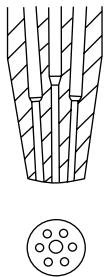
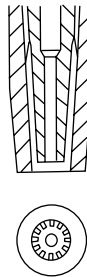


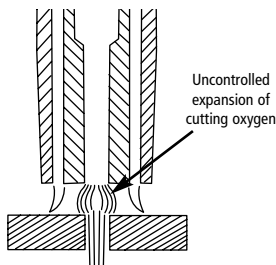
Genuine COMET™ TAPER SEAT CUTTING NOZZLES



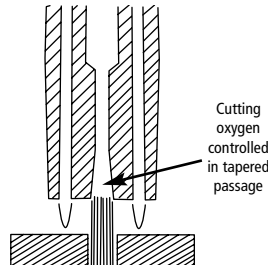
One-Piece Acetylene Nozzle



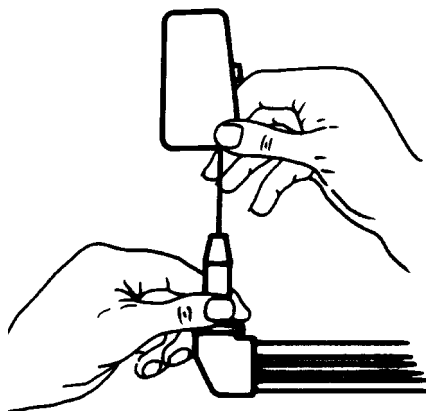
Two-Piece LP Gas Nozzle



Standard Tip

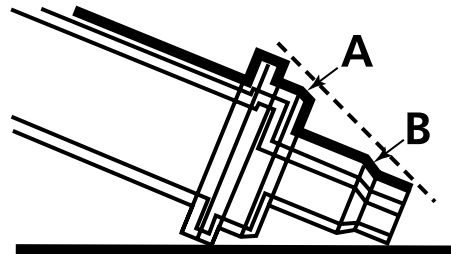


Hi-speed Tip



Nozzles are the vital component of flame cutting equipment. They provide the preheating flames to raise the steel to ignition temperatures and direct the jet of oxygen on to the heated area to perform the cutting process. To achieve this result in the most efficient way, Genuine COMET™ nozzles have the following features:

- ▲ **Longer Nozzle life** – the high brass content and advanced manufacturing techniques give Genuine COMET™ taper seat nozzles an inbuilt quality.
- ▲ **Better quality cutting** – the mirror smooth finish of the gas ports assures stable gas flows and superior cutting oxygen stream. Cuts are clean and smooth with the narrowest kerf width.
- ▲ **Less slag adhesion** – high copper content of sizes 20, 24 etc conducts heat away from the nozzle face. The nozzle keeps relatively cool and slag adherence to the nozzle face is reduced.
- ▲ **LPG (propane) flames do not blow off** – taper seat LPG nozzles have slotted preheat ports which cause a turbulence in the gas flow enabling the flame to hang on to the nozzles.
- ▲ **Faster nozzle attachment** – easy change of position for bent nozzles. Only one nut is tightened to give perfect seating with taper seat nozzles.
- ▲ **Small sizes of taper seat acetylene nozzles are machined from high quality brass so that the small preheat holes will withstand continuous cleaning.** Brass nozzles stay better longer for these moderate heat applications.
- ▲ **In all nozzles preheat gas consumption is reduced because high velocity preheat ports ensure that the flame travels at high speed from the exit ports to the work.**
- ▲ **Wider seating areas ensures gas tight seals with less tightening.**
- ▲ **Protective flange to safeguard tapered seat from damage.** (See diagram below. Points 'A' and 'B' equal seats).
- ▲ **Individual flame testing of Genuine COMET™ nozzles guarantees consistent high quality performance.**



Standard Nozzles

CIGWELD standard taper seat nozzles are primarily designed for hand cutting and precision machine cutting. The number of preheat holes provide for a better distribution of the preheat flames required in profile cutting. Standard nozzles produce a very uniform kerf surface and kerf width under any recommended conditions.

Hi-Speed Nozzles

Where speed is the prime consideration, when machine cutting eg. in plate splitting operations, Hi-Speed nozzles offer very definite economies. Hi-Speed nozzles cut a narrower kerf, less metal is consumed and consequently less cutting oxygen is required. Gas savings of between 20% and 40% per metre of steel cut are consistently gained with up to 50% increase in cutting speed, with no loss of quality.

Maintenance Instruction for Nozzles

Do not mistreat the nozzle. Do not use it as a hammer or as a lever to prise away cut portions of metal.

To clear the orifices, special nozzle cleaning reamers are obtainable from CIGWELD Distributors.

It is strongly recommended that these be used in preference to other means. Should nozzle cleaning reamers not be available, then use a drill one size smaller than the orifice and work it up and down without twisting. The drill should be held in a pin vice, if it does not enter easily, start with a smaller drill with the same procedure, increasing the size of drill until the correct size is used.

It is **most important** that the small holes at the seating end of the nozzles are not enlarged in any way. After prolonged use the nozzle may become dirty, in which case it should be immersed for two hours in a solution of the COMWELD NOZZLE Cleaning Compound. For very dirty nozzles the period of immersion should be doubled.

NOTE: the correct strength of cleaning solution is obtained by using 28.4ml of compound to 568ml of water. Effective pre-heat flame shape and cutting oxygen stream can only be maintained when the edges of the orifice are sharp and square. If a nozzle becomes damaged on the end, rub it down with a piece of fine emery paper over a plate of glass, holding the nozzle at right angles to the glass. The orifices should be cleaned out as described above. Provision is made in the design of the nozzle to make reconditioning possible, as much as 3mm may be removed before the nozzle becomes unserviceable.

DO NOT use old pieces of wire, reamers or brooches to clean out pre-heat and cutting stream orifices.

DO NOT interfere in any way with the seating surfaces either on the nozzles or in the blowpipe head.