

# Motorized Sampling Hand Pump

Electric Sampling Pump

Lubrication Plus®  
**QUMENSUS**



Lubrication Plus®  
**SOLGE**

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## Electric Sampling Pump

### summary

Oil sampling is the most important in analysis. In order to increase the reliability of data, uniformity and representativeness should be maintained, and contamination should be protected from airborne.

For accurate sampling,

1. Sampling Location: location, quantity (representativeness, persistence)
2. Sampling Procedure: Standardized so that all team members perform the same at any time
3. Sampling Device: It should not disturb the quality of the sample, and it should be easy to use, clean and economical.
4. Sampling Bottle: The shape and cleanliness are very important.
5. Sampling at least 30 minutes after operation (Enough stirring effect needed)
6. In case of sampling when the equipment is stopped, it is carried out immediately after the equipment is stopped.

### Factors Affecting the Quality of Oil Analysis Data

Test	Influencing Area or Activity					
	Proper Sample Location	Clean Sample Containers	Proper Agitation	Regular Instrument Calibration	Test Procedure Precision	Skill of Lab Technician
Particle Count	■	■	■	■	●	●
Moisture Contamination (KF)	●	✗	■	●	■	■
Viscosity (D445)	✗	✗	✗	●	●	▼
AN/BN	▼	✗	▼	●	■	■
Elemental Analysis	●	●	●	■	●	●
Ferrous Density	■	▼	■	■	●	●
Analytical Ferrography	■	●	■	✗	▼	■
Patch Test	■	●	■	✗	▼	●
Fuel Dilution (Flash)	▼	✗	✗	●	●	●
Glycol (Reagent Method)	▼	▼	▼	✗	■	●
FTIR	▼	●	▼	■	■	■

■ Highly Important ● Important ▼ Minor Importance ✗ No Effect

### Features

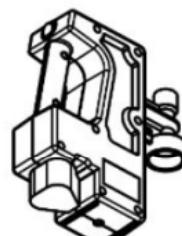
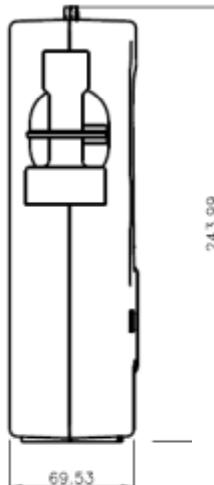
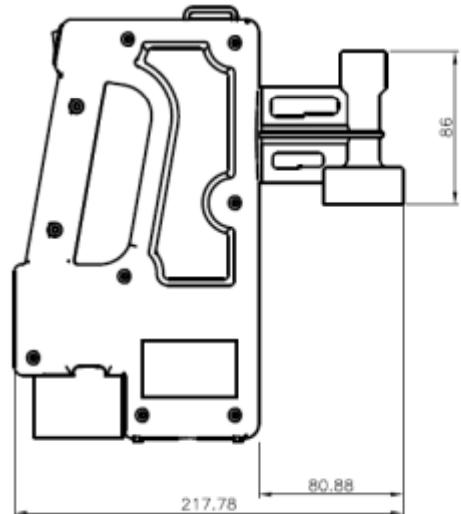
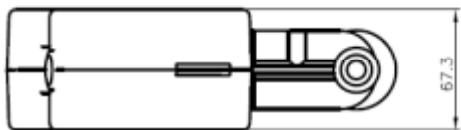
- Oil extraction by applying a certain vacuum in the container with an automatic vacuum pump
- Convenient sampling compared to manual type
- Sturdy and one-handed grip
- Adopts standardized clamping standards for clean vacuum sample bottles
- One-touch operation switch
- Sample collection possible without external contamination

# Motorized Sampling Hand Pump

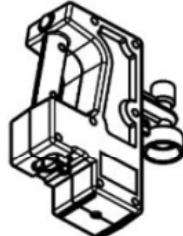
## Electric Sampling Pump

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Branded by **SOLGE**

### Specification



Installed Battery



Uninstalled Battery

# Sample Bottle

## Sample bottle for lubricant analysis



### Summary

More than 80% of industrial equipment failures are lubrication-related failures, and most of the causes of lubrication-related failures are contamination (particles, moisture).

It should be possible to monitor and control the causes of these failures through used oil analysis, but most companies ignore the sample bottle for oil analysis that must be used to derive accurate lubricant analysis results and errors caused by using a non-exclusive sample bottle (capacity, cleanliness) are being overlooked.

Expensive oil analysis equipment is important, but for accurate oil analysis, the first is to use a dedicated sample bottle for oil analysis.

### Features and composition

- ✓ Complete exclusion of oil confounders  
Super Clean level cleanliness (10 pieces/ml)
- ✓ Robust appearance  
Prevents distortion when using a vacuum pump
- ✓ clear sample bottle
- Oil color can be visually checked
- ✓ high temperature use  
Conventional PET bottles are dented at high temperatures
- ✓ ABS material used  
Excellent heat resistance and durability
- ✓ Various options available  
Sampling Probes, Sampling Pumps, Sampling Vessels

### Specification

P/N	SSCSB150	SSCSB500
Diameter (mm)	50	73
Height (mm)	106	155
Volume (ml)	150	500
Connection (mm)		38
Material		ABS
Operating temperature		0 ~ 80

## 2. Basic Information:

Item	Specification
Size	(W) 216 mm x (D) 67.5 mm x (H) 243 mm
Weight	700g / 875g (including battery)
Power	Rechargeable Battery (Removable)
Battery Charger	12.6 VDC 1A (Input Power : 100~240V), 50/60 Hz. 1.5 A
Battery Capacity	11.1V, 2500 mAh, 27.75Wh
Charging hours	Below 3.5 hours, in case that battery was fully discharged
Battery Life	3 hours (Continuous use under no load)
Operating Temperature (°C)	Ambient: 75°C Fluid : Non-contact, variable depending on the sample bottle
Applicable Viscosity (cSt)	1 cSt ~ above 680cSt (However, it is variable depending on the oil temperature, etc.)
Pumping Capacity	100 ml / 2~4 sec at 32cSt @40°C (Different depending on the viscosity and temperature of the fluid.)
Neck size of the bottle to be assembled	Ø38(mm) (Other sizes require a separate adapter)
Tube Mounting Specifications	OD Ø8 ~ Ø10 mm
Material	Body : ABS Bottle Joint : PA6

## 3. Bottle neck size (Standard Size) // Ask adaptor for the different size



#### 4. Ez-SAM Operation



Before operation, complete set as a picture. Decide tube size and length. .



Press on and off button for vacuum and stop.

\*\*\*\*Important: Do Not handle EZ-SAM to up and down position or side position. Prefer to stand as a picture. Liquid might go over into device to damage motor.

## Ez-SAM Packing

### 1. Compete set

- Standard package - Ez-SAM

Include Ez-SAM 1ea, Battery 1ea, Battery Charger 1ea, Strap 1ea,



- Standard package - Ez-SAM with extra battery



# Sampling Tools

## Pitot Tube, Minimess, Multi-Lube Adaptor

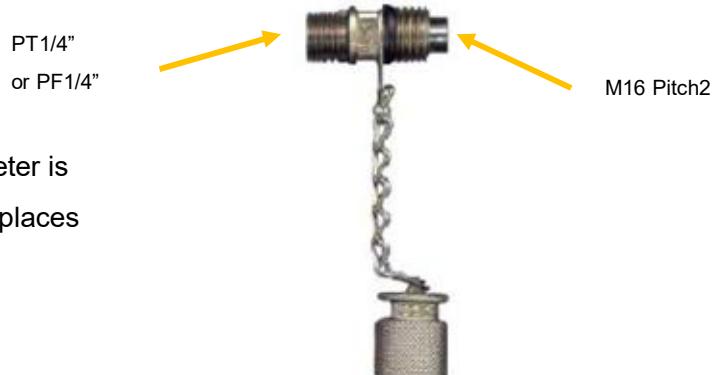
### ■ Sampling Pitot Tube (SUS316)



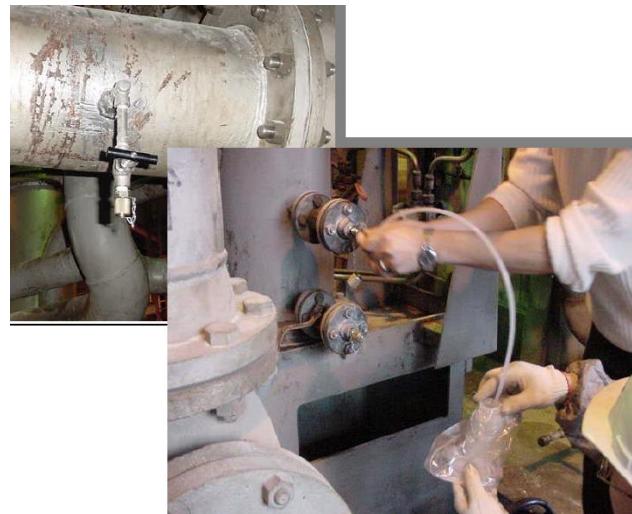
- Minimess connection: PT 1/4" or PF1/4"
- Tube: 8 mm - based on outer diameter
- Material: SUS316
- Tube length: produced based on 30cm

### ■ Sampling Port SUS304 or galvanized steel)

- 3.4 mm for low viscosity (up to 68 cSt)
- 10mm for high viscosity (over 100cSt)
- (For high viscosity applications, the hole inner diameter is larger and is suitable for high viscosity lubricants or places without pressure)



### ■ Sampling Tool Bag - Refer to separate catalog

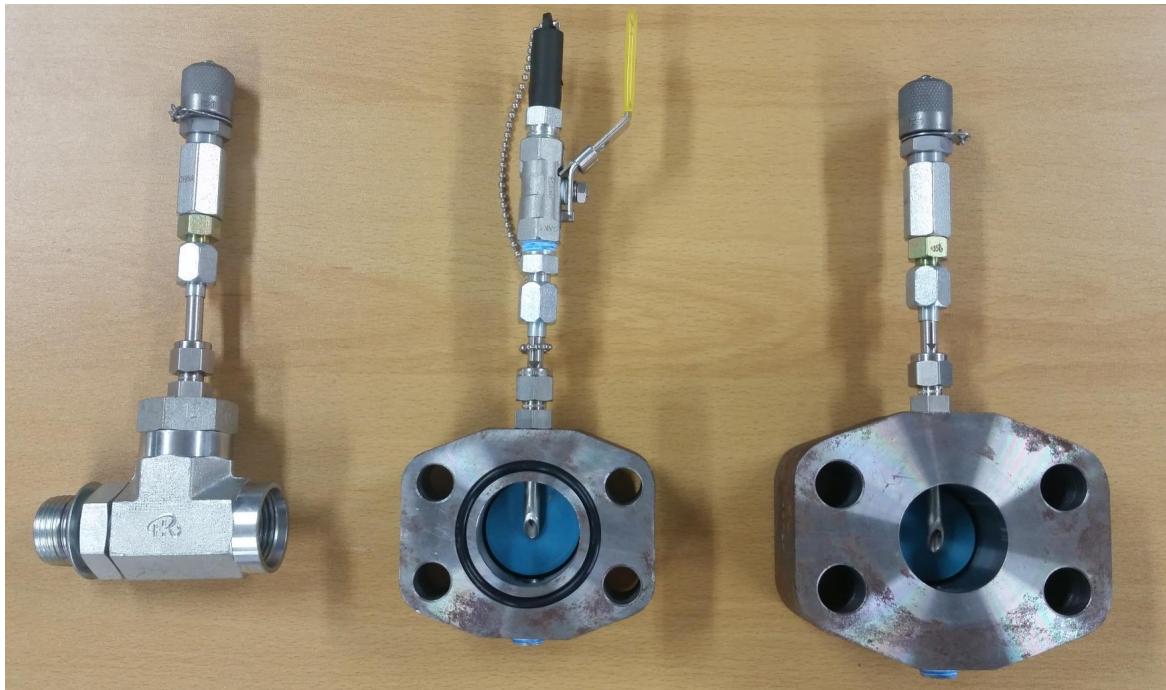


# Sampling Tools

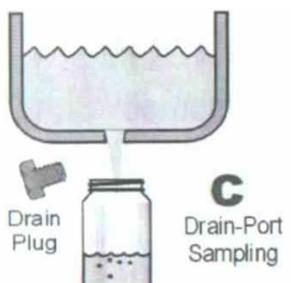
Pitot Tube, Minimess, Multi-Lube Adaptor 等

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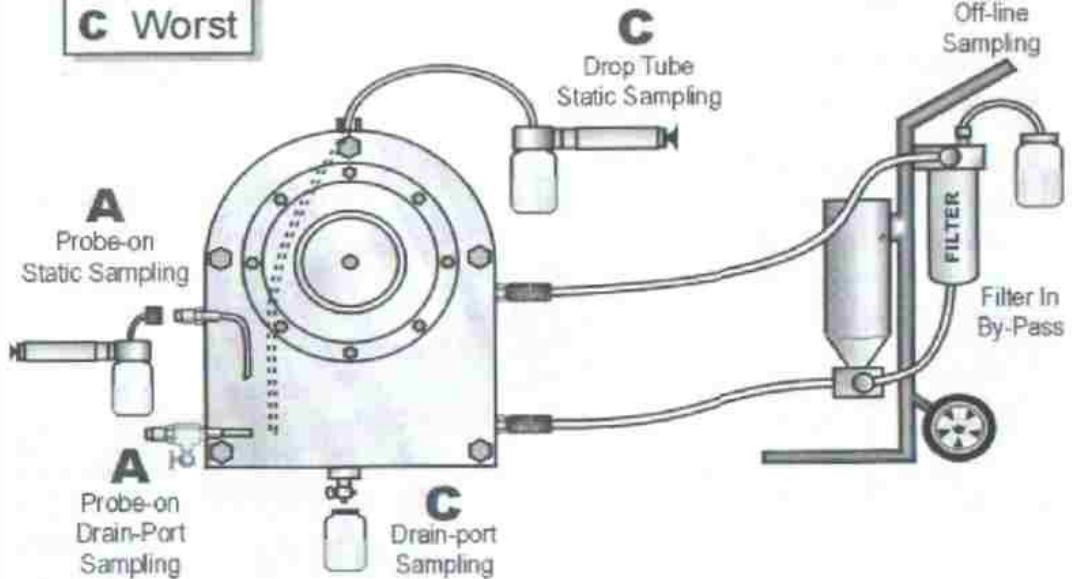
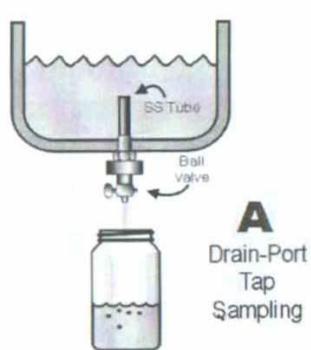
## Sampling Port installation example



## Static Sampling Locations – Comparison



**A** Good  
**B** Fair  
**C** Worst



Oil Sampling Case – Gearbox

# Sampling Tools

Pitot Tube, Minimess, Multi-Lube Adaptor 等

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## Part Number

### ▪ Ordering P/N

Part Name	Part Number	Specification
<b>Sampling Port (Type: Minimess)</b>	 SPM1/4 (General)	Oil Sampling Minimess 1/4"
<b>Sampling Probe</b>	 SPBM162P	Oil Sampling Probe
<b>Oil Sampling Pump</b>	 OSP38X	Molded Nylon,38x,Stainless
<b>Sampling Bottle</b>	 SSCSB150 SSCSB500	150ml 500ml
<b>Tubing(Sampling Hose)</b>	 OST30	Oil Sampling Tubing 30

Sampling port Minimess P/N	Description
SPSUH	SUS 304(High Viscosity)
SPSUL	SUS 304 (Low Viscosity)
SPMH1/4	Metal High Viscosity
SPML1/4	Metal Low Viscosity

## EZ-SAM Battery Information:

Lithium Battery. 12V, 2500mah Recharging  
connector 12.6V, 1A



IEC		IECEE CB SCHEME		Ref. Certif. No.
IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME				
<b>CB TEST CERTIFICATE</b>				
Product		Adaptors (AC/DC ADAPTER)		
Name and address of the applicant		Shenzhen Sominyu Technology Co., Ltd. Building A1, Room601, Longwangmiao Industrial Park Baishixia Community, Fuyong Street Bao'an District 518103 Shenzhen PEOPLE'S REPUBLIC OF CHINA		
Name and address of the manufacturer		Shenzhen Sominyu Technology Co., Ltd. Building A1, Room601, Longwangmiao Industrial Park, Baishixia Community, Fuyong Street, Bao'an District, 518103 Shenzhen, PEOPLE'S REPUBLIC OF CHINA		
Name and address of the factory		Shenzhen Sominyu Technology Co., Ltd. Building A1, Room601, Longwangmiao Industrial Park, Baishixia Community, Fuyong Street, Bao'an District, 518103 Shenzhen, PEOPLE'S REPUBLIC OF CHINA		
Ratings and principal characteristics		Rated Input : 100-240VAC, 50/60Hz, Max. 1.5A Rated Output : See test report for details Protection Class : II Degree of Protection : IP20		
Model/type Ref.		QS-xxxxxx-V, QS-xxxxxx-H (See test report for details of model description)		
Additional information (if necessary)		See Test Report for National Differences and Group Differences		
A sample of the product was tested and found to be in conformity with		IEC 61558-1:2005 IEC 61558-1:2005/AMD1:2009 IEC 61558-2-16:2009 IEC 61558-2-16:2009/AMD1:2013		
as shown in the Test Report Ref. No. which forms part of this certificate		211-700509-000		
This CB Test Certificate is issued by the National Certification Body				
CBS 003461 0007 Rev. 00 Date, 2019-07-30		 ( Shaochang Liu )		
Page 1 of 2 TÜV SÜD PSB Pte Ltd • 1 Science Park Drive • Singapore 118221		 PSB Singapore		

# Supplier's Declaration of Conformity

<b>Product Description:</b>	Motorized Sampling Hand Pump
<b>Model/Brand Name:</b>	EZ-SAM
<b>Variant Model:</b>	-
<b>FCC Rule Part(s):</b>	FCC Part 15 Subpart B Class B Part 15.107(a) & Part 15.109(a)
<b>Applicant Name:</b>	Solge corporation
<b>Applicant Address:</b>	11.Secheonbuk-ro 8 gil, Dasa-eup, Dalseong-gun, Daegu, Korea 42922
<b>Manufacturer Name:</b>	Solge corporation
<b>Manufacturer Address:</b>	11.Secheonbuk-ro 8 gil, Dasa-eup, Dalseong-gun, Daegu, Korea 42922
<b>Test Report Reference No.:</b>	KES-EM-22T0387

**Motorized Sampling Hand Pump**, Model **EZ-SAM** has been tested in accordance with the measurement procedures specified in FCC Part 15 Subpart B class B and has been shown to be complied with the electromagnetic emission limits specified in FCC Rule Part 15 Subpart B class A. A testing of the sample product has been valid for the sample tested based on the reference test report, KES-EM-22T0320

## Responsible Party – U.S. Contact Information

**Company Name:** Corporation Solge  
**Company Address:** 11.Secheonbuk-ro 8 gil, Dasa-eup, Dalseong-gun, Daegu, Korea 42922  
**Telephone :** 053-588-3309  
**Contact name :** **Lee ChanSu**

Date of Issue: May. 12, 2022

President: Kim TaeHeon

Signature:



**Solge corporation**

11.Secheonbuk-ro 8 gil, Dasa-eup, Dalseong-gun, Daegu, Korea 42922



Final package size and weight for 10 sets



HS CODE : 8413.81-9000

If you have any questions, please contact at [lubricationplus@solge.com](mailto:lubricationplus@solge.com)

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User's manual rev 0. 20231207