



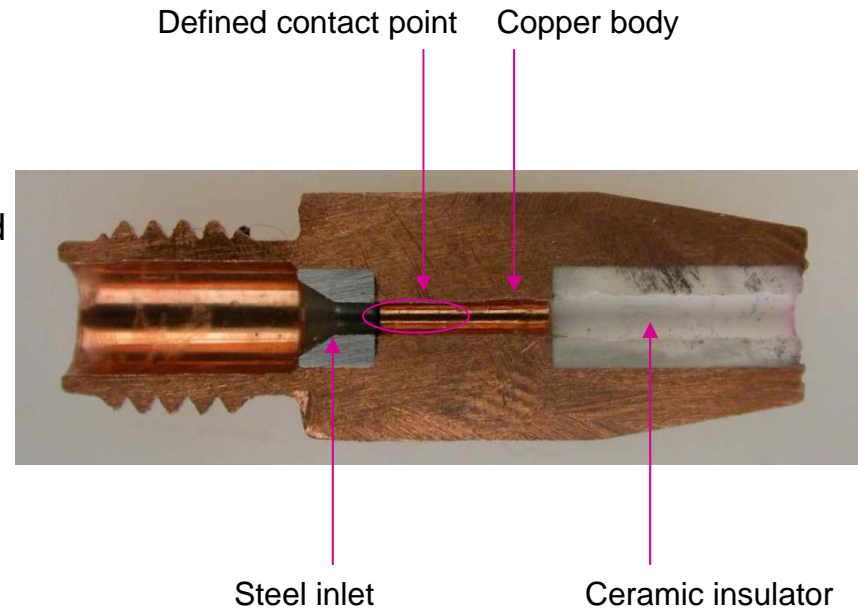
Description	Features				
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Contact tips "FASTtip" – a breakthrough technology

Process improvement without capital invest

FASTtip contact tip technology provides significant welding productivity.

Increased travel speed of 25-30%, clearly optimized weld quality and long contact tip life leads to impressive cost reduction.



Description

Features

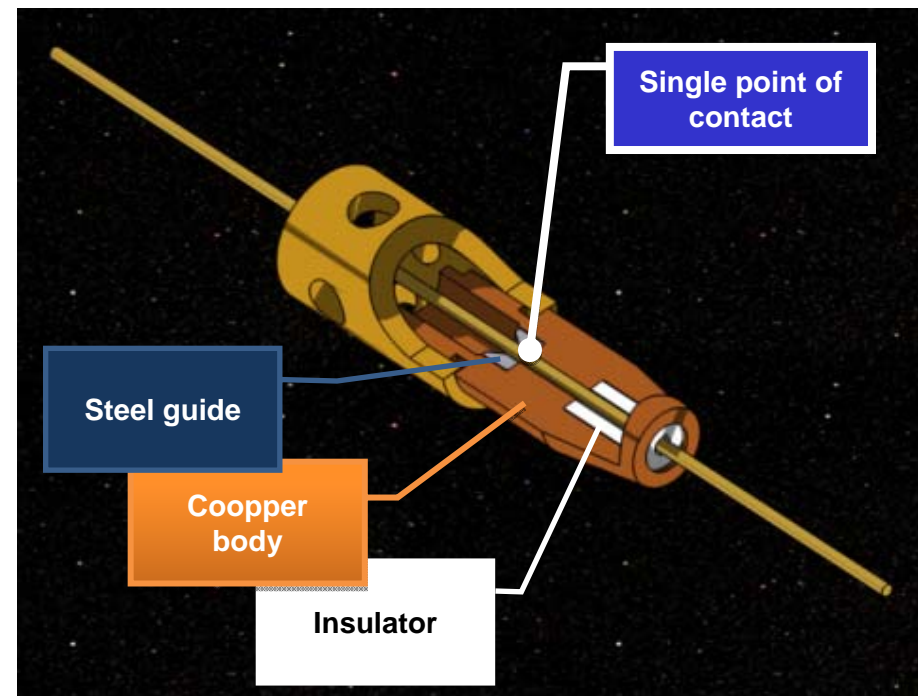
Contact tips "FASTtip" – a breakthrough technology

FASTtip contact tip:

- Complex geometric structure: Body, Guide, Insulator
- Single point of contact
- Extended stick out with wire guidance

The steel insert is guiding the wire electrode right to a short, hence defined area of current transfer. Thus a smooth and stable arc welding process is established.

The ceramic insert is increasing the wire stick out. The resistance heating in the wire is increased, as well as the melting rate, which leads to higher welding travel speed.



Description

Features

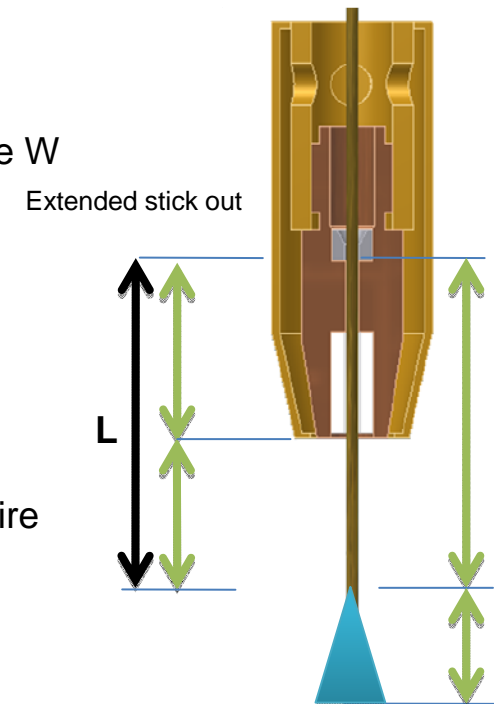
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Extended stick out:

- Extended stick out by ceramic insert
- Increased L increases the amount of wire being resistively heated, hence W increases
- Current drops as resistance in the wire is increased

FASTtip solution:

- Single point of contact:
 - Steel guide projects wire
 - Ceramic insulator avoids conductivity in the bore and guides the wire
- "internal" extended stick out by the length of ceramic insert

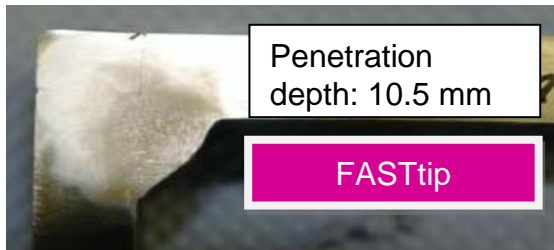
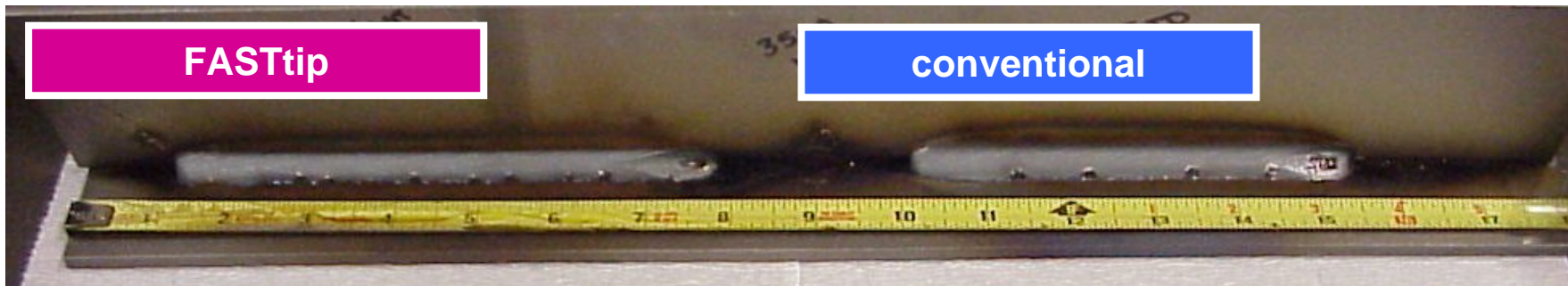




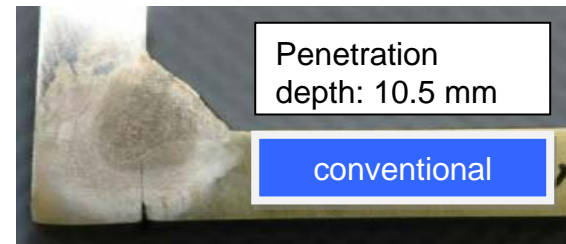
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Contact tips "FASTtip" – a breakthrough technology

Performance



- 15 sec weld
- 30% increase in length of weld
- Equal penetration



Description

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Benefits to the user:

- Increase in welding speed
 - Reduction of arc-on time
 - Faster production results in higher output (more capacity):
 - Less gas consumption
 - Less energy consumption
 - Less wire usage (less spatter)
- Improve Welding Quality
 - Less heat distortion
- Reduce Spatter
 - Spatter reduction through more efficient and stable welding process
- Less downtime (longer tip life)
- Reduction of robot and manpower cost
 - Depends on improved cycle time



Description

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Contact tips "FASTtip" – a breakthrough technology

Additional cost opportunities:

- Spatter reduction
 - Less cleanup
 - Better work piece quality, less rework
 - Less wire use
- Significant increase in tip life
 - Steel guide is load bearing and reduces the load on the copper contact point
 - Ceramic insulator provides wear resistance at end of tip (better TCP)
- 4 to 5 times greater than conventional tips reducing down time

Environmental benefits:

- Significant green house gas reductions through direct gas savings, energy usage, associated reduction in emissions due to less wire being consumed and the reduction in transport of raw materials

