CLAIMS

1. A purge apparatus for purging an inside of a storage container in which a product is stored, with a purge gas, the purge apparatus comprising:

a discharge pipe configured to connect to a discharge port of the storage container to discharge the purge gas inside the storage container;

a meter configured to measure an exhaust flow rate that is a flow rate of the purge gas flowing through the discharge pipe when the purging is carried out; and

a determination unit configured to determine whether the purging is satisfactory, based on the exhaust flow rate measured by the meter; and

a flow rate control unit configured to switch between a first mode in which the purging is carried out by supplying the purge gas to the storage container at a first flow rate and a second mode in which the purging is carried out by supplying the purge gas to the storage container at a second flow rate, the first flow rate being a flow rate up to a predetermined flow rate, in the storage container in which the purge gas leaks from a portion other than the discharge port of the storage container when the flow rate of the purge gas supplied to the storage container is greater than the predetermined flow rate, the second flow rate being a flow rate greater than the first flow rate,

wherein the meter measures the exhaust flow rate in the first mode, and

the determination unit determines whether the purging is satisfactory,

based on the exhaust flow rate measured in the first mode.

2. The purge apparatus according to claim 1, wherein the flow rate control unit starts the purging in the second mode, switches to the first mode to perform the purging to determine whether the purging is satisfactory, and performs again the purging in the second mode.

3. A purge method of purging an inside of a storage container in which a product is stored, with a purge gas, the purge method comprising:

connecting a discharge pipe to a discharge port of the storage container, the discharge pipe being capable of discharging the purge gas inside the storage container, the first flow rate being a flow rate up to a predetermined flow rate, in the storage container in which the purge gas leaks from a portion other than the discharge port of the storage container when the flow rate of the purge gas supplied to the storage container is greater than the predetermined flow rate, the second flow rate being a flow rate greater than the first flow rate;

measuring an exhaust flow rate that is a flow rate of the purge gas flowing through the discharge pipe when the purging is carried out by supplying the purge gas to the storage container at a first flow rate; and

determining whether the purging is satisfactory, based on the measured exhaust flow rate.