TIP-MIX STYLE CUTTING TIPS

HOW SAFE ARE TIP-MIX TIPS?

WHY ARE TIP-MIX STYLE CUTTING TIPS THE SAFEST TIPS AVAILABLE?

Unlike the other big brand handheld cutting torches, QCC's torches do not have an internal mixer. Rather than mixing preheat oxygen and fuel in the torch handle or body QCC's tip-mix tips feature a unique design that mixes preheat gases in the tip itself. This greatly reduces the chance of a flashback/blowback occurring and the possibility of operator injury and potential equipment damage.

WHAT HAPPENS IN A TIP-MIX STYLE TIP WHEN A FLASHBACK OCCURS?

If a flashback/blowback does occur with a QCC tip-mix style cutting tip, it is confined only to the cutting tip. The tip internals will overheat and melt, causing an audible "bang" and whistle as gas leaks from the overheated tip. The sound and sudden reduction in cutting ability lets the operator know a flashback/blowback has occurred and to replace the cutting tip.

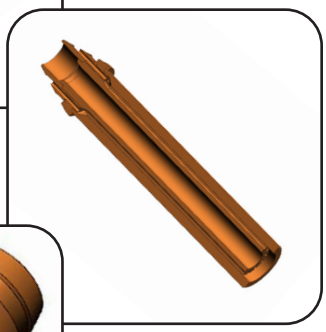
WILL TIP-MIX STYLE CUTTING TIPS INCREASE OPERATOR SAFETY?

The unique design of QCC's tip-mix style cutting tips place torch operators as far away as possible from a flashback/blowback, unlike other torches with internal mixers. This reduces the possibility of an operator accident or injury.

WILL TIP-MIX STYLE CUTTING TIPS INCREASE EQUIPMENT SAFETY?

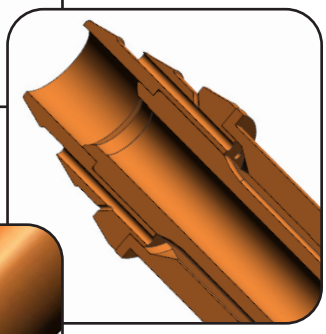
QCC's tip-mix style cutting tips minimize the chances of torch and equipment damage by limiting any potential flashback/blowback damage to inside the cutting tip. This reduces the potential for expensive torch and equipment repairs or replacements.

External view of a 213-15S tip-mix style cutting tip

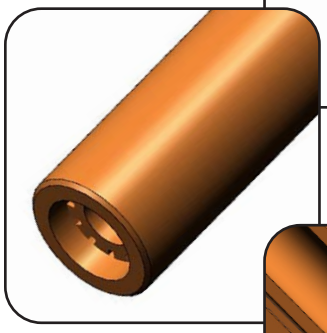


Internal view of a 213-15S tip-mix style cutting tip

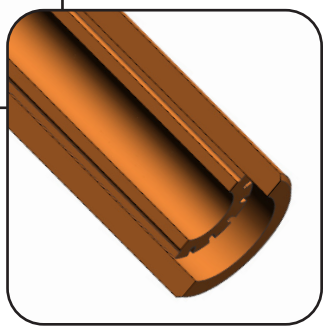
External view of preheat entry bores & mixing chambers



Internal view of preheat entry bores & mixing chambers



External view of preheat mixture exit splines



Internal view of preheat mixture exit splines

TIP-MIX STYLE CUTTING TIPS

HOW DO TIP-MIX TIPS WORK?

1. CUTTING OXYGEN

Cutting oxygen starts flowing through the center bore of the cutting tip, moving straight through to the tip exit.

2. PREHEAT OXYGEN

While cutting oxygen flows through center of tip, preheat oxygen enters the tip through specially designed bores.

3. PREHEAT FUEL

Preheat fuel enters the tip through strategically placed bores.

4. PREHEAT MIXTURE FORMS

Preheat oxygen and preheat fuel mix together. The preheat mixture flows down and through the angled holes and heads towards the slotted bores.

5. PREHEAT MIXTURE FLOWS

The preheat oxygen and fuel mixture flows down through the tip, to the tip exit.

6. PREHEAT MIXTURE & CUTTING OXYGEN EXIT

The preheat oxygen and fuel mixture exit the gun barreled straight bores through uniquely shaped splines. As the preheat mixture exits the tip, it mixes with the cutting oxygen that has been flowing through the center of the tip throughout the mixing process.