A blower assembly is used to distribute air in various kinds of equipment. It is commonly seen in cars, furnaces, and home appliances. During forging or furnace operation, air is the utility that should be available at all time in order to ensure a smooth and standardized operation. Supplying air manually will reduce productivity and more man hour to accomplish a given task.

Thus, an electric blower was designed in this regard with an efficient electric motor as the driver. The suction conditions and other application data are appropriately used to calculate the design parameters such as: suction specific speed, the power input to the blower, the inlet and outlet velocity, the twisting moment of the impeller shaft etc.

Beyond the basic parts of a blower assembly, there are several ways the equipment can be varied. Depending on its use, the wheel can be extremely long or wide. There can also be a wide variance in the way the assembly is secured. This includes different sizes of casings, which can range from small, circular models which are not much bigger than the blower wheel to larger rectangular structures. Depending on the use, the blower assembly can also be made to be affixed to equipment in several different ways. Primary considerations include the amount of space available to secure the assembly and how much support the equipment needs, which typically depends on the size and power of a particular component. The configuration of a blower assembly depends upon the size and needs of the item being cooled. For small to mid-sized equipment a single assembly will typically suffice. Larger machines may have dual blower assemblies. Housing for the blower assembly will also vary, depending on the amount of space available. While housings can be made snug and still function adequately, these sizes are not ideal. For optimum performance, it will be made with extra space so the parts have room to function efficiently. They are exclusively engineered to endure the most rugged handling and withstand the increased workload expected of quality replacement products through years of service. Furnace blowers account for about 80% of the total furnace electricity consumption and are primarily used to distribute warm air throughout the home during furnace operation as well as distribute cold air during air conditioning operation.