GRINDING SYTEM

Our system is noise free, features a quick and simple installation, has high performance and reliablity and impossibility of clogging.

When the control panel activates the outlet discharge pump, the high speed rotation of the impeller creates a vacuum causing water and organic residuals aspiration from the bowl. The high velocity of rotation enables a complete fragmentation of toilet paper and organic residuals without the possibility of clogging.

Outlet pump performances (discharge vertical 29 ft and horizontal 262 ft) give great freedom of choice in the routing of the pipes to reach the holding tank.





When the head is discharged, a double outlet one way valve, incorporated inside the toilet mechanism, prevents that dirty water or smell from coming back.

Low water consumption allows for fresh water installation without having to discharge the holding tank frequently.

Complete discharge system is included inside the ceramic base.

GRINDING SYTEM





The toilet paper and organic residuals are macerated before they enter the pump. Residuals can only enter the pump when macerated into little parts not able of causing pumping problems.



The particular impeller design allows the residuals to enter the pump only after maceration, obtained through stainless steel blades situated in the pump cover. These blades are positioned in order to use the maximum pump torque and velocity of rotation. In fact they are located at the centre of the shaft axis where motor torque has maximum power.

Residuals must pass through the steel cutters and impeller, having only 2.5 mm of space.

GRINDING SYTEM

Materials improperly discharged, remain in the grinding area until they are completely macerated. In this area they cannot cause clogging or pumping problems.

Canals at the entrance of the pump, enable water to enter the pumping area, even when solid materials are still to be macerated. This design allows the pump to continue to function.



In conclusion it is very difficult to clog this type of pump as solid material can be discharged a little at a time with each flush. The pump will be able to continue to work while any clog is still positioned in the grinding area and outside the pump impeller.

Also if the macerator can not grind the material inserted by the user, it will not cause any damage to the pump. Removal of the clogging material is made easier because it is positioned at the entrance of the pump.

WHY ARE PLANUS TOILETS ABSOLUTELY THE MOST SILENT ?



The noise of the vortex pump is due to the cavitation issue, caused by the presence of some air in the pump, that is inevitably sucked through the toilet drainage hole at the end of each discharge sequence. That air remains caught in the upper part of the pump.

PLANUS worked to solved the problem by adding an "automatic vent air discharge" in the in the upper part of the pump. This innovation for which <u>Planus has a patent pending</u>, has practically solved the noise problem enabling the pump to run imperceptibly quiet and increasing its performance conciderably.



A banging noise in the water pipes is clearly audible when the solenoid shuts off.

PLANUS has introduced the "water hammer arrestor" as a standard component of its preassembled inlet set.

Thanks to that, the problem has been solved.



The pressure of the water entering into the bowl causes an annoying hiss.

PLANUS has totally solved the problem introducing the "dripping flush system".

