products.



Feed system



Metering system



Dispensing Module



### application Materials

Epoxies

Organosilicon

Urethanes

Acrylics



# METERING SYSTEM

02



## METERING SYSTEM

It is the core components in adhesive dispensing system.

According to production process and requirements, appropriate metering system enables delivery accurately and efficiently materials from feeding system to dispensing system.

System control improves the quality of dispensing and minimizes material waste.



**Puflo**

Pulse Flow  
Plugger|piston metering

**Miflo**

Micro Flow  
Progressive cavity pump metering



**Enflo**

Endless Flow  
Endless metering

**Cyflo**

Cycle Flow  
Gear Metering

## Puflo PLUGGER PISTON METERING SYSTEM

Puflo uses piston metering principle, advanced flow design and high precision metering. It applies to various materials and meet different market demands.

### Applications

Low to high viscosity adhesives, thermal conductive materials, sealing materials, etc.

**±1%**  
Metering Accuracy

One component  
Variable speed  
0.05 to 396cc

Two component  
Variable proportion  
100:100 ~ 100:10



## Applications

**One Component**

-  Automobile  
bodyshop / final assembly / painting / electric motor and controller / Transmission / engine
-  Automotive parts  
body / Sensors and electronic components / Lighting / Audio components
-  Photostatic junction box / Aluminum frame

**Two Components**

-  Wind energy  
blades, wind electric motor groove mouth
-  Car lighting
-  EV battery  
battery cell, Battery module, Battery pack, Battery tray
-  Automotive electronics
-  Photostatic junction box

**Features and Advantages**

-  High precision servo motor and independent development drive structure
-  First-in-first-out fluid path to ensure material time efficient
-  Structure modular design to easy installation and maintenance
-  Specific seal structure design and lubricant technology to decrease maintenance cost
-  Fluid simulation technology to optimize fluid path and improve efficiency.
-  DuraTec wear-resistance technology as optional to apply to high abrasive and filling material and extend lifetime
-  Adaptive control system to ensure higher precision metering.
-  Process detection: pressure detection, torque detection, position detection
-  Options: flow monitoring, heating function

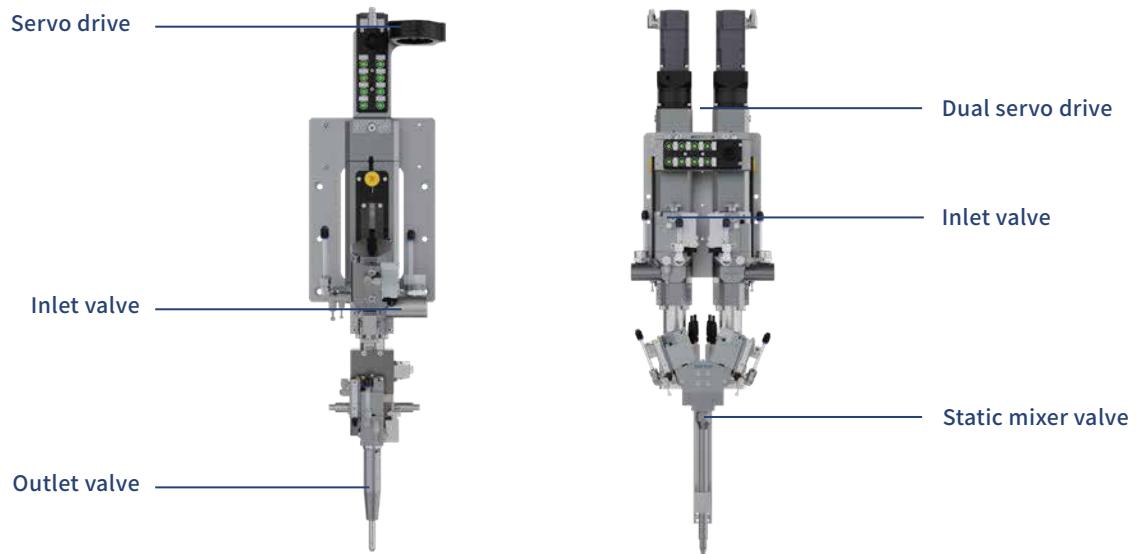
### Puflo(1C) Metering Technical Parameter

Model No	PF1ALS/L PF1AMS/L PF1AHS/L	PF1BLS/L PF1BMS/L PF1BHS/L	PF1CLS/L PF1CMS/L PF1CHS/L	PF1DLS/L PF1DMS/L PF1DHS/L	PF1ELS/L PF1EMS/L PF1EHS/L	PF1FLS/L PF1FMS/L PF1FHS/L	PF1GLS/L PF1GMS/L PF1GHS/L	PF1KLS/L PF1KMS/L PF1KHS/L	PF1HLS/L PF1HMS/L PF1HHS/L	PF1JLS/L PF1JMS/L PF1JHS/L
Metering Type	Plugger Pump	Plugger Pump	Plugger Pump	Piston Pump	Plugger Pump	Piston Pump	Plugger Pump	Piston Pump	Plugger Pump	Plugger Pump
Min.shotsize (ml)	0.25	0.5	1	1.5	3.55	3	6.28	7.95	14.14	16.58
Max.shotsize (ml)	4	8	18	24	63	86	175	214	396	447
Filling Time (s)	6 120,000- 170,000	6 120,000- 170,000	6 120,000- 170,000	8 120,000- 170,000	10 120,000- 170,000	10 120,000- 170,000	16 120,000- 170,000	16 120,000- 170,000	25 120,000- 170,000	25 120,000- 170,000
Flow Rate (ml/s)	0.05 - 1.0	0.1 - 2.0	0.2 - 4.0	0.3 - 6.0	0.7 - 10.0	1.45 - 14	1.25 - 17.5	1.55 - 24	2.8 - 30	3 - 35
Pressure Range (bar)	0 - 160	0 - 160	0 - 160	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200
Weight (kg) (without dispenser)	12	12	12	13	18	20	45	47	75	85

### Puflo(2C) Metering Technical Parameter

Metering Type	Plugger Pump	Plugger Pump	Plugger Pump	Piston Pump	Plugger Pump	Piston Pump	Plugger Pump	Piston Pump	Plugger Pump	Plugger Pump
Min.shotsize (ml)	0.5	1	2	3	7.1	6	12.56	15.9	28.28	33.16
Max.shotsize (ml)	8	16	36	48	126	172	350	428	792	894
100:100~100:10										
Filling Time (s)	6 120,000- 170,000	6 120,000- 170,000	6 120,000- 170,000	8 120,000- 170,000	10 120,000- 170,000	10 120,000- 170,000	16 120,000- 170,000	16 120,000- 170,000	25 120,000- 170,000	25 120,000- 170,000
Flow Rate (ml/s)	0.1 - 2	0.2 - 4.5	0.4 - 8	0.6 - 12.5	1.4 - 21	1.9 - 28	2.5 - 40	3.1 - 48	5.6 - 60	6 - 70
Pressure Range (bar)	0 - 160	0 - 160	0 - 160	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200
Weight (kg)	21	21	21	23	37.9	40	90	94	152	175

\*The table is applied to A and B same technical specification



## I Type Designation

PF 1 DML - CML

Product Catalog		Component		Volume		Viscosity		Lifecycle		Volume		Viscosity		Lifecycle							
Component1										Component2											
PF	Piston Dosner	1	1C	A	005	L	Low	S	Standard												
				B	010	M	Mid	L	Long life												
				C	020	H	High														
				D	030																
				E	070																
				F	100																
				G	180																
				H	420																
				J	500																
				K	240																
		2	2C	A	005	L	Low	S	Standard	A	005	L	Low	S	Standard						
				B	010	M	Mid	L	Long life	B	010	M	Mid	L	Long life						
				C	020	H	High			C	020	H	High								
				D	030					D	030										
				E	070					E	070										
				F	100					F	100										
				G	180					G	180										
				H	420					H	420										
				J	500					J	500										
				K	240					K	240										

## Miflo PROGRESSIVE CAVITY PUMP METERING SYSTEM

Centron Miflo progressive cavity pump metering is pulsation-free and endless metering.

It is mainly applied to micro dispensing, dosing and trickle impregnation, etc.

### Applications

Low to high viscosity adhesives, thermal conductive materials, sealing materials, Epoxies, etc.

±1  
%

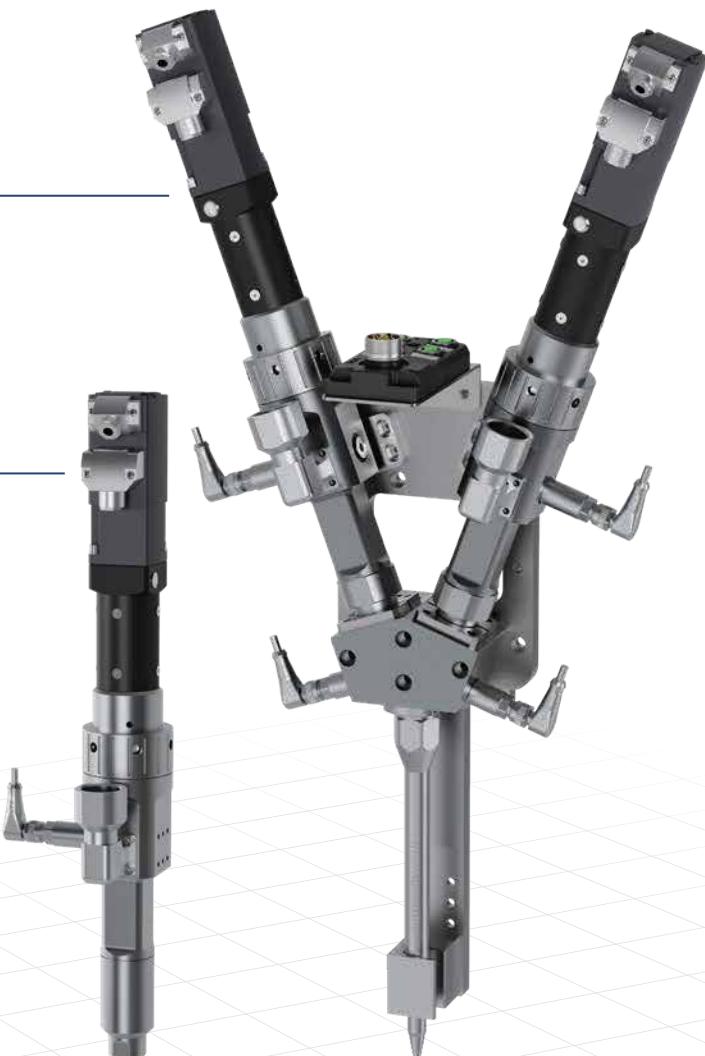
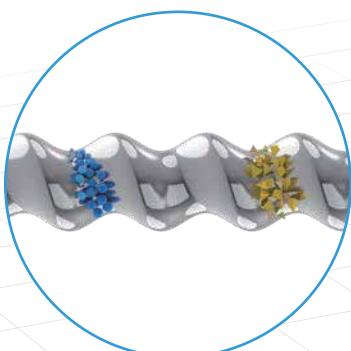
Metering  
Accuracy

Two component

Variable ratio

One component

Variable speed



Applications		Features and Advantages	
<b>One Component</b>			
 Automobile electric motor and controller		 Endless metering, pulsation-free material delivery, no shear force	
 Automotive parts Automotive intelligent seats / Sensors and electronic components / Lighting / Audio components / ABS case		 large particle materials	
 3C electronics LED / Push button on mobile side / Semiconductor chip / CPU and chips Screen and shell / Touch screen and LCD		 Advance structure design easy to installation and maintenance	
<b>Two Components</b>			
 EV battery battery cell / Battery module / Battery pack / Battery tray		 DuraTec wear-resistance technology as optional to apply to high abrasive and filling material and extend lifetime	
		 High wear-resistance and corrosion resistance stator material as option to extend life time	
		 Specific seal structure design and lubricant technology to decrease maintenance cost	
		 Fluid simulation technology to optimize fluid path and improve efficiency	
		 No welded and less pressure lost to achieve accurate metering precision	
		 Process detection: pressure detection, torque detection, position detection	
		 Options: heating function	

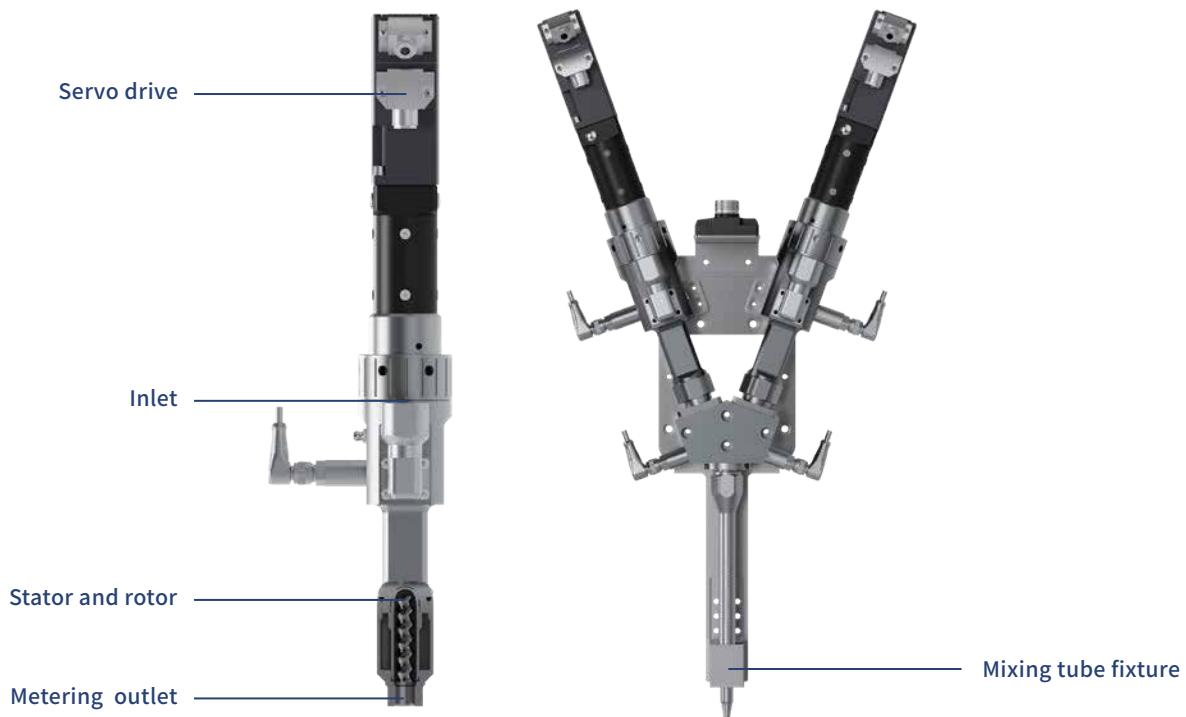
## Miflo (1C) Metering Technical Parameter

Model No	MF1AL1S/L	MF1BL1S/L	MF1CL1S/L	MF1DL1S/L	MF1EL1S/L
	MF1AL2S/L	MF1BL2S/L	MF1CL2S/L	MF1DL2S/L	MF1EL2S/L
Torque Nm	8	8	8	8	8
Max. volumeflow(ml/min)	17	47	137	225	650
Min. dispensing quantity (ml)	0.014	0.035	0.1	0.2	0.5
Measuring pressure (bar)	≤30	≤30	≤30	≤30	≤20
Inlet pressure (bar)	≤20	≤20	≤20	≤20	≤15
Dispensing Accurac (%)	±1	±1	±1	±1	±1
Speed (°C)	10-40	10-40	10-40	10-40	10-40
Working temperature(°C)	10-50	10-50	10-50	10-50	10-50
Max. RPM (r/min)	120	120	120	120	120

## Miflo (2C) Metering Technical Parameter

Model No		0.15	0.35	1	2	5
Max. volumeflow(ml/min)	0.14	32	56	130	244	586
Min. dispensing quantity (ml)		0.03	0.049	0.114	0.214	0.514
Max. volumeflow(ml/min)	0.35		80	154	268	610
Min. dispensing quantity (ml)			0.07	0.135	0.235	0.535
Max. volumeflow(ml/min)	1			228	342	684
Min. dispensing quantity (ml)				0.2	0.3	0.6
Max. volumeflow(ml/min)	2				456	798
Min. dispensing quantity (ml)					0.4	0.7
Max. volumeflow(ml/min)	5					1140
Min. dispensing quantity (ml)						1

\*The maximum and minimum flow rate is related to the mixing ration.  
for further parameters of two components, please refer to one component parameter.



### Type Designation



Product Catalog	Component	Volume Flow	Viscosity	Stator Material		Rotor Material	Volume Flow	Viscosity	Stator Material		Rotor Material	
				Component1					Component2			
MF	Progressive Cavity Pump Meter	1 1C	A	0.15	L	High	1	FFM	S	Std		
			B	0.35	M	Low	2	FFKM	L	Long life		
		2 2C	C	1								
			D	2								
			E	5								
			A	0.15	1	FFM	S	Std	A	0.15		
			B	0.35	2	FFKM	L	Long life	B	0.35		
			C	1					C	1		
			D	2					D	2		
			E	5					E	3		

## Enflo ENDLESS METERING SYSTEM

Centron Enflo is endless metering type without filling time to enhance production efficiency.

### Applications

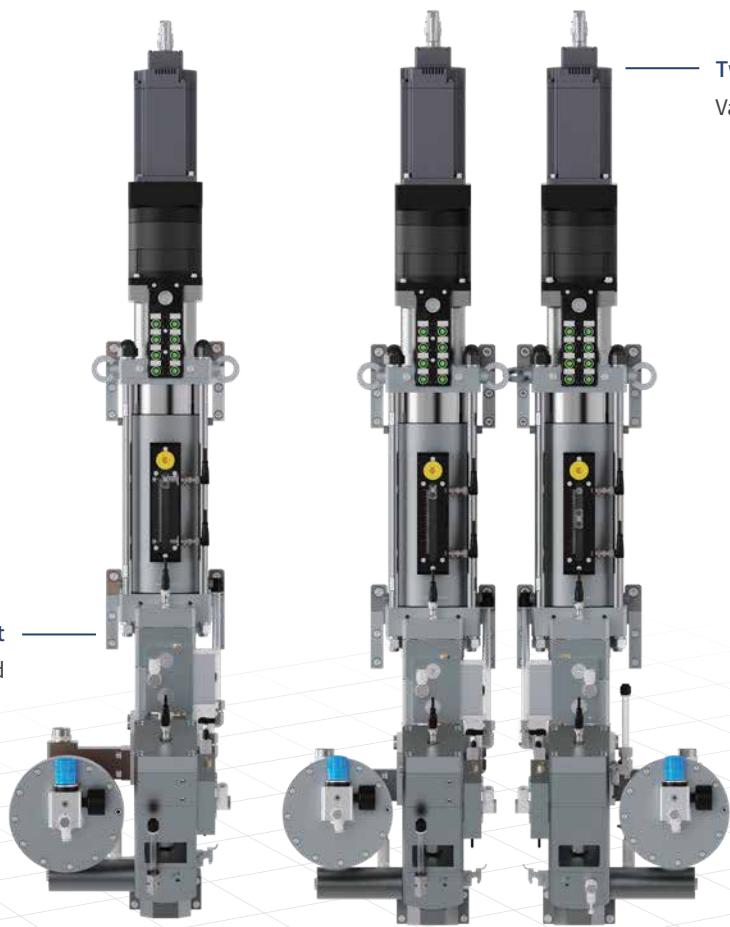
Low to high viscosity adhesives, thermal conductive materials, sealing materials, Epoxies, etc.

**±3%**

Metering  
Accuracy

One component  
Variable speed

Two component  
Variable ratio



\*Metering accuracy ±3% when metering system and dispensing module integrated only.

Applications	Features and Advantages
<p><b>One Component</b></p> <p> Automobile bodyshop / final assembly</p> <p> Photostatic junction box / aluminate</p>	 High precision servo motor and independent development drive structure
<p><b>Two Components</b></p> <p> EV battery battery cell, Battery module / Battery pack / Battery tray</p>	 Structure modular design to easy installation and maintenance
	 Specific seal structure design and lubricant technology to decrease maintenance cost

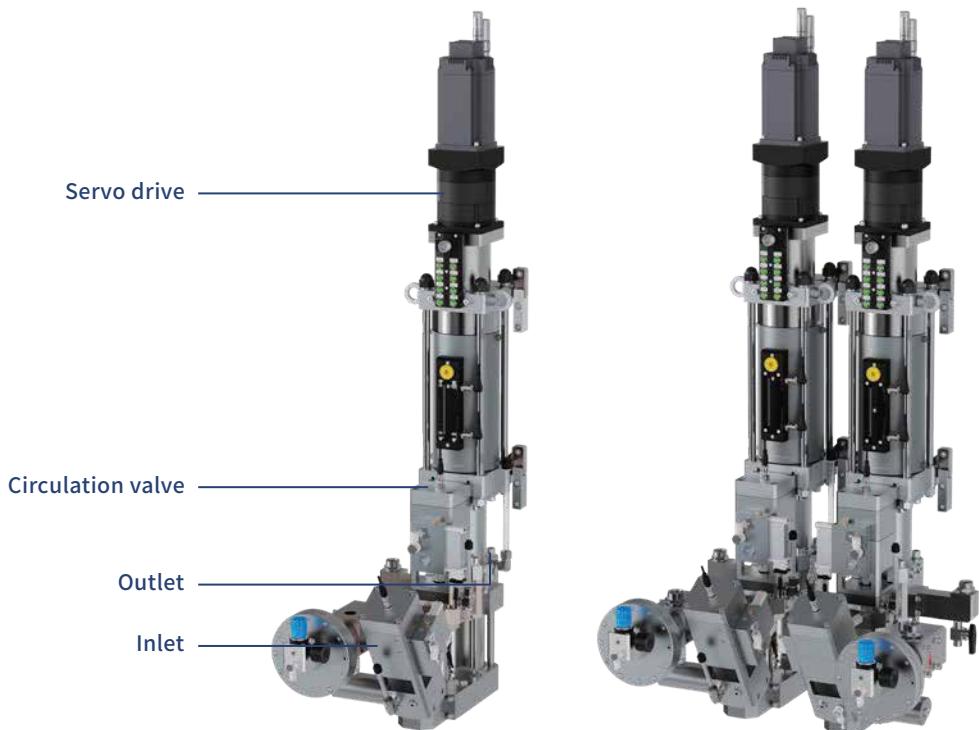
## Enflo (1C) Metering Technical Parameter

Metering Type	Piston Pump Endless Metering				
Capacity	40	60	80	120	160
Min. shot size (ml)	0.7	1.4	2.1	2.8	4.2
Speed (ml/s)	0.27-5.4	0.4-0.8	0.5-10.0	0.8-16.0	1.1-21.5
Pressure Range (bar)	Inlet Pressure:0-120 ; Metering Pressure:0-200				
Dispensing Accuracy	±3%				
Life Cycle	Std/Long Life				

## Enflo (2C) Metering Technical Parameter

Metering Type	Piston Pump Endless Metering				
Capacity	80	120	160	240	320
Min. shot size (ml)	1.4	2.8	4.2	5.6	8.4
Speed (ml/s)	0.54-10.8	0.8-16	1-25.0	1.6-32	2.2-43.0
Pressure Range (bar)	Inlet Pressure:0-120 ; Metering Pressure:0-200				
Adjustable Proportion	100:100 ~ 100:10				
Dispensing Accuracy	±3%				

\*Options: flow monitoring, heating function.



### Type Designation

EF 1 B M L - D M L 2 C

Product Catalog		Component		Volume		Viscosity		Lifecycle		Volume		Viscosity		Lifecycle							
		Component1								Component2											
EF	Continuous Meter	1	1C	A	40	L	Low	S	Std												
				B	60	M	Mid	L	Long life												
				C	80	H	High														
				D	120																
				E	160																
		2	2C	A	40	L	Low	S	Std	A	40	L	Low	S	Std						
				B	60	M	Mid	L	Long life	B	60	M	Mid	L	Long life						
				C	80	H	High			C	80	H	High								
				D	120					D	120										
				E	160					E	160										

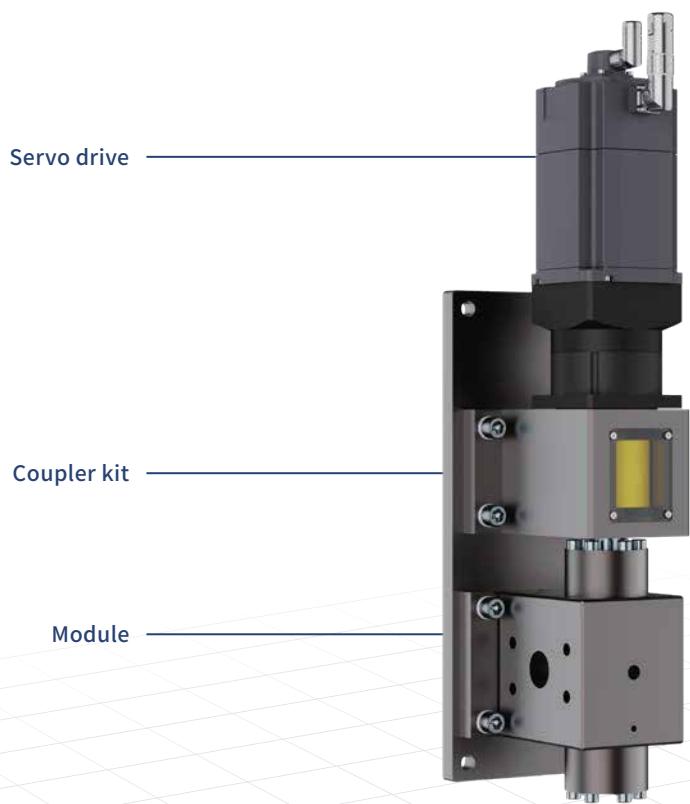
## Cyflo GEAR METERING SYSTEM

Centron Cyflo is high precision servo motor control gear endless metering which achieves accurate dosing in high flow and high viscosity application.



### Applications

Low to high viscosity adhesives, sealing materials, etc.





## | Applications

Automotive final assembly

Photostatic

Automotive painting

Electric motor and controller

## | Features and Advantages

Stable accuracy dispensing in high flow rate

quick start-stop response to reduce material waste

Advanced structure design to easy installation and maintenance

Servo motor control, high precision dispensing

Cyflo Gear Metering Technology Parameter					
Model No	CF1ALS/L CF1AMS/L CF1AHS/L	CF1BLS/L CF1BMS/L CF1BHS/L	CF1CLS/L CF1CMS/L CF1CHS/L	CF1DLS/L CF1DMS/L CF1DHS/L	CF1ELS/L CF1EMS/L CF1EHS/L
Displacement (cc/rev)	10	20	30	50	70
Viscosity Cps			20,000—3,000,000		
Inlet Pressure (bar)			200		
Outlet Pressure (bar)			280		
Max Flow Rate (ml/s)	8	16	24	40	56
Servo Drive Power (W)	400	750	1500	2000	3000
Inlet Dimension (G)	3/4"	1"	1"1/4"	1"1/2"	1"1/2"
Outlet Dimension (G)	1/2"	3/4"	1"	1"1/4"	1"1/4"

## Type Designation

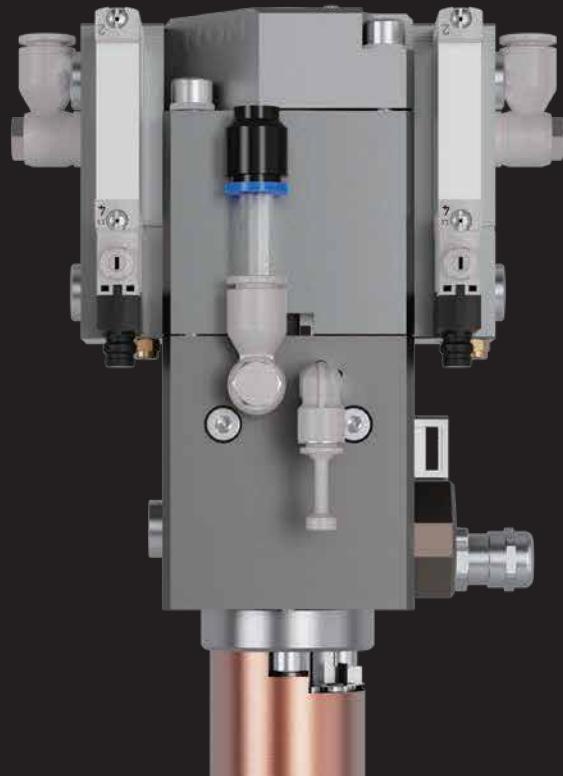
**CF 1 C L S**

Product Catalog		Component		Volume Flow		Viscosity		Lifecycle	
CF	Gear Meter	1	1C	A	10	L	Low	S	Std
				B	20	M	Mid	L	Long life
				C	30	H	High		
				D	50				
				E	70				



# APPLICATORS AND DISPENSE VALVES

03



## APPLICATORS AND DISPENSE VALVES

Centron dispensing module offers reliable, durable and different seal type to meet different requirements of dispensing applications.

### One Component Applicator



**Bodyshop Applicator**

For bodyshop application

**Stitchbead Applicator**

For sealing application

## Mix Valve



## Features and Advantages



Different seal type to meet different requirement, enhance dispensing quality



Innovative structure design to reduce material waste



Reduce maintenance cost, extend lifetime



Mechanical positioning easy to maintenance



Wear-resistance thimble to extend lifetime



Max working pressure up to 350bar

## One Component Applicator

Work Type	Thimble	Suction	Thimble
Flow Rate (ml/s)	0.4-4	1-7	2-35
Pressure Range (bar)	0-350	0-250	0-250
Applicable Viscosity(cps)	100-2,000,000		
Life Cycle	Std/Long Life		

## Two Component Mixing Valve

Work Type	Thimble	Suction	Thimble	Thimble
Pressure Range (bar)	0-250	0-250	0-250	0-250
Wide (ml/s)	0.5-10.0	0.5-18.0	0.5-23.0	1.0-72.0
Applicable Viscosity(cps)	100-2,000,000			
Life Cycle	Std/Long Life			
Applicable Proportion	100:10		100:100	

## Type Designation

V 1 T 3 08 S 0

Product Catalog	Component	Type	Cylinder Diameter	Top Pin Pull Rod Size	Lifecycle	Heating
V Applicator	1 1C	T Thimble	3 32mm	04 4mm	S Std	0 Not Heated
	2 2C	S Suction	4 40mm	06 6mm	L Long Life	1 Heated
			5 50mm	08 8mm		
			6 60mm	10 10mm		
			8 80mm	15 15mm		

## WIDE APPLICATOR

Wide Applicator Parameter

MODULE NO	Model No (mm)	Material
VW050P	50	Plastic
VW022M	22	Mental
VW052S	25	SUS304
VW030S	30	SUS304
VW040S	40	SUS304
VW050S	50	SUS304
VW055S	55	SUS304
VW065S	65	SUS304
VW070S	70	SUS304
VW110S	110	SUS304



### Type Designation

**VW 09 M**

Product Catalog		Width		Material	
VW	Wide Applicator	020	20mm	P	Plastic
		030	30mm	M	Metal
		040	40mm	S	St.St
		050	50mm		
		060	60mm		
		070	70mm		
		080	80mm		
		090	90mm		
		100	100mm		
		110	110mm		

## NEEDLE

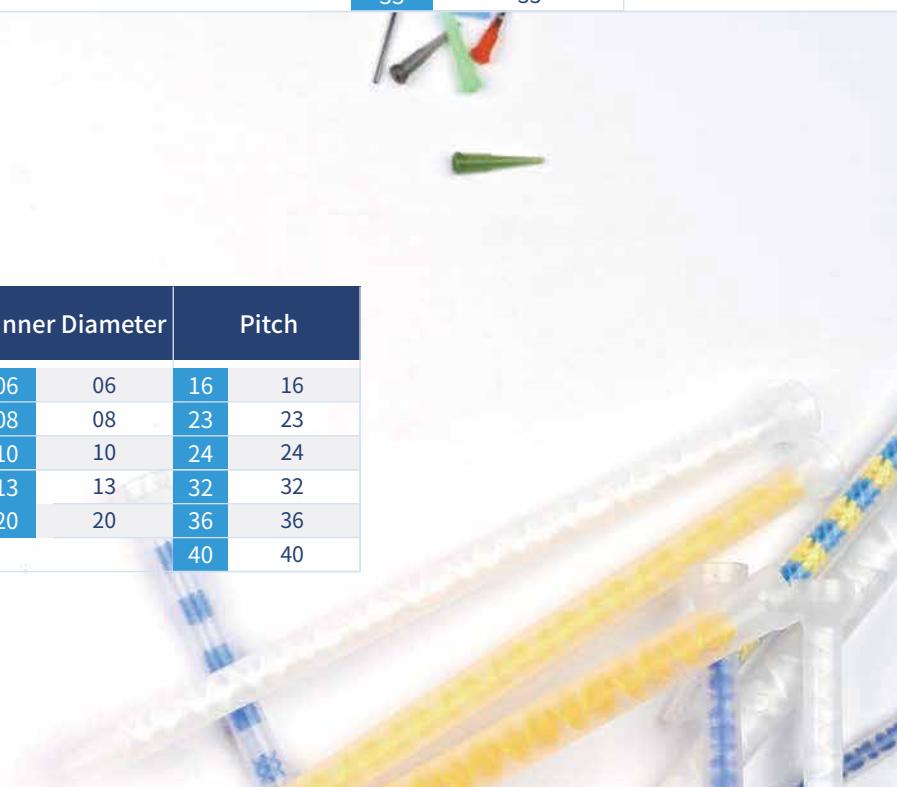
N A 13 15

Product Catalog		Type		Width		Inch	
N	Needle	A	Plastic Needle	08	08	05	0.5
		B	Plastic Needle+st.st. tube	09	09	10	1
		C	St.st	10	10	15	1.5
				11	11	20	2
				12	12	25	2.5
				13	13	30	3
				14	14	35	3.5
				15	15	40	4
				16	16	45	4.5
				17	17	50	5
				18	18		
				19	19		
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				28	28		
				29	29		
				30	30		
				31	31		
				32	32		
				33	33		

## STATIC MIXER

MT 06 24

Product Catalog		Inner Diameter		Pitch	
MT	Static Mix Tube	06	06	16	16
		08	08	23	23
		10	10	24	24
		13	13	32	32
		20	20	36	36
				40	40



# CS2000 CONTROL SYSTEM



## CS2000 CONTROL SYSTEM

### High production efficiency and easy-to-use professional adhesive dispensing control system

New generation CS2000 control system offers an innovative design, high performance and cost-effective system to enhance customer production efficiency and competitive and reduce new product go-to-market time. CS2000 control system provides a strong guarantee for the sustainable development.



#### Enhance production efficiency

1ms work cycle as low as  
Shot response time



#### Good compatibility

flexible for industry common  
buses such as PROFINET, Ether-  
CAT, EtherNet/IP, CC-Link



#### Enhance production quality

High precision metering  
Stable beads  
Difficult dispensing processes



#### Reduce maintenance cost

Standardized program  
sustainable iteration



#### Simple operation

10" inch high resolution color touch  
screen  
user interface easy and simply to  
operate



#### Data management

Multiple key work parameter  
upload, such as work pressure,  
volume, temperature, etc



#### Self-adaptation control

Self-learning of adhesive viscosity  
change during operation, self-ad-  
aptation adjustment of metering  
parameter, maintain equipment  
accuracy

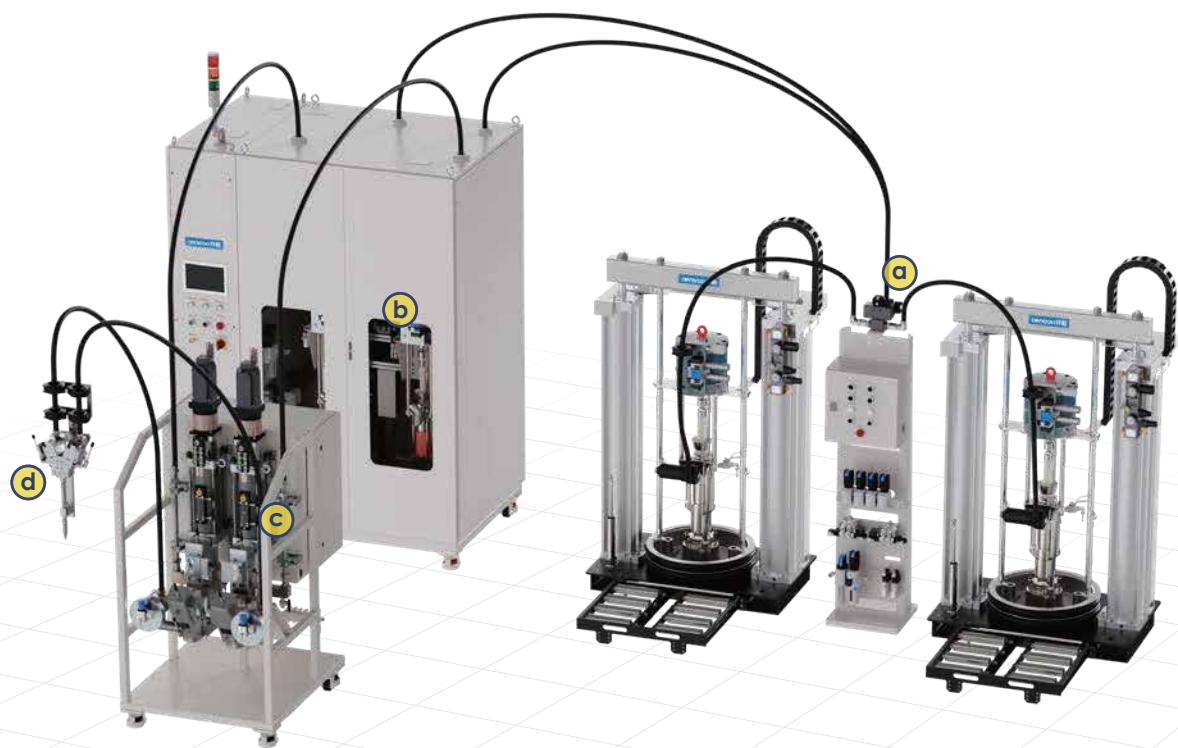
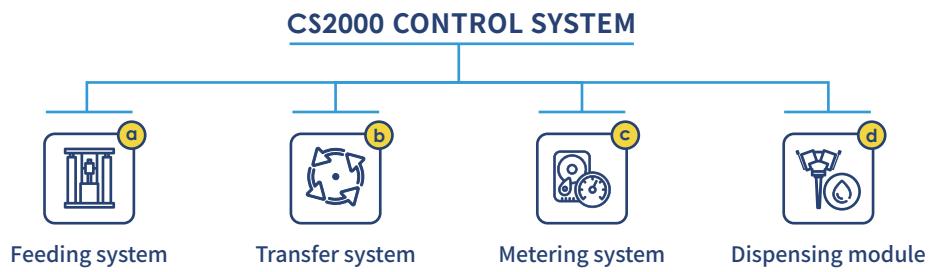


#### Authority management

Multiple authority management  
Multiple method for log-on:  
password, ID card (optional)

<b>CS2000-PF</b>	PF Puflo Piston Metering Control System
<b>CS2000-EF</b>	EF Enflo Continuous Metering Control System
<b>CS2000-SD</b>	Single Servo Dual Components Metering Control System
<b>CS2000-UV</b>	UV Universal Dispensing Control System (Automobile)
<b>CS2000-MF</b>	MF Miflo Progressive Cavity Metering Control System

**Independent Research  
and Development**  
**Strong Performance**  
**Meet Your Different**  
**Application Requirements**



## High Performance

Program scan period as low as 1ms  
Reduce response time, enhance production efficiency  
Less program scan period to enhance bead stability



Program scan cycle  
As low as

1 ms

## High Compatibility

Flexible for various industry buses



4 Industry buses

PROFINET®

CC-Link

EtherNet/IP®

EtherCAT®

## High Flexible

Support up to 255 independent formulas  
Different products integrated heating control and support up to 36 ways



Available independent formula up to

**255**



Integrated heating control up to

**36** ways

1	Air-cooled box	2	Air-cooled box	3	Air-cooled box	4	Air-cooled box
Volume	10.00	Volume	10.00	Volume	10.00	Volume	10.00
Flow rate	05.00						
5	Air-cooled box	6	Air-cooled box	7	Air-cooled box	8	Air-cooled box
Volume	10.00	Volume	10.00	Volume	10.00	Volume	10.00
Flow rate	05.00						

## User Interface Features

Graphic interface to easy use  
Each system partitioned shown and status at a glance

**Menu Bar**

**Equipment Status**  
Quickly Know Well Equipments Status

**Pump Color Indicates Different States**

- Green: normal
- Gray: not enable
- Yellow: material replacement Notification
- Red: fault/material shortage

**Graphics and Text Mixed**  
Clear and Concise

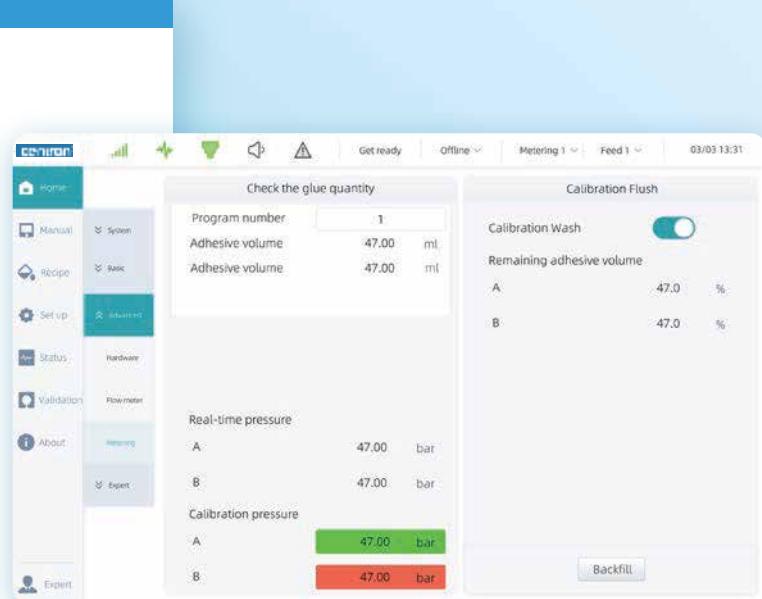


## Intelligent Function

Intelligent pre-loading: Rapidly Set up the working pressure to reduce dispensing CT;

Intelligent re-fill: automatically adjust the refill process to reduce evacuation probability

Intelligent calibration: high speed and high accuracy for calibration work, easy to operation;

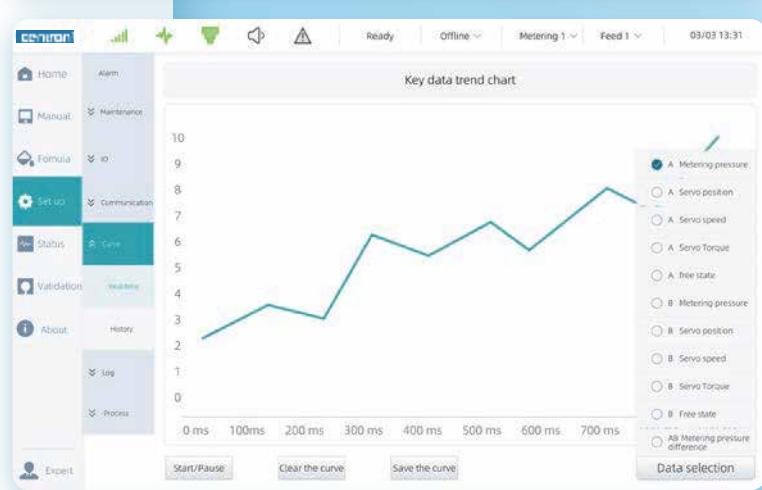


## Real-time Curve

Real-time key data trend curve, easy to locate trouble.

Data option: metering pressure, servo drive status, etc

Available for curve saving and forwarding, easy to remote support and trouble review and summary



## Life Time Monitoring

Life time monitoring for key wearing parts. System automatic maintenance alarm when product towards the end of its lifetime to reduce unscheduled downtime.

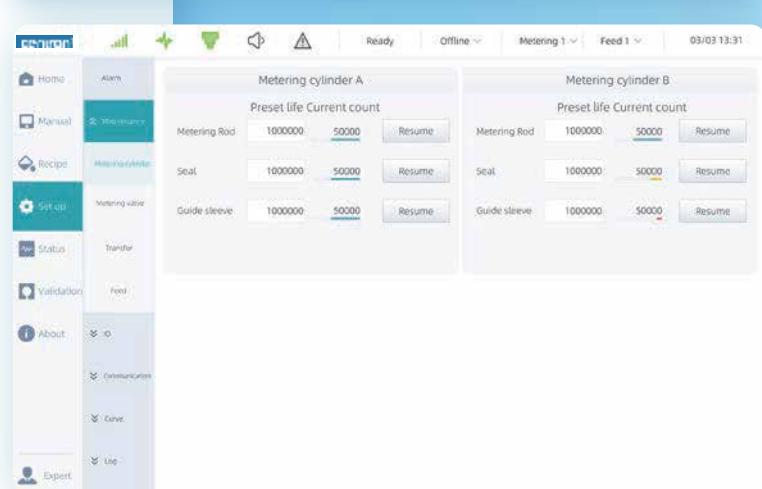
Maintenance reminder ratio setting

Progress bar color shows different life time:

Blue: full life time

Yellow: purchase new parts reminder

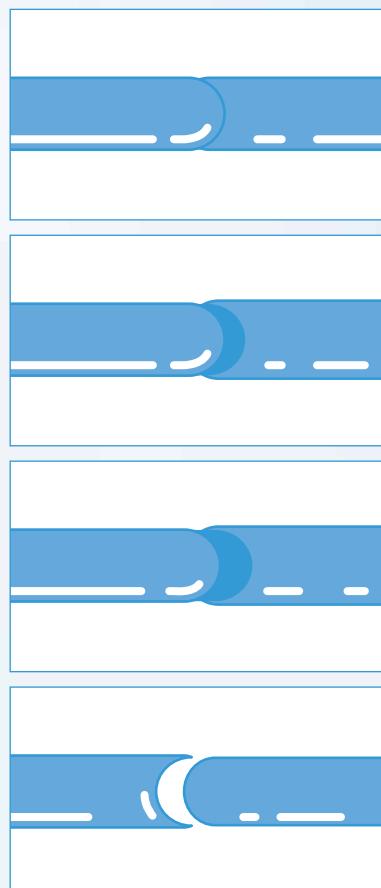
Red: end of its life time soon



## Bubble Monitoring

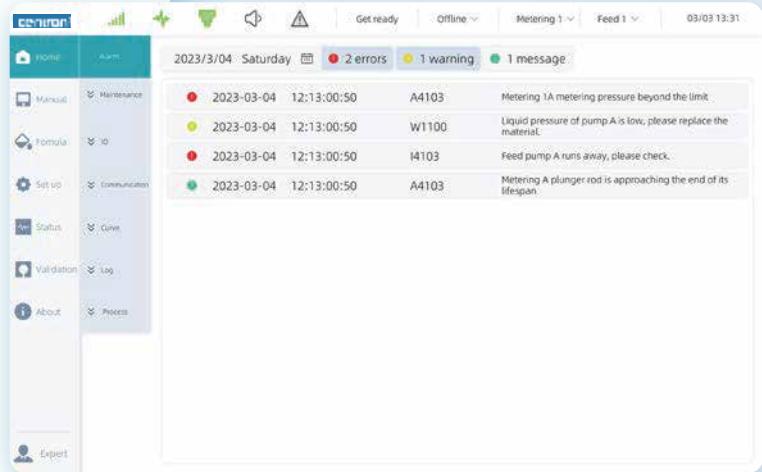
- Monitor bubble in metering system, automatically exhaust air when bubbler in fluid to prevent bead broken.
- One of challenge for adhesive dispensing is to monitor air in system or during dispensing.
- It hardly finds air or bubbles with naked eye so beads will have serious problems if things go on like this.
- Please see 4 types problem:

Type 1
i. Bead connected ii. Surface covered iii. Almost no gap
Type 2
i. Bead connected ii. Surface covered iii. Easy to find gap
Type 3
i. Bead connected not close ii. Surface covered iii. Easy to find gap
Type 4
i. Bead not connected ii. Surface not covered iii. obvious gap



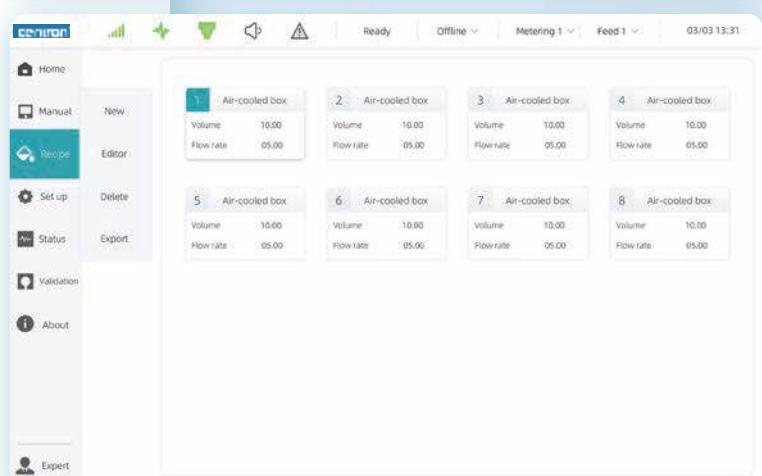
## Commissioning and Troubleshoot Information

Clear text troubleshoot information reduce shutdown/troubleshooting time



## Innovative Storage Solution

Parameter, process data, alarms is independently saved and available to separate back-up.



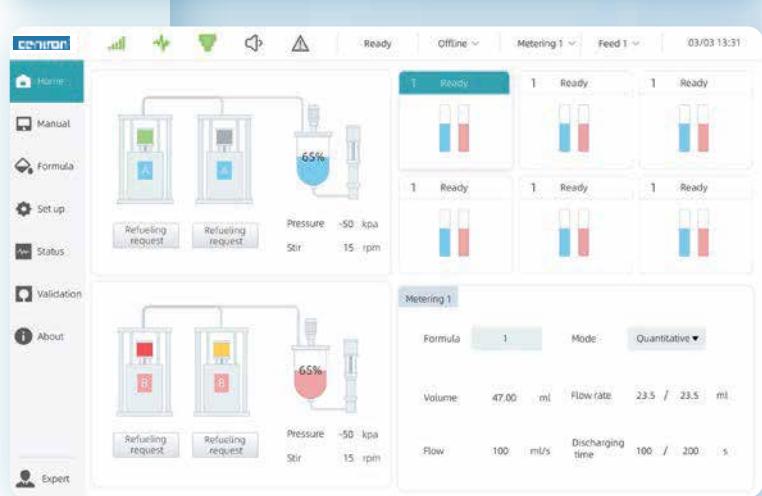
## Optimized Troubleshoot

Graphical interface, different color shows different status to easily locate trouble position

Modular status overview to quickly locate trouble modular;

Trouble history list to review all trouble information

\*different motor color shows different pump status



# TRANSFER SYSTEM

# 05



## TRANSFER SYSTEM

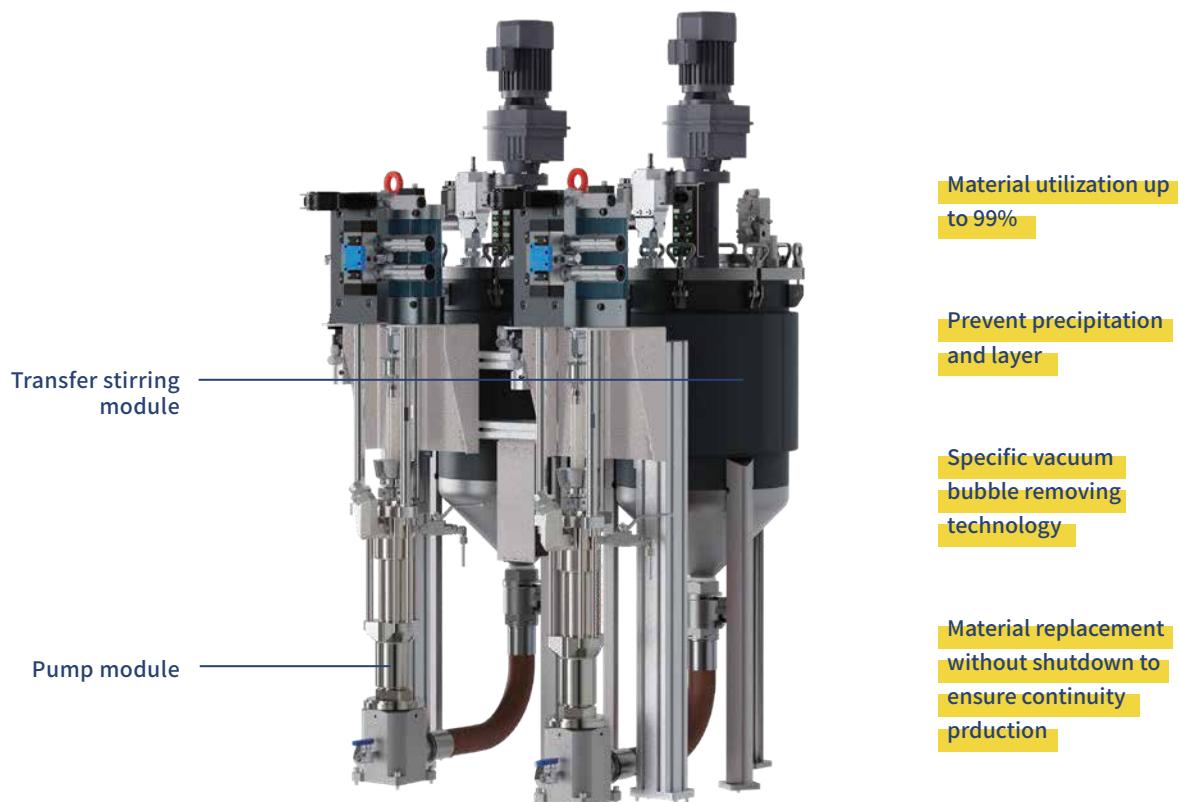
Centron transfer system provides material pretreatment in order to delivery more stable material, enhance metering system stability and enable convenient replacement of material barrels, without disrupting production.

### Applications

Mainly for two component high viscosity and thixotropy adhesive which is easy precipitation and layer, need heating and remove bubble.



\*It can be integrated with feeding system in one cabinet.



Technical Parameter			
Viscosity (cps)	AB High Viscosity A:20,000-500,000 B:20,000-500,000	A High Viscosity B Low Viscosity A:20,000-500,000 B:100-10,000	AB Low Viscosity A:100-10,000 B:100-10,000
Transfer barrel	Tank Size	30L 45L 60L	
	Tank Material	SUS304stainless steel, internal polished, external nanocoating	
	Stirring Method	Electric stirring, RPM 5-30R/min, frequency conversion, speed detection	
	Liquid Level Detection	Online liquid level sensor	
	Nitrogen Protective	Nitrogen port and control	
	Function	Vacuum, pressure detection	
	Transfer Station	Diaphragm Pump;Plugger Pump;2-ball Pump	

## | Type Designation

TS A 6 6 S

Product Catalog		Type		A Volume		B Volume		Machine Cabinet	
TS	Transfer Station	A	AB High Viscosity	3	30	3	30	S	Single Cabinet
		B	AB Low Viscosity (with vacuum pump)	4	45	4	45	C	Complex Cabinet
		C	A High Viscosity, B Low Viscosity	6	60	6	60		

# FLUID PRESSURE REGULATORS

06



## FLUID PRESSURE REGULATORS

Pressure regulator is to adjust optimal working pressure of material from pump and make fluid smooth flow.



pneumatic



mechanical

Technical Parameter				
Model No	Control Type	Viscosity (cps)	Inlet Pressure (bar)	Outlet Pressure (bar)
PRM2BC	Mechanical	50,000-2,000,000	250	15~150
PRM2CC	Mechanical	50,000-2,000,000	50	5~15
PRM4AC	Mechanical	50,000-2,000,000	400	28~310
PRP4AC	Pneumonia	50,000-2,000,000	400	28~310
PRP2CC	Pneumonia	50,000-2,000,000	50	5~15

## Type Designation

PR M 2 A C

Product Catalog		Type		Flow		Pressure Regulating		Material	
PR	Pressure Regulator	M	Mechanical	2	G1/2 Flow Gate	A	High Pressure 28-310bar	C	Carbon Steel
		P	Pneumatic	4	G3/4 Flow Gate	B	Mid Pressure 15-150bar	S	St.St.
						C	Low Pressure 5-15bar		
						D	Low Pressure 5-20bar		

# ANNEX

FLOWMETER  
HOSE



07

## FLOWMETER

Centron offers multiple flowmeter to meet different requirements.

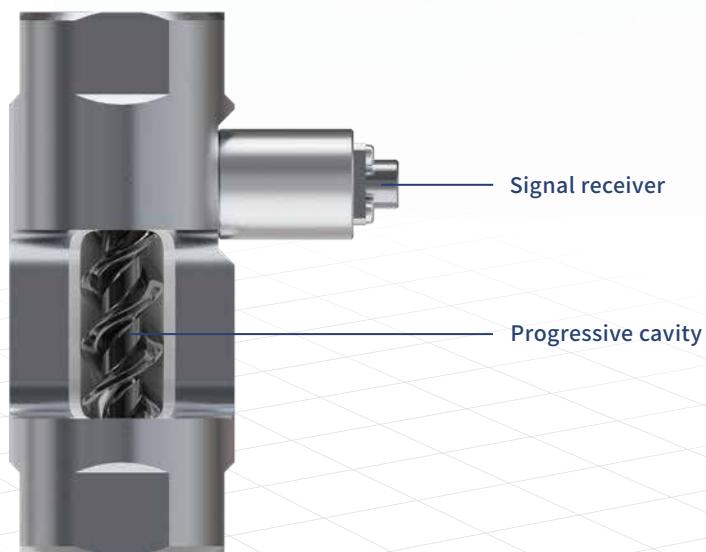
Flowmeter measures the fluid flow of hose to make whole system more precision operate. It is able to measure instantaneous flow rate as well as the total amount of fluid in a certain period time.

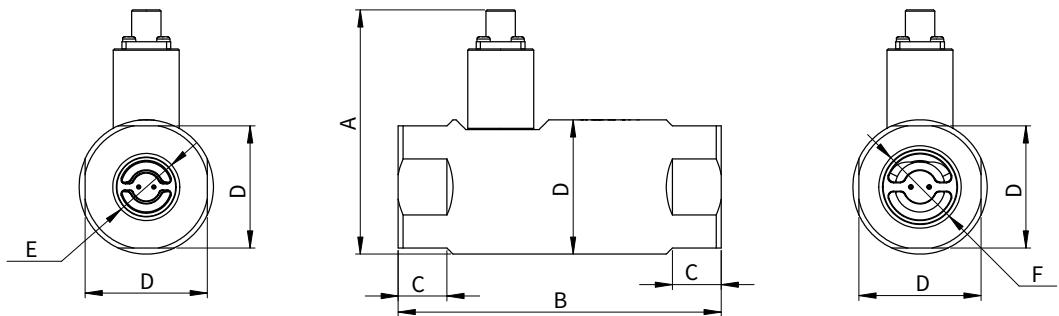
### Application Area

- Thermal conductive materials
- Thermal conductive structure adhesive
- Adhesive with glass microbeads/abrasive

### Features

- One component flowmeter
- Low pressure loss of inlet
- Apply to big particle filling material
- Simple K coefficient calibration
- No obstruction during flow monitoring





	A	B	C	D	E	F
FM1V020	100mm	132mm	20mm	50mm	G1inlet	G1outlet

Technical Parameter	
Model No	FM1V020
Range	1.0~20ml/s
Repeatability	±5%
Progressive Cavity Type	about 3ml/r
Pulse Resolution	1280 pulse/r
Max Pressure	3000psi
Viscosity	25,000-1,000,000cps
Interface Type	Inlet: G1 Outlet: G1"
Material	Stainless Steel
Weight	2kg
Fluid Type	Urethanes, Epoxies, Organosilicon, Acrylics
Recommended Maintenance	One Calibration per Month
Pulse Number	1280 pulse/r
Power Supple	DC 24V
Current	< 50mA
Power Supply Protection	Reverse Protection Function
Environment Temperature	0°C - 60°C
Storage and Transportation	0°C - 60°C
Electrical Connector	5 Cores Male Type A
Output Circuit Type	A/B Phase Pulse
Short-circuit Protection	Yes
Output Current Limit	15mA
Low Level Output Voltage	<1V
High Level Output Voltage	>21V

### Type Designation

**FM 2V 100**

Product Catalog		Type		Volume
FM	Flow Meter	GE	Gear	002
				004
				010
		1V	Single Screw Flow Meter	020
				020
		2V	Double Screw Flow Meter	040
				100
				200
		DP	Different Pressure	

## HOSE

## Type Designation

H T 10 M

Product Catalog		Material		Diameter		Pressure (psi)	
H	Hose	T	Teflon	08	DN08	M	3000
		N	Nylon	10	DN10	H	5000
		W	Teflon Insulation Hose	12	DN12		
		H	Teflon Heating Hose	16	DN16		
				20	DN19		
				25	DN25		
				32	DN32		
				40	DN40		





centron存融