



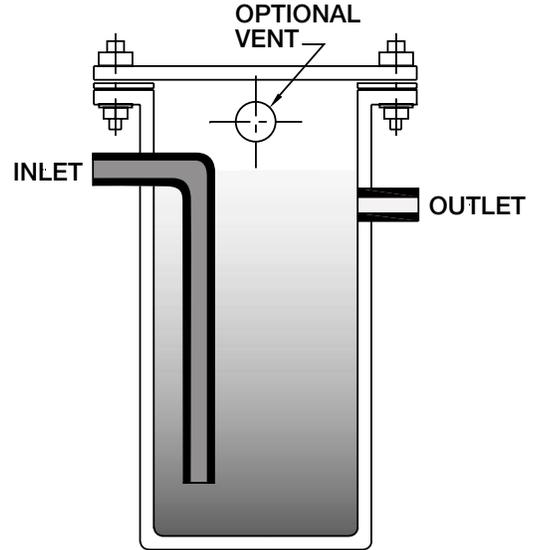
Town & Country Plastics Neutralization Tanks

General Information

The T&C Neutralization tank is designed to intercept harmful chemicals; dilute and neutralize these wastes so that they are safe to discharge to the sewer.

How it Works

The inlet channels the incoming waste directly to the bottom of the tank. Before reaching the outlet the fluids must first pass through proper limestone chips filling the tank. The Calcium carbonate in the limestone reacts with acids to form harmless neutral salts, carbon dioxide and water. The neutral salts are transformed into sludge and fall to the bottom of the tank. Carbon dioxide gas mixes with water to form carbonic acid, which helps to neutralize alkaline wastes. The water helps to dilute the acidic, alkaline and solvent wastes. Once neutralized, wastes are discharged to the sewer systems.



Sizing

American Society of Plumbing Engineers, as well as some national and local codes have recognized different ways of sizing a neutralization tank. It is advis-able to check with local authorities for sizing requirements in your particular locality. Sizing the proper tank for your project is determined by the number of lab sinks discharging through the system. Table TC1 illustrates the most widely used sizing method.

Table TC1: Acidic Waste Neutralization Tank Sizing Table

| | | | | | | | | | | | | | | | | |
|-----------------------------|---|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| Number of Lab Sinks | 2 | 4 | 8 | 16 | 25 | 40 | 50 | 60 | 80 | 90 | 110 | 150 | 175 | 200 | 270 | 300 |
| Tank Size In Gallons | 5 | 15 | 30 | 55 | 100 | 150 | 175 | 200 | 275 | 300 | 350 | 500 | 550 | 650 | 1000 | 1200 |

Limestone Chips

The limestone chips used in conjunction with neutralization tanks must be in the one to three inch (1"- 3") diameter size range and must contain a high calcium carbonate content in excess of 90%. Table TC2 is a useful reference tool in determining the proper amount of limestone needed for the respected tank size. **NOTE: This guide provides the approximate amount needed for a charge (one filling). Replacement chips will be required as determined by the use of the tank.**

Table TC2 - Limestone

| TANK MODEL # | APPOXIMATE AMOUNT POUNDS |
|--------------|--------------------------|
| NT-5 | 50 lbs. |
| NT-15 | 100 lbs. |
| NT-30 | 200 lbs. |
| NT-55 | 500 lbs. |
| NT-100 | 1,000 lbs. |
| NT-150 | 1,750 lbs. |
| NT-175 | 1,900 lbs. |
| NT-200 | 2,500 lbs. |
| NT-275 | 3,200 lbs. |
| NT-300 | 3,200 lbs. |
| NT-350 | 4,000 lbs. |
| NT-500 | 5,000 lbs. |
| NT-550 | 7,500 lbs. |
| NT-650 | 9,000 lbs. |
| NT-700 | 9,100 lbs. |
| NT-800 | 9,500 lbs. |
| NT-1000 | 10,200 lbs. |
| NT-1100 | 10,600 lbs. |
| NT-1200 | 11,000 lbs. |
| NT-2000 | 16,000 lbs. |
| NT-3000 | 25,000 lbs. |

Tank Maintenance

A proper maintenance schedule must be adhered to. If adequate maintenance is not performed, the efficiency of the tank drops off dramatically. A regular maintenance program of one to three months should be observed, more frequent maintenance may be required depending upon volume of waste through the tank.