Solid Nozzles

All solid nozzles are made from a special high strength chrome/vanadium/tungsten tool steel and are supplied in pre-heat-treated ‘T’ condition, or fully hardened and tempered in our heat-treatment ovens.

Shock resistant and tough, our nozzles will withstand high temperatures up to 800°F (430°C) for extended periods without undue fatigue.

Do not compare these top quality nozzles with nozzles which are made from “easy to machine” common tool steels.

- OEM or Custom design style
- Highest quality- we manufacture for many OEMs
- Inside surfaces are polished to a mirror finish for minimum hang-up and flow resistance
- Made in our workshop- fastest delivery
- Made from top quality tool steel for longest possible life
- In-house heat treatment for fast turn-around
- Gas Injection and water cooled options
- Any shape and size available to your order

Internal design:

GENERAL PURPOSE
Standard free flow internal design, General Purpose, provides minimum flow resistance and back pressure buildup. 1/2” standard diameter flow path unless otherwise stated.

NYLON REVERSE TAPER
For use with polyamides, acrylics, and similar expansive and heat sensitive materials. Material flows 1½” through 1/8” diameter restricted throat into 1” long reverse taper. Sprue breaks inside nozzle providing expansion area and reducing drool.

FULL TAPER - ABS
For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and areas of hangup. Recommend large orifices for minimum flow resistance. Taper 3” longitudinal distance from rear opening to 1/2” internal bore.

Material Specifications:
S1: Chrome vanadium tool steel through hardened used for through-hardened one-piece “solid” nozzles and removable tips.
EN19T: Standard material for removable tip nozzle bodies. Pre Heat-Treated
EN24: Through Hardened Steel for Tips and Nozzle bodies in more demanding applications.
D2: Through Hardened Tool Steel for solid one-piece nozzles in demanding applications
Copper nickel: Used for removable tips when a high degree of thermal conductivity is required, or if space limitations do not permit the use of a heater band.