

### BASIC MODEL STP

The filling operation is pneumatically driven – The infinitely variable suction and filling speeds, allowing the operator to optimise the output for the product and container being handled. Without any additional equipment both inflammable and explosive products can be filled. Fill quantity is set manually on the front of the machine, so volume changes are quickly achieved. Two basic models with a choice of pneumatic operation are available.

### Standard-Version

The pneumatic driving system incorporates a cylinder with variable speed for both suction and fill strokes. The foot operated on/off switch must be depressed until filling is completed. If for any reason the switch is released, the pump returns to its start point ready for the next fill cycle. During setting of the fill volume either the foot switch must be depressed or the machine must be disconnected from the air supply.

### Comfort-Version

These units differ from the standard types by the incorporation of a digital impulse drive system. The following functions are possible:

- The operator is only required to touch the foot switch to operate the machine
- The "Off/On" switch allows fill volume changes during machine stop
- With the "Manual/Automatic" switch it is possible to select either single cycle or continuous operation with variable cycle time
- Operation of the „Emergency Stop“ button automatically interrupts the fill cycle, and the pump returns to its start point
- Pneumatically operated diving nozzles can be used (the units are fitted as standard with necessary interface)
- Easily built into automatic filling lines

The machine is supplied with a foot switch and container locator, which can be interfaced with fast-acting clutches if required. An indicator on the hand wheel permits fine adjustment of the fill volume.

An optional pneumatic counter facilitates either multiple fills (volumes greater than 1000 ml) or a predetermined batch size.

### PRODUCT SUPPLY



#### Standard hoppers

A choice of 12, 26 or 50 litre capacities in polished stainless steel are available. They have quick release clamps and are fully interchangeable for all pump types. Further on a cylindrical 6 litre hopper with pressure piston plate is available. Additionally corresponding covers complete the range



#### Heated hoppers

For products to be filled warm (caused by technical reasons or to ameliorate the filling conditions) we propose the use of our heated hopper, fitted with electronic controlled temperature regulation and designed in up to date heating foil technique. These hopper have the same volume as the standard versions. Additionally corresponding covers complete the range.



#### Suction pipe (only for liquid products)

If the fill product must be drawn straight from large containers (barrel, tank, etc.) we can supply suction piping.

Modular filling system

## GRISONA STP

For liquid or pastous products  
Our modular approach is the easy and safe way to  
meet your filling needs



Modular filling system

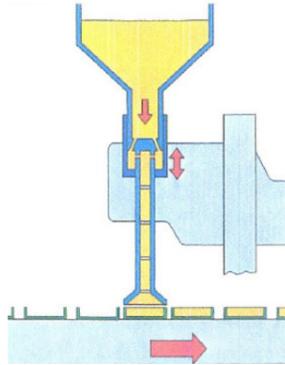
## GRISONA STP

The GRISONA STP is designed for a very wide range of applications. It is the optimum system for liquid and cream products requiring accurate filling. Today's GRISONA STP is the result of many years of experience gained under production conditions and the practical development of proven engineering. Let us convince you of the capabilities of GRISONA STP.

### HOW THE GRISONA STP WORKS

At the heart of the filling system is an interchangeable metering pump. It is the ultimate development of the patented PERPETUA pump. With each stroke the machine draws a preset amount of product from the hopper and discharges it through a special nozzle into the container below.

Capacity is 1800 fill cycles per hour. Thanks to its simple and reliable method of operation, high fill accuracy, easy of maintenance and cleaning, the GRISONA STP is the ideal filling machine for cosmetics, pharmaceuticals, chemicals and foodstuffs.



With each stroke of the pump an accurately metered amount of product is drawn from the hopper and fed to the filling nozzle

### PRODUCT AND CONTAINERS

You can fill products that are either liquid or pastous. Set for continuous filling the GRISONA STP will handle all types of containers from 0.8 to 1000ml, e.g. bottles, jars, tubes, etc. By selecting multiple fill it is possible to obtain greater volume. All components that come into contact with the fill product are either made of stainless steel or Teflon based compounds. In this way, the machine are built to withstand any type of product. The pumps can be sterilised.

### SELECTING YOUR GRISONA STP PUMP TYPE

Selection of the right type of pump is determined by the fill volume of your container. There are five different fill capacities to choose from

Fill capacity in ml	0,8 – 8	4 – 40	12 – 120	35 – 350	100 – 1000
Pump type	8	40	120	350	1000

All pumps repeat to  $\pm 0.5\%$  of fill volume and are inspected and certificated before despatch using water as a filling medium.

### Material

All parts in direct contact with the filling product are made of stainless steel (V4A/1.4435/AISI 316L) respective high quality plastic PTFE and PETP

### Dimensions

- Length: 810mm
- Width: 300 – 420mm
- Height: 1330 – 1550mm

Weight according to type and equipment 45 – 120kg

### Utilities pneumatic

- supply pressure 6 bar
- air requirement for each fill cycle at 100% pump volume: 9-10 litre

## THE RIGHT FILLING NOZZLE

### Valve nozzle



consisting of the valve nozzle body and change parts with various size of filling tubes for liquid products into any type of container

### Smoothing nozzle



for the air free filling of jars, pots and tins with cream products followed by smoothing of the surface of the product (samples of the containers required with order)

### Spray nozzle



for thicker liquids through to pastous products into pots, jars, tins and vertical filling of tubes

### Tube filling nozzle



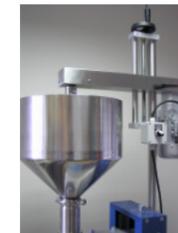
(horizontal) for air free filling of tubes with pastous products (samples of the containers required with order)

### Twin nozzle



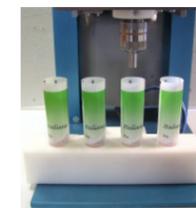
Allows the simultaneous filling of two containers by an accuracy of 0.5% (max. dosage volume is 50% of pump stroke)

## RECOMMENDED ACCESSORIES



### Agitator

If the fill product in the container has to be stirred or if you are filling pastous products we can supply an electrically driven agitator for both the standard and the heated product hoppers. It can be switched on and off separately and runs at approx. 30 RPM. Variable speed versions or versions for inflammable or explosive products are available.



### Multiple tube holders

If the tubes are to be closed on our GRISOTUB MS (metal tubes) or GRISOTUB PS (plastic tubes) we recommend that you use a multiple-tube holder.



### Diving Nozzle TD

If you want to fill foaming products, we recommend the pneumatically driven diving nozzle TD. This unit can only be used in conjunction with the Comfort version.