Gas Burners (Downdraft/Immersion Tube & Ring)

Gas burners are the last part in a combustion system, responsible for creating an environment where the fuel and air supplies can properly mix, retention of the flame, and control of the speed and shape of the combustion process.

Burners can be designed to provide fast intense combustion or slow lazy combustion, depending on the system needs. There is a large variety of gas burner types (pilot burners, nozzle mix burners, high velocity high temperature burners, spiral flame radiant burners, tube burners, duct burners and others).

Features that most common burners have in common are gas inlet, air inlet, mixing, flame retention and flame shaping. Our engineers can help you to determine the right burner for your application.

Gas is an economic energy source. The cost for 1 million Btu generated by natural gas is around $13.35 ($13.75 per thousand ft³, compared to $30.40 for the same amount of energy generated by electricity).

Downdraft Gas Burner

Titan Industrial Heating Systems has pioneered the down draft gas burner system for heating:
- Phosphates
- Waste Water
- Hot Seal tanks
- and many other applications

The tube heating efficiencies decrease as build-up occurs, slowing the heating process and ends consuming more in energy.

This system allows you to have the heating source independent of the tank. When the tube builds up, as it does in phosphates and waste water applications: simply disconnect the power and shut off the gas, remove the vent tube and the burner and pull the fire tube out.

You replace it with spare tube you had made at the same time: while the crusted one is being cleaned.

For waste water evaporation more than 1 tube can be in a tank. The typical rate is 15 G.P.H per burner.

Your rate may be less due to humidity and other factors.
Immersion Tube Gas Burner

Immersion tube type gas burner systems are commonly used on hot caustic, Alkaline, Sodium dichromate, black oxide and hot seal tanks.

Use a Titan Industrial Heating Systems Gas Burner 4” or 6” and your heating problems are solved.

Ring Gas Burner

Ring gas burners start at 8” at 35,000 btu’s and go up to 250K.

Most operate on a 110v 5amp circuit. We can make them straight, left or right.

Your application dictates our design.