



JETLESS FILLING MACHINE



The most important feature of the Oakley Jetless fill system is the ability to dramatically increase fill speeds. For example, 5/16" tubes are typically filled at speeds of 15" per minute; 3/8" tubes are filled at speeds of 20" per minute; and 1/2" tubes are filled at speeds of 25" per minute.

The machine produces a very consistent fill level in all of the tubes being filled. This level is also adjustable so that you can create the proper cavity in the tube for your particular upper plug without having to either spill or add MgO.



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ADVANTAGES

- **REDUCTION OF MgO LOSS**
The machine reduces the amount of MgO spillage or loss to a bare minimum. The cost savings in MgO can be considerable.
- **AUTOMATIC POSITIONS PROGRAMMING**
An important feature of the machine is the ability to individually program the positions on the machine that you wish to use for filling. No element tubes have to be placed in the stations that are not being used. With this feature you can run any quantity of elements you desire from 1 to the maximum number of stations on the machine.
- **TOOLED MACHINE TO FILL 2 OR MORE DIAMETERS, WITHOUT HAVING TO CHANGE ANY TOOLING**
For example, on an 18 position machine, we could supply 9 positions tooled for 3/8" and 9 positions tooled for 1/2", or we could supply 6 positions tooled for 3/8"; 6 positions tooled for 7/16"; and 6 positions tooled for 1/2".
While this would limit the production of any one diameter on the machine, it would eliminate the need to change the tooling on the machine each time you wish to fill tubes of a different diameter. For customers who are making small quantities of different element diameters, this can be a huge time-saving feature.



CHARACTERISTICS

MECHANICAL VIBRATOR

The mechanical vibrator has two simple adjustments to control vibration. An eccentric cam determines the travel of the vibrator bar or the amplitude of vibration. The second adjustment is a variable-speed motor that controls the rotational speed of the cam or the vibration frequency. The speed of the vibrator is programmed on the touch screen. You can obtain a precise degree of vibration to best suit any particular element. By providing better control and regulation of the vibration level, customers can achieve more consistency in fill levels as well as improved density.

FULLY AUTOMATIC LENGTH ADJUSTMENT

The machine can be reset for a new element length by simply programming the desired length on the touch screen and then pressing the Adjust Length button on the screen. The length can be programmed in millimeters, or inches. For elements up to 2.5 meters (78.75"), the entire process takes less than 30 seconds and guarantees the accuracy and repeatability of length setups. This is a great advantage for customers who must change lengths frequently on their machines. To accomplish this automatic length adjustment, we have combined the older clamp and anvil bars into a single assembly. The anvil bar now has its own chain drive and pivots below the clamp mechanism when not in use.

ELECTRICAL UPPER PIN EXTENSION ADJUSTMENT

The hook rod bar is motorized and allows you to adjust the hook position on all of the stations on the machine at one time. Raise and Lower Hook Rod pushbuttons on the touch screen are used to make this adjustment. The hook rods move up or down slowly allowing you to easily set the upper pin extension exactly where desired. This feature is very valuable if you change the pin extension of your upper terminal pin on a fairly frequent basis.

RACK LOADING AND UNLOADING

The addition of the disappearing clip retainer bar has made it possible to use our Pneumatic Rack to load and unload all previously mentioned fill machine models. Either 18 or 24 tubes can be simultaneously loaded with the pneumatic rack by simply snapping the tubes into the retaining clips. After the tubes have been loaded into the machine and raised enough so that they engage the special centering tip, the spring clip retainer bar is retracted so it will not interfere with the remaining sequence of the machine. At the end of the fill cycle, when the filled elements have been removed, the spring clip bar is brought to the forward position so it will be ready to receive the next load. Use of the pneumatic rack reduces handling times and thus increases the productivity of the machine. Please note, however, that the use of the spring clip feature and the pneumatic rack for loading require that your element tubes have consistently open and burr-free inner diameters so that all of the tubes can be simultaneously raised over the centering tips.



TECHNICAL CHARACTERISTICS

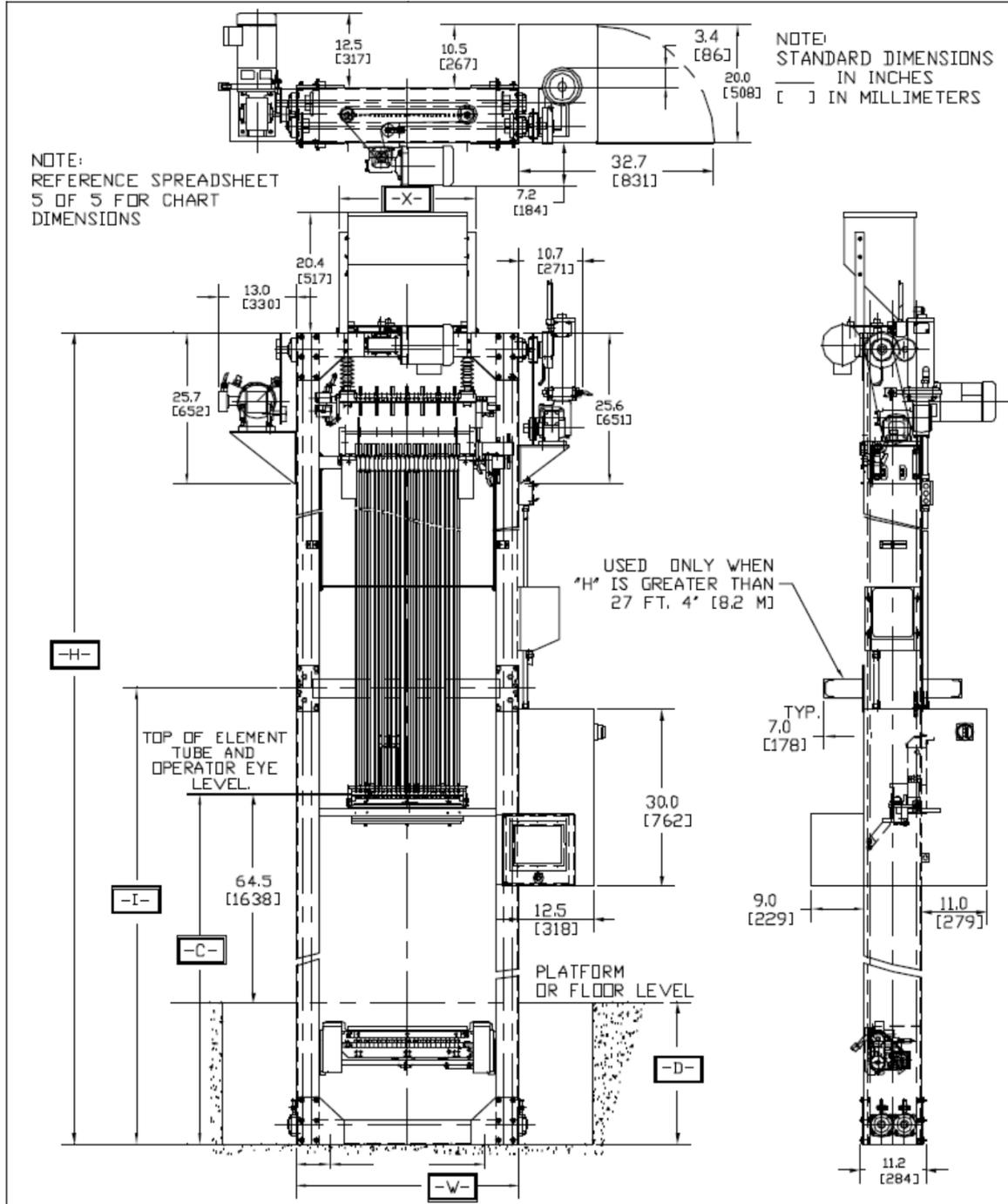
MODEL	12 Pos.	18 Pos.	24 Pos.
Length	60" (1524mm)	60" (1524mm)	60" (1524mm)
Width	All Models: 28.5" (724mm)		
Height	All Models: 2 times Maximum Element Length & 56" (1422mm)		
Weight 6 ft. (1830 mm) Per 12 ft. (300 mm) add	1750 lbs (794 kg) 75 lbs (34 kg)	1750 lbs (794 kg) 75 lbs (34 kg)	1750 lbs (794 kg) 75 lbs (34 kg)
Electric Supply	All Models: 220/380/440v – 3ph – 50/60hz		
Air Supply	All Models: 5.6 bar (80 psi)		
Min. Tube Diameter	All Models: .216" (5.5 mm)		
Max. Tube Diameter	.875" (22mm)	.625" (16mm)	.500" (12.7mm)
Min. Tube Length	All Models: 8.5" (216mm)		
Max Tube Length	30 ft. (9144 mm)	30 ft. (9144 mm)	30 ft. (9144 mm)
Fill Rate	All Models: 0-35.4" (0-900 mm) per minute		
Avg. Handling Time	2 minutes	2.5 minutes	2.5 minutes
Hourly Production	180 pcs.	240 pcs.	320 pcs.

Notes:

- Hourly production figures above are based upon filling a .375" (9.5mm) diameter element with a length of 40" (1000mm) and presuming the operator will be using the pneumatic rack for loading and unloading the machine.
- When using the pneumatic rack, the minimum element length is increased to 10" (250mm).



LAYOUT



C	130.000 inch	3302 mm
D	65.500 inch	1664 mm
H	280.000 inch	7112 mm
I	149.55 inch	3797 mm
W	37.750 inch	959 mm
X	59.294 inch	1506 mm