

# Ultra•Fused<sup>®</sup> High Duty Copper/Brass Radiator Cores

- The leading tube to header joint technology for copper/brass radiator core design
- Up to 20 times stronger than conventional solder jointed tube to header connections
- Reduces the solder in the joint offering maximum corrosion resistance
- Creates stronger bonds that endure under high-stress conditions

# High Duty Copper/Brass Radiator Cores

Developed in response to the need for a core that performed beyond the normal, Ultra+Fused® has offered significant improvements in core life and durability in harsh duty applications in On and Off-Highway applications.

Failures driven by the repetitive cycles of high temperatures and pressures seen in the harshest environments are reduced by fusing the tube to the header plate with a weld, rather a than a soft solder filler. The process uses the base materials present in the joint to bond the tube to the header giving a near seamless melding of the tube and header plate.

Traditional heavy duty radiators rely on soldered tube to header joints. Solder can often fail as the radiator expands and contracts with the demanding temperature and pressure changes within the modern cooling system. The cyclic loads lead to fatigue failures, a traditional enemy of lead/tin solders.

The Ultra-Fused<sup>®</sup> fusion welding process uses TIG welding to melt the tube material into the headerplate material, giving a joint that is proven to be 20 times stronger than the traditional soft solder. When combined with heavy wall tube material and phosphor bronze headerplates with large diaphragming surfaces, the Ultra-Fused® core soaks up the bumps, twists and racking seen in the highest duty applications.





- Ultra•Fused<sup>®</sup> has revolutionised the mechanical performance capability of copper/brass radiator core construction for high duty applications - gives the user the longest service life between maintenance or repair. Less maintenance, more time on the road.
- Ultra•Fused<sup>®</sup> construction enables light weight, high efficiency cores to be used in heavy duty applications. Highest performance for your application - letting you access the high performance you need from your machine.
- Ultra•Fused<sup>®</sup> has a long field history of solving problems related to core failures - proven technology, giving proven fixes, to real problems.
- Ultra•Fused® can be used in any market sector, Power Generation, Industrial, On Highway Vehicles and Off Highway machines - a solution for every application.
- Ultra•Fused® caters for the higher operating pressures and temperatures of modern diesel engines introduced by EGR and other pollution control methods - a perfect match for the increased demands that you ask of your machine.

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