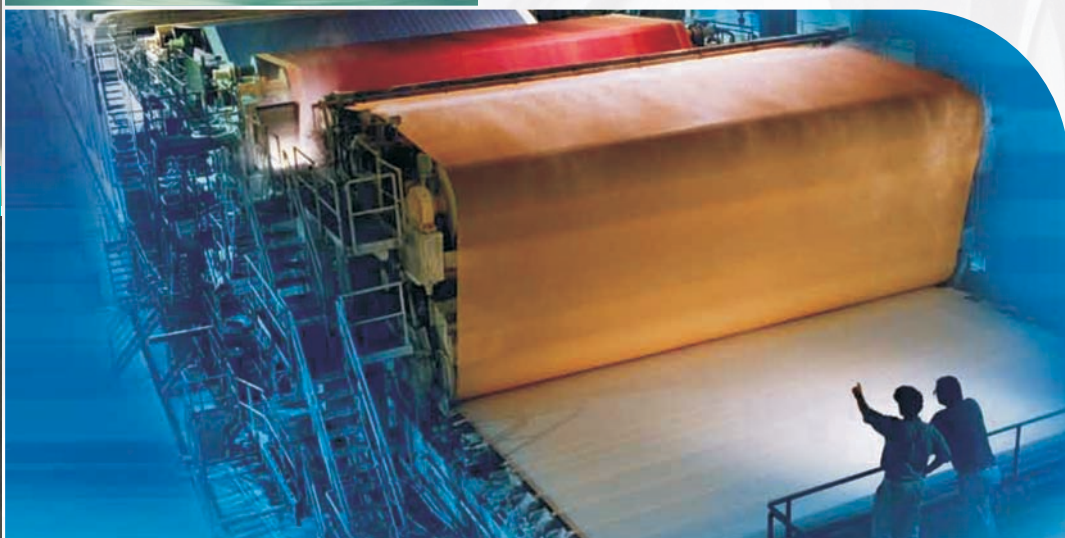
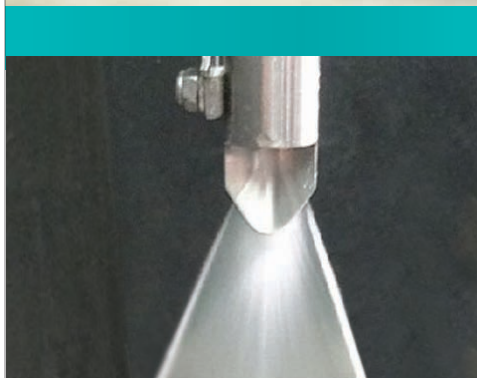




**Sidhu**<sup>TM</sup>  
ENGINEERING WORKS



SHOWERS  
OSCILLATORS  
SPRAY NOZZLES  
WEDGE FILTERS  
AUTO SELF CLEAN FILTERS

SIDHU ENGINEERING WORKS specializes in manufacture of world class spray showers, Nozzles, Filters. The company is fully equipped with a team of technical professionals and latest manufacturing facilities such as Turning, Cutting, Milling, CNC, machining, fabrication, welding, and complete Toll Room facilities. We are located at Ghaziabad (U.P.) just 30 km away from international airport (Delhi).

Established in 1985 by Mr. Ram Pal Basra (Founder & MD), Sidhu Engineering Works became a well known name in India and international industry for its modern manufacturing technology, and for white, kraft, board paper machines.

We provide technical solutions to the problems of Excess fresh water consumption from showers, how to get more life & production of felts/wire, cleaning of felt, wire, mold section & paper industry with our customized, economized, well tested expertise of more than two decades under the single shell.

We also provide computerized drawings for ideal showers as per need of the clients.

We are specialized in undertaking upto 7 Mtr. Long showers as per machine width. We offer regular consulting services to those industrialists who are planning to set up new showering system with better cleaning of fabrics. We are also undertaking Turnkey projects to renovate all existing paper machines showering systems. Since we entered the industry from the initial manufacturing of all types of spray nozzles, we have obtained expertise and specialization to make complete showering, filtration system up to 5000 LPM. We have developed such kind of showers which can save fresh water quantity per day.

Corporate Office & Factory



We also have expertise in designing to make any precision job and Air Rotory seal, Qrv. for clutch combination etc.

Today we feel, that our knowledge and background experience has established us for the world class service of paper machinery.

"Shower/ filters/ nozzles machines Exporting to Nepal, Iran, South Africa, Kenya, Bangladesh, Germany & targeting more countries".

## We export to





# SIDHUMATIC ROBO JET CLEANER

**Its Our New Innovation to  
Get Zero Drainage of Paper Mills**



Sidhumatic Robo Jet cleaner use for clean the wire/felts with three jet nozzles to reduce the fresh water consumption with better cleaning of paper clothing on paper machine.

## Salient Features

- It is our new innovation introduced first time in Pulp & Paper industries.
- Provide Sidhumatic Robo Jet Cleaner (Innovation).
- All SS 316 construction for very wet conditions.
- Travel lengths- available wire/felt width 2 mtr. to 8 mtr. of P/M
- Variable speeds from 4 to 800 mm/min Suitable for Machine speeds from 50 to 2000 Mtrs/min.
- Auto synchronization with machine speed.
- Greas dipped mechanism: zero maintenance.
- Sprocket chain arrangement- zero dwell time.
- Special imported motor, TEFC, 30 W, 24 V, DC single phase, torque 40 N/Mtr.
- Special motor made in USA, oscillator speed can be varied without VFD (Innovation).
- Provide Sensors & limit switch for reverse / forward of Jet Nozzle
- Variable speed oscillation without VFD. No tension of moisture problem in VFD.
- SS 316, Enclosure-IP 65. Oscillator can run dipped in water.
- Control Panel : IP 65 with SMPS (Indian). 25 Mtrs cable for installation.
- Connectors ready for installation.
- Unit weight : 50 to 200 Kg

## Features & Benefits

- Robo assembly provides continuous movement of showers to ensure good coverage.
- Optimizes cleaning efficiency.
- Minimizes water use.
- Improves felt and paper quality.
- Provide liner cleaning of clothing.
- Easy integration to existing lines.
- Durable construction – can withstand washdown procedures.
- Easy-to-use control unit – user adjustable speed by auto / manual as per machine speed and stroke settings. Settings can be stored or adjusted on-the-fly.
- Inline or side mounting options available.

**Sidhumatic Robo Jet Cleaner ideal for  
clean paper machine clothing req. 6 m<sup>3</sup>/  
day fresh water only**

# Micro Travel Variable Speed Oscillating Shower

Model No. : 2001, 3001, 6001



## Salient Features:

- It is our new innovation introduced first time in Pulp & Paper industries.
- All SS 316 construction for very wet conditions.
- Stroke lengths- available 150 to 300 mm.
- Variable speeds from 4 to 75 mm/min Suitable for Machine speeds from 50 to 1200 Mtrs/min.
- Auto synchronization with machine speed.
- Oil dipped mechanism:- zero maintenance.
- Transverse screw arrangement- zero dwell time.
- Special imported motor, TEFC, 30 W, 24 V, DC single phase, torque 40 N/Mtr.
- Special motor made in USA, oscillator speed can be varied without VFD (Innovation).
- Variable speed oscillator without VFD. No tension of moisture problem in VFD.
- SS 316, Enclosure-IP 65. Oscillator can run dipped in water.
- Control Panel : IP 65 with SMPS (Indian). 20 Mtrs cable for installation.
- Connectors ready for installation.
- Unit weight :- 15 Kg.

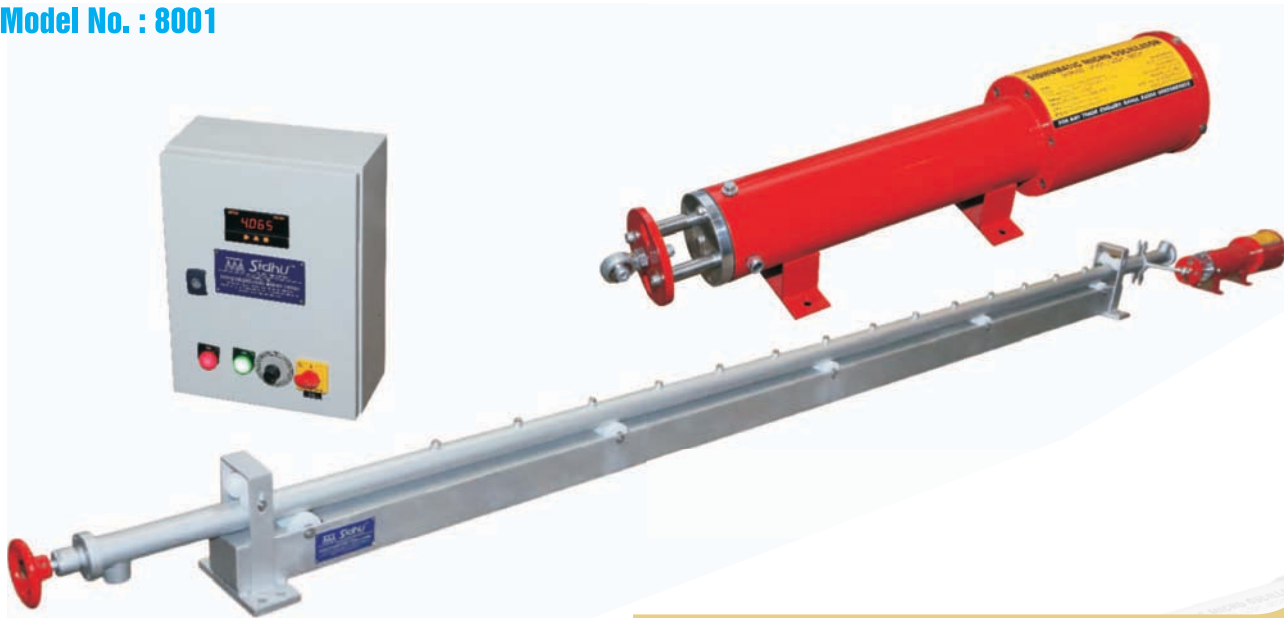
## Features and Benefits

- Oscillator assembly provides continuous movement of showers to ensure good coverage.
- Optimizes cleaning efficiency.
- Minimizes water use.
- Improves felt and paper quality.
- Easy integration to existing lines.
- Durable construction – can withstand washdown procedures.
- Easy-to-use control unit – user adjustable speed and stroke settings. Settings can be stored or adjusted on-the-fly.
- Inline or side mounting options available.

# MICRO SHOWER WITH ROLLERS TRACK SYSTEM

**Sidhu Roller Track System Ideal for 4 mtr  
and above Bearing Center of paper machine**

**Model No. : 8001**



## Features & Benefits

- We provides rollers track system to prevent sagging (bend) of shower tube & easy to install / remove the shower tube on paper machine during running condition
- Oscillator assembly provides continuous movement of showers to ensure good coverage.
- Optimizes cleaning efficiency.
- Minimizes water use.
- Improves felt and paper quality.
- Easy integration to existing lines.
- Durable construction – can withstand washdown procedures.
- Easy-to-use control unit – user adjustable speed and stroke settings. Settings can be stored or adjusted on-the-fly.
- Inline or side mounting options available.

## Salient Features

- It is our new innovation introduced first time in Pulp & Paper industries.
- Provide Rollers Track System (Innovation).
- All SS 316 construction for very wet conditions.
- Stroke lengths- available 150 to 300 mm.
- Variable speeds from 4 to 75 mm/min Suitable for Machine speeds from 50 to 1200 Mtrs/min.
- Auto synchronization with machine speed.
- Oil dipped mechanism:- zero maintenance.
- Transverse screw arrangement- zero dwell time.
- Special imported motor, TEFC, 30 W, 24 V, DC single phase, torque 40 N/Mtr.
- Special motor made in USA, oscillator speed can be varied without VFD (Innovation).
- Variable speed oscillator without VFD. No tension of moisture problem in VFD.
- SS 316, Enclosure-IP 65. Oscillator can run dipped in water.
- Control Panel : IP 65 with SMPS (Indian). 25 Mtrs cable for installation.
- Connectors ready for installation.
- Unit weight : 15 Kg.

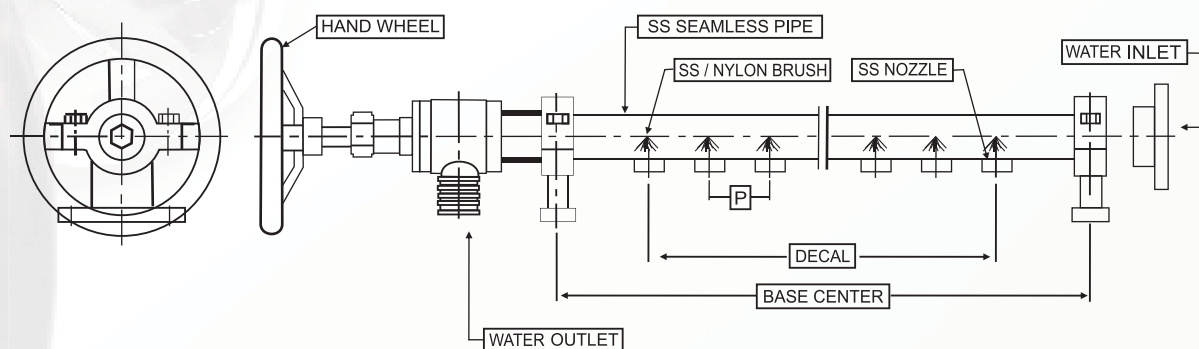


## Features & Benefits

- Designed for use with fresh water and operations where nozzle clogging is unlikely.
- Economical.
- For use with self-cleaning nozzles with brushes arrangement.

## Specifications

- **Nozzle compatibility:** Self-cleaning, Shower Jet, Disc Jet, Spray nozzles and more.
- **Spray nozzle spacing:** 70 mm to 330 mm.
- Orifice Available in 0.7, 0.8, 0.9, 1.0 and 1.2 mm spray angle 0° to 120° as per client requirement.
- **Materials of construction:**  
Pipe: 304 or 316 stainless steel.





# Wet End Web Tail Cutter Shower

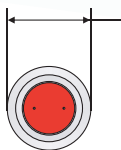
## Features & Benefits

Automatic, Manual Tail Cutter System of Wire/Felt guides suitable for Wet or Dry End are realized in a compact and reliable assembly and can be installed in any position and machine section.

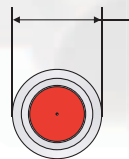


## Specifications

- **Nozzle compatibility:**  
Needle Jet, Disc Jet nozzles in ruby tips and more
- **Spray nozzle spacing:** Adjustable 0° solid stream
- Orifice Available in 0.2, 0.4, 0.5, 0.6 to 1 mm
- **Materials of construction:**  
Pipe: 304 or 316 stainless steel



Double Trim Squirt Nozzle



Single Trim Squirt Nozzle



### THREADED SHOWER JET NOZZLES

- Needle jet nozzles, High impact straight jet nozzles, all industry standards are available in high quality.
- Orifice Available in 0.7, 0.8, 0.9, 1.0 and 1.2 mm spray angle 0° as per client requirement.

Available in SS304, SS316, insert ruby, ceramic, tungsten carbide & brass.



### RUBY JET NOZZLES

- Disc-type nozzles fit inside the shower; the internal brushes easily sweep fibre particles.
- Lock ring holds the nozzles in place.
- Available in flat and solid stream spray patterns.
- Solid stream versions: Choose from stainless steel, ceramic or synthetic ruby orifice material for longer wear life.
- Orifice Available in 0.7, 0.8, 0.9, 1.0 and 1.2 mm spray angle 0° solid stream as per client requirement.

Available in SS304, SS316, insert ruby, ceramic, tungsten carbide & brass.



### NOZZLES FOR SHOWER HEADERS

- Our unique disc-type nozzles, Flat Spray, Dome Type Jet / Flat Spray Nozzles and Flat fine nozzles for internal brush showers are manufactured in-house offering longer life plus increased efficiency.
- Orifice Available in 0.7, 0.8, 0.9, 1.0 and 1.2 mm spray angle 0° to 120° solid / flat stream as per client requirement.

Available in SS304, SS316, insert ruby, ceramic, tungsten carbide & brass.



### VALVE SPRAY NOZZLES

- State-of-the-art technology, Valve Spray Nozzles offer ease of removing particles through rotate manual valve operation. Highly designed self cleaning nozzles, spiral nozzles.
- Orifice Available in 0.7, 0.8, 0.9, 1.0 and 1.2 mm spray angle 0° to 60° solid / flat stream as per client requirement.

Available in SS304, SS316.



# Water Filter



## Triplex or Gang Filter

- Can shut off individual filters if not required.
- Easy to control.
- Available in capacities 1000 lpm - 5000 lpm.

## Duplex Filter

- Uninterrupted water flow by shifting valve lever.
- Can clean the cartridge while water flows from the other end.
- Available in capacity 400-3000 lpm.



Internal View



Side View

Imported Wedge Wire (20 to 2000 microns)

## Simplex Filter

- Easy removal of top cover and filter cartridge system.
- Available in capacity 200 lpm – 1000 lpm.

## Features

- All stainless steel construction
- Compact design
- Wedge wire filter for efficient cleaning and long life
- Very high pressure rating upto 70 Bar
- Easy cartridge removal
- Rugged and reliable high pressure rating ball valve with Teflon seal
- Manual back flushing provision enables cartridge cleaning on time
- Automatic indication of pressure difference due to filter clogging



Simplex Filter

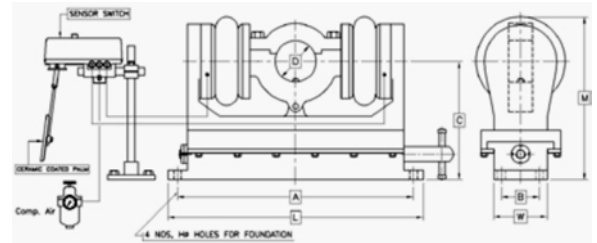


Duplex Filter

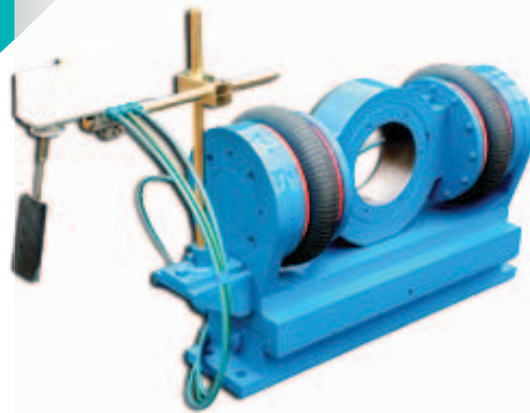


Triplex or Gang Filter

# Pneumatic Auto Guide System (Bellows Type)



Type	D	L	W	A	B	H(hole)	C	M	WEIGHT (APPRX.)
RX-120	120	670	140	620	100	20 ∅	305	430	120 kg
RX-190	190	850	170	775	100	20 ∅	350	505	225 kg



Felt and Wire Auto Guide Systems are designed to keep the wire running properly in the center of the roll over which it travels. If you loose control over your wire felt or fabric, the cost incurred in damaged clothing is high. Lost production can make such accidents extremely irritating and costly.

Installing the reliable and well proven automatic wire and felt guiding system represents an easy way and inexpensive way to avoid this problem. It comprises of an actuator and pneumatic controller with ceramic coated palm assembly, the Auto Guide works without sliding surfaces.

## Salient Features

1. Immediate response to any movement of the clothing in the cross machine direction without overcompensation
2. Very few moving parts and little need for maintenance work.
3. Moving parts are fully enclosed for complete protection against water, fiber and dust
4. Extremely low compressed air consumption, normal working pressure @ 3.0 kg/cm<sup>2</sup>
5. Suited for installation in any position- horizontal, vertical, inclined or even upside down.
6. Easy to install and operate.
7. No adjustment required before start up
8. Built in manual over ride

## Advantages

1. Avoid Fabric run off
2. Minimize fabric edge wear
3. Reach Maximum fabric wear life
4. Reduce sheet breaks
5. Optimize paper productivity

## PNEUMATIC AUTO GUIDE BELLOW & PISTON TYPE

The SIDHU Pneumatic Auto Guide System (Piston Type) are designed for use in wire, press and dryer section of paper machines. All piston guides have a compact, enclosed design.



Moving parts are fully enclosed for complete protection against water, fiber and dust  
Extremely low compressed air consumption, normal working pressure @ 3.0 kg/cm<sup>2</sup>  
Suited for installation in any position- horizontal, vertical, inclined or even upside down.



## Features

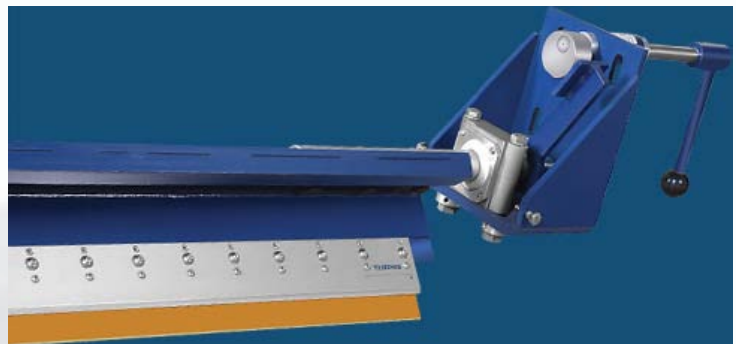
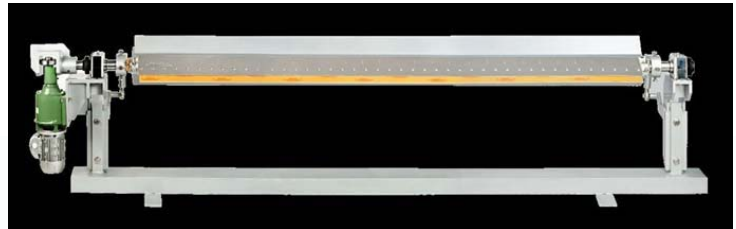
Suitable for wire, felts & dryer fabrics  
Normal working pressure @ 3.0 kg/cm<sup>2</sup>  
Adjustable stroke, maximum stroke upto 60 mm on either side

# Doctoring Systems

We are one of the prominent Manufacturers, Exporters, and Suppliers of Doctoring Systems in the market. Doctoring Systems are designed and manufactured for Wire return rolls in complete SS 316 versions and cost effective SS clad versions as per customer's specific requirements.

Press doctors are designed with self conforming ET Uniform holders. Doctors for centre press with double doctors are also designed.

Dryer doctors are designed with either standard K 35 holders for better conformity with the dryer cans.



## Features

- Electromechanical as well as bellow type is provided for Doctor Oscillation
- Doctors for size press applications are designed with rigid K 35 holders in all SS construction
- Calendar doctors are designed with ET Uniform self conforming holders for better efficiency in doctoring, with electromechanical Oscillators
- Doctors for MG are designed with ET Uniform flexible doctors for takeoff position and K 35 for the first and second position. However, for High Speed machines two ET
- Uniform systems are considered to be more effective
- Linear motion bearings are manufactured in sizes of 40, 45, 50 and 55 mm as a standard with housings of CI and SS as standard
- Turnbuckles for positioning the doctors are manufactured in MS, SS and as per custom requirements with rod eye ends
- Control Panel for pneumatically loaded ET Uniform systems is manufactured in reinforced fiber glass
- Doctor blades are supplied with a variety of qualities for various applications on wire press dryer and calendar. Epoxy, laminated, carbon fiber blades, etc., give good performance and longer life



## Needle JET

### Water Consumption at different pressure in LPM (kg./cm<sup>2</sup>)

Pressure Bar kg./cm <sup>2</sup> :	6	10	15	20	25	30
<b>Nozzle size Dia</b>						
0.6	0.58	0.76	0.93	1.07	1.20	1.31 LPM
0.7	0.80	1.03	1.27	1.46	1.64	1.79 LPM
0.8	1.04	1.35	1.67	1.91	2.14	2.34 LPM
0.9	1.32	1.71	2.10	2.42	2.71	2.96 LPM
1.0	1.63	2.11	2.59	2.99	3.35	3.66 LPM
1.2	2.35	3.04	3.73	4.31	4.82	5.27 LPM
1.5	3.67	4.76	5.83	6.73	7.53	8.24 LPM

## Fan JET Spray

### Water Consumption at different pressure in LPM (kg./cm<sup>2</sup>)

Pressure Bar kg./cm <sup>2</sup> :	2	4	5	6	7	10
<b>Nozzle size Dia</b>						
1.0	0.7	0.9	1.0	1.1	1.20	2.2 LPM
1.5	1.6	2.3	2.6	2.8	3.1	3.6 LPM
2.0	3.3	4.6	5.2	5.8	6.0	11.0 LPM
2.5	4.1	5.8	6.5	7.1	7.6	14.6 LPM
3.0	5.7	8.1	9.0	9.8	10.7	27.4 LPM
3.5	7.4	10.4	11.6	12.7	13.8	45.6 LPM



#### Works :

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