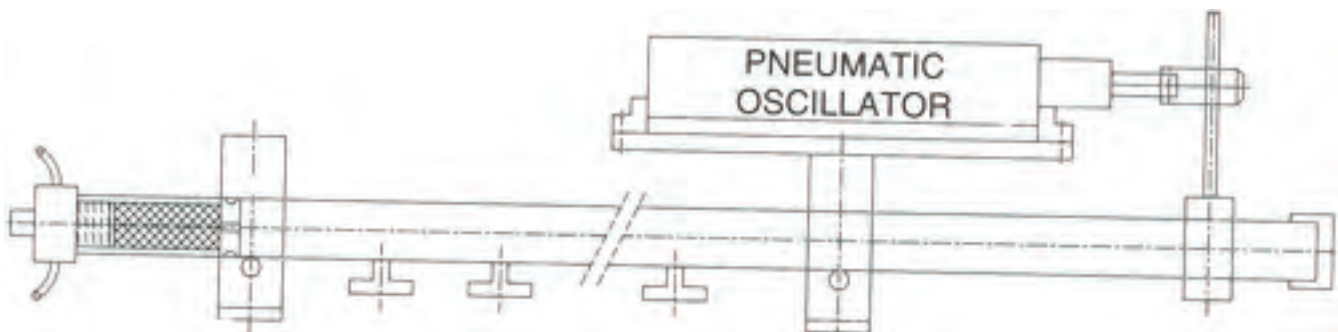


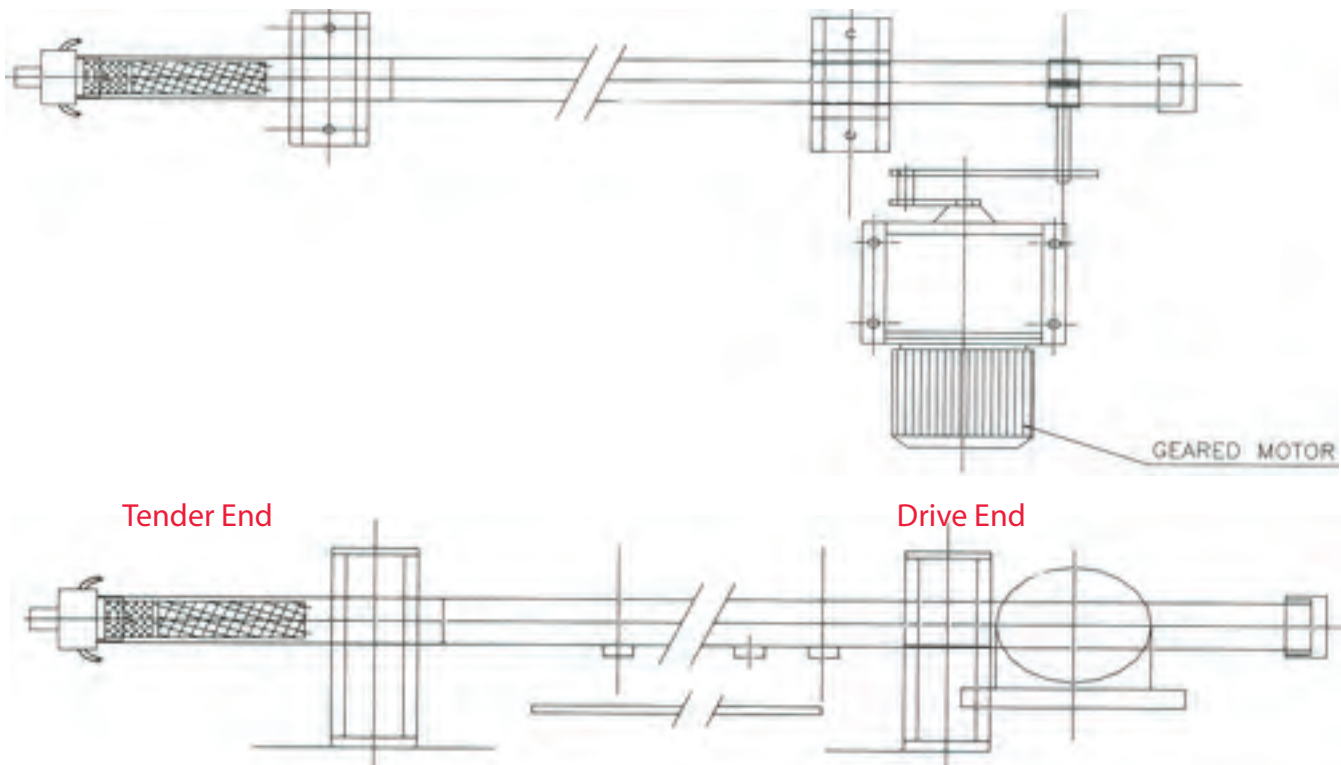
OSCILLATING SHOWER HEADER for pulp and paper mills.

Oscillating needle jet and fish tail showers for wire, felt and cylinder mould. Oscillating mechanism can be provided with either pneumatically operated air cylinders or Electro mechanical fixed speed oscillators and variable speed microtravel oscillators for matched speed oscillation..

Pneumatic: The oscillation arrangement is by use of a Pneumatic Cylinder which can operate on 80 lbs air pressure. The available stroke lengths are 150, 200, 300 and 500mm.



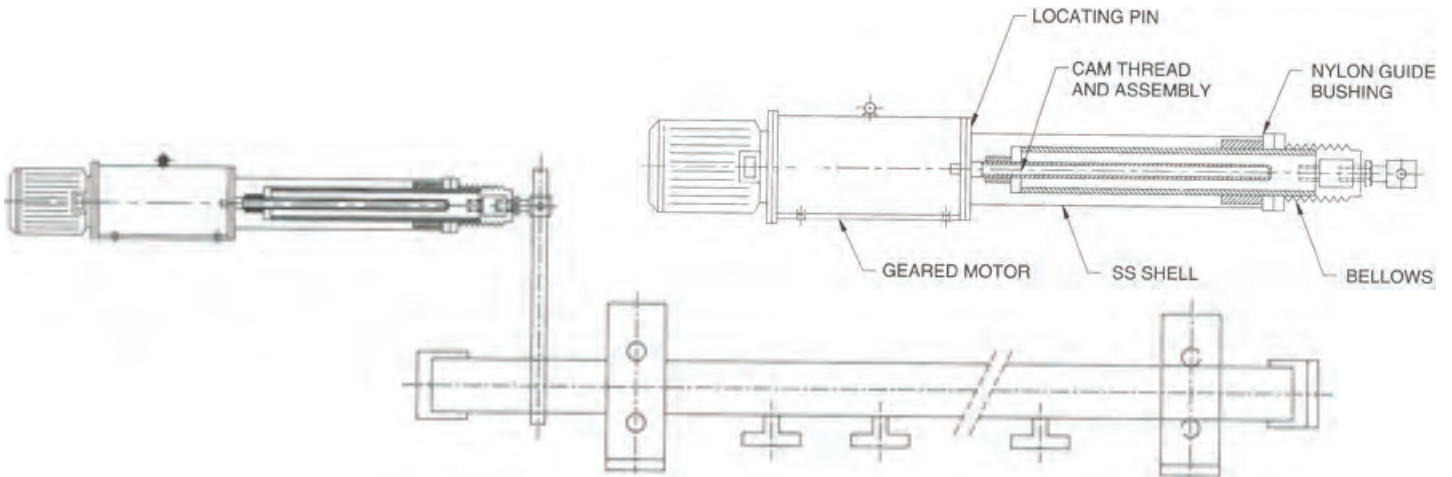
Electro-mechanical Fixed Speed Oscillator : Geared Motor with flywheel & cam system for micro speeds with output RPM of 0.025 to 10 RPM for various operating machine speeds



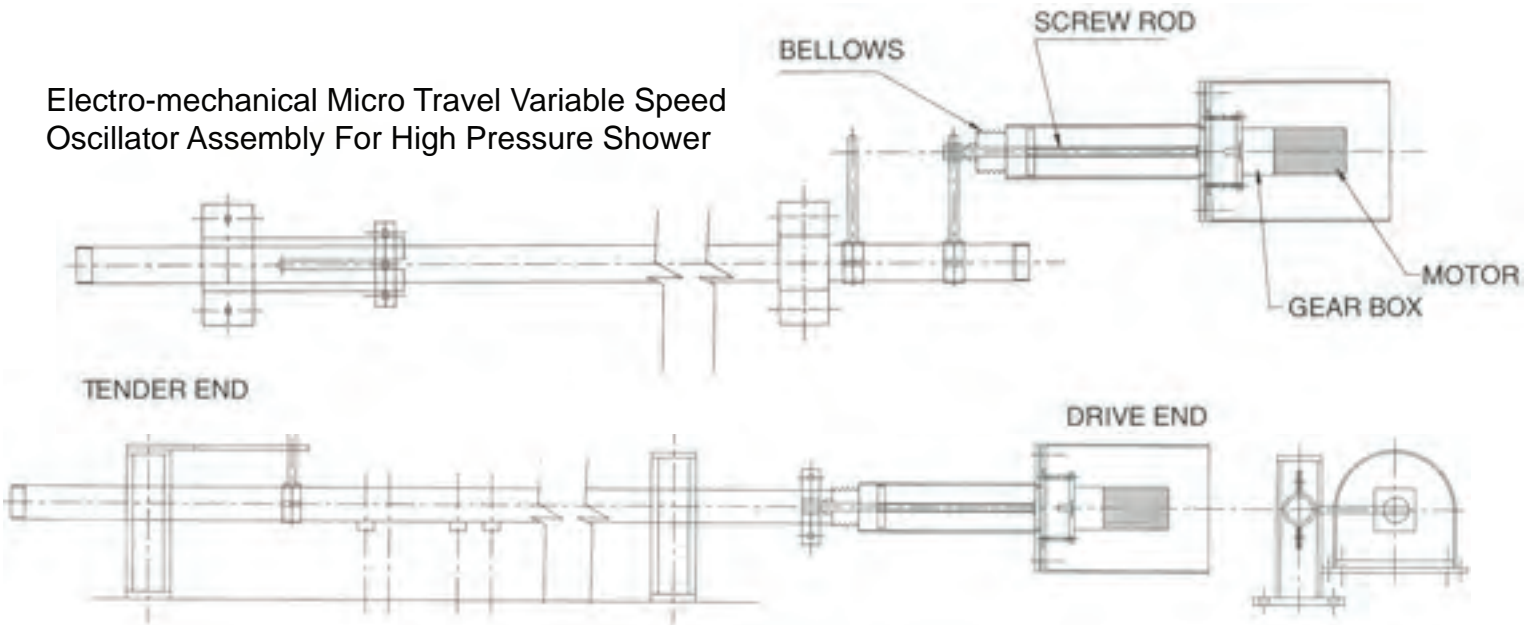
OSCILLATING SHOWER HEADER for pulp and paper mills.

Electro Mechanical

The oscillation arrangement is by a geared motor with a reversible screw assembly. The linear oscillation speed is designed taking the average machine speed. This oscillator eliminates the "Dwell" time. This provides uniform cleaning pattern resulting in better run ability of paper. The entire oscillating unit is covered with SS shell and is bellow protected. FRP cover is provided to avoid ingress of water on motor side. Available in standard stroke lengths of 150 to 200mm.



Electro-mechanical Micro Travel Variable Speed Oscillator Assembly For High Pressure Shower



ELECTROMECHANICAL MICRO TRAVEL
VARIABLE SPEED OSCILLATOR ASSEMBLY
FOR HP SHOWER

OSCILLATING SHOWER HEADER for pulp and paper mills.

Perfect Cleaning Of Fabric By Micro travel

The latest travel in fabric cleaning is use of Micro travel slow moving oscillators which is installed in many mills today.

The relationship of movement to the surface to be cleaned by the shower commonly known as matched speed oscillation is achieved by this shower.

The pneumatic oscillators and electro mechanical oscillators with flywheel & cam systems are essentially high speed devices and their inefficiency in cleaning is clearly illustrated below.

Shower is designed in such a way to enable removal on the run. We offer a slotted tube unit, whereby the outer carrier tube is permanently fixed across the paper machine. Either with brackets or with loose flanges welded to support brackets, the inner spray pipe is oscillated across the sprayed surface using either pneumatic or electro mechanical variable speed oscillator. The shower pipe can be easily removed for maintenance or repair on running condition with the slotted tube remaining in position.



Electromechanical
Micro Travel Variable Speed Oscillator

Electro mechanical Variable speed oscillators provide a solution to the above problems.

The control panel accepts a machine signal either (0-10 or 4020 ma), such that the oscillator cleaning of fabric by the shower pipe.

A simple equation given below will be a guide line to decide linear speed for a given machine speed.

Machine Speed m/min

Fabric length meters Eg:

Fabric speed 200 m/min = 10 RPM ie One Rev in
Fabric length 20 mts. 6 secs.

Time taken for 1mm = 6 secs.

If stroke length is 200 = time taken is $200 \times 6 = 1200$ secs ie 20 Minutes

The pitch of nozzle is always the stroke length/2 to achieve double cleaning of fabric.

An oscillator with 125-150mm pitch of nozzle should be ideal for most conditions. But with increased use of waste paper furnish and multilayer fabrics being dense a closer pitch of 100 is recommended to reduce cleaning time and have effective cleaning of fabric.