

## RADIAL CUTTING TECHNOLOGY

**MCR's Radial Cutting Torch™** tool is the safest and most efficient pipe cutting device available in the industry. Based on patented cutting technology, MCR's Radial Cutting Torch tool, or **RCT™** tool, is used to sever tubing, casing, drill pipe, and coiled tubing without the use of explosives or hazardous materials, making it one of the safest pipe cutting tools on the market.

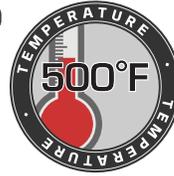
### ADVANCED TECHNOLOGY

The patented nozzle and proprietary mixture of various powdered metals produces jets of highly energized plasma to cut virtually any type of pipe in any well condition. Because RCT cutting technology does not use explosives or hazardous chemicals, the tool can be shipped almost anywhere in the world within 24 hours, saving significant time and associated costs, while remaining compliant with safety regulations.

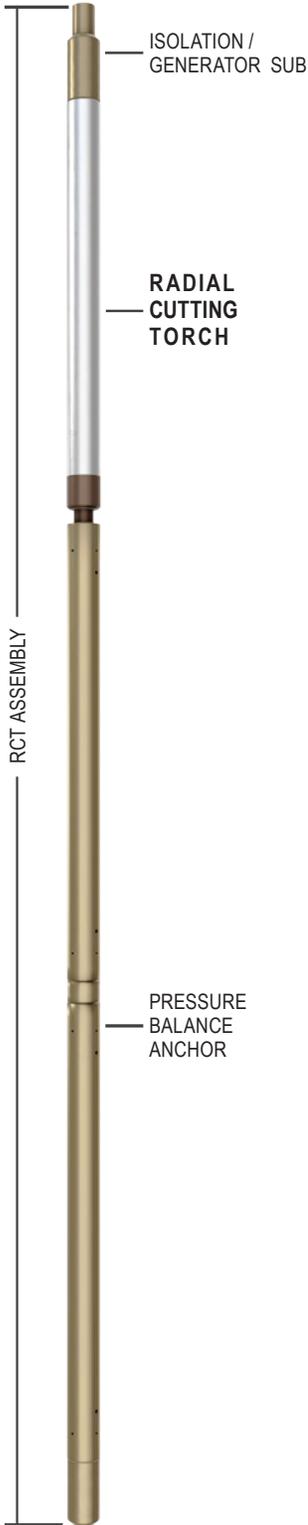
### SUPPORTING TOOLS

- Electro-Mechanical Anchor (EMA)
  - Anchors during cutting operation
- Generator Safety Sleeve (GSS)
  - Safely dissipates all Thermal Generator energy in the event of operator activation error on surface
- Remote Firing Mechanism (RFM)
  - Data logging tool and firing system
  - Safely enables all MCR systems on coiled tubing, slickline and pipe

UP TO



UP TO



## OPERATION

MCR's Radial Cutting Torch assembly is lowered into the well until the desired depth is reached. MCR's **Thermal Generator™ (THG™)** activator activates the primary fuel load; highly energized plasma is produced causing an increase in internal pressure. Once the pressure produced inside the torch exceeds that of the well bore, the protective sleeve is displaced exposing the nozzle to the well bore. Plasma exits thru the nozzle to sever the target in drilling, completion, production, or recovery scenarios, within wellbore temperatures up to 500°F (260°C) and pressures up to 10,000 psi (69 MPa).

### RCT tools are available for

- Standard severance applications
- Undersized for restrictions
- HT environments  
*(XRT® Radial Cutting Torch tool series for HPHT deployments\*)*
- Cutting up to 9-7/8" casing
- Custom tools available

### Non-hazmat rated RCT tools currently available

- RCT-SP series of torches.

\*XRT Radial Cutting Torch tool systems are capable of pressures up to 30,000 psi (207 MPa). Contact MCR for system details.

## BENEFITS

- Non-Explosive
- Radio Safe
- Operates in temperatures to 500°F (260°C) & pressures up to 10,000 psi (69 MPa)  
*(see XRT tool systems for HPHT requirements)*
- Cuts all steel, high chrome, plastic coated tubulars, Inconel®, Monel®, Hastelloy® and exotic pipe
- Non-hazmat fuel systems available†
- Cuts are flare-free and do not produce swelling
- Cuts in fluids or dry pipe, heavy drilling fluids
- Deployable within hours not days
- Minimizes downtime and associated costs
- Approved for all methods of transport



†Radial Cutting Torch tools available as hazmat & non-hazmat