

The Merkle ColdMIG Process

As much as 30% heat reduction!



Application:

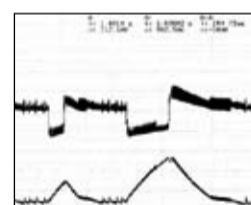
- Welding of thin sheet metals 0.6 – 3.0 mm
- High gap bridging capacity
- MIG brazing at low heat input
- Welding of mixed materials
- Welding of coated sheet metals

The Merkle ColdMIG process sets new standards in welding. With as much as 30% less heat input thin metal sheet welding (0.6 – 3.0 mm) is achieved to perfection. Its high gap bridging capacity and optimum welding facility of mixed materials and coated sheet metals are other world class features.

The ColdMIG process principle:

The characteristic curve is controlled in the up- and downslope cycle by an ultrafast digital signal processor.

- Steep controlled upslope in the short-circuit cycle
- Steep (almost vertical) downslope of the current after drop transfer
- Constant frequency of the drop transfer

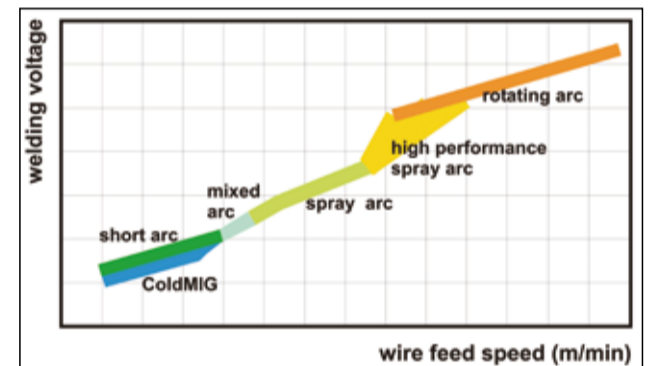


short arc



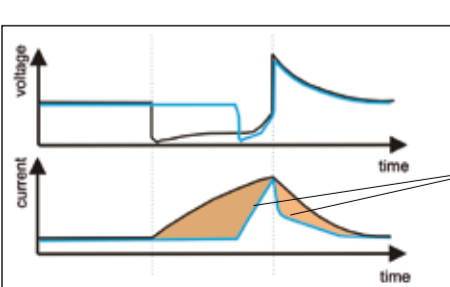

ColdMIG

Arc sections



Welding current: 20 – 140 A
Arc voltage: 13.5 – 20 V
Wire feed speed: 0.7-5 m/min

Process benefits:

<p>Comparison of heat inputs</p> <p>20-30% less heat input in comparison to conventional short arc welding.</p>  <p>heat reduction from ColdMIG</p>	<p>Gap bridging capability</p> <p>The high gap bridging capability sets new standards even with complex requirements and applications.</p> 	<p>MIG brazing of galvanised sheet metals</p> <p>MIG brazing of galvanised sheet metals to perfection thanks to 30% less heat input.</p> 
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