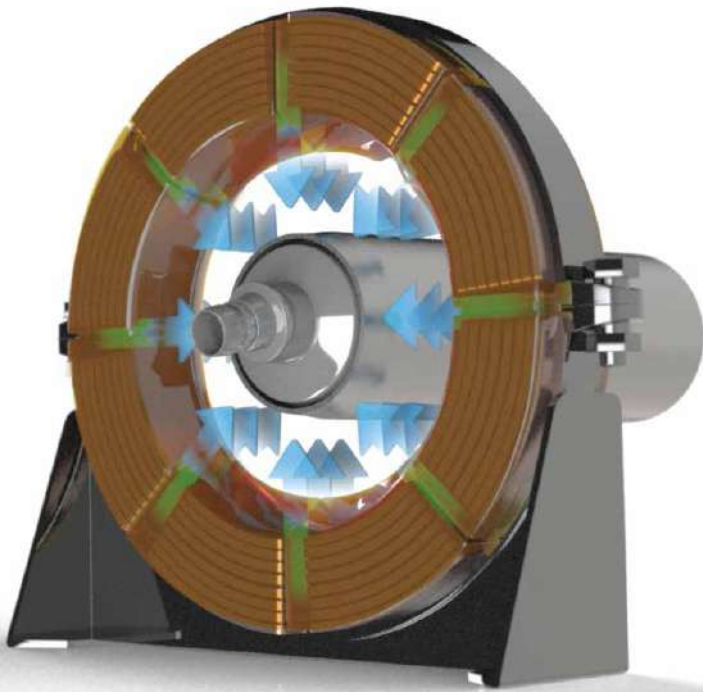


Magnetic Pulse Welding



Our Magnetic Pulse Welding (MPW) technology uses electromagnetically generated forces to create a solid-state cold weld at room temperature. This weld is completed in microseconds and is stronger than a conventional weld.

Seamless Pressure Resistant Welding



Technology Benefits

MPW is a solid state, cold welding process generated by a high speed collision between two metals:



GREEN & CLEAN PROCESS



NO HEAT AFFECTED ZONE
Dissimilar Materials



STRONG, CORROSION RESISTANT WELD

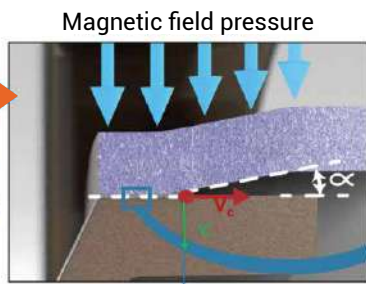
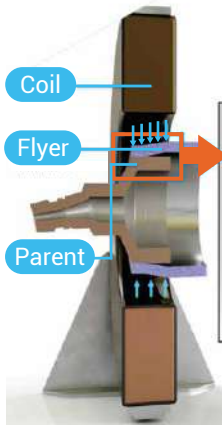


LOW SCRAP RATE

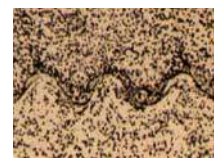


LOWER TCO MATERIAL SAVING

PROCESS



Cross Section Micrography



In Testing

The parent material fails prior to the welded area:

BURST TEST

Pressure vessel,
Al to Al



TENSILE TEST

Flat weld,
6,000 series Al
to 6,000 series Al

bmax.com



Solution

Pressure Vessels



Our breakthrough Magnetic Pulse Welding (MPW) technology makes it possible to bind materials at a molecular level and at room temperature, without fumes or filler material, thus preserving the material's initial properties.

Increasingly efficient and reliable, our industrial, turnkey MPW systems are currently being used by automotive industry leaders for mass production of key components of highly efficient HVAC (Heat Ventilation & Air Conditioning) systems utilized in electric vehicles, like R744 (CO₂) accumulators and R290 (Propane) receiver driers.

We enable our customers to save material and thus weight and cost, while ensuring high levels of product performance.

Co-Engineering
& Prototyping

Process, Performance
& Quality

On Site
Services

Maintenance
Services

Continuous
Improvement

Products manufactured by our systems



Accumulator



Hydraulic Accumulator



Receiver Drier



Filter Canister



Drive Shaft



Connecting Rod



Dissimilar Joint



Welding System Manufacturing

- Security, Health & Safety
- Compact, Semi-automatic Mass Production
- High Repeatability, & Low Scrap Rate
- Process Monitoring
- Easy to Operate & Maintain
- Environmentally-Friendly

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