

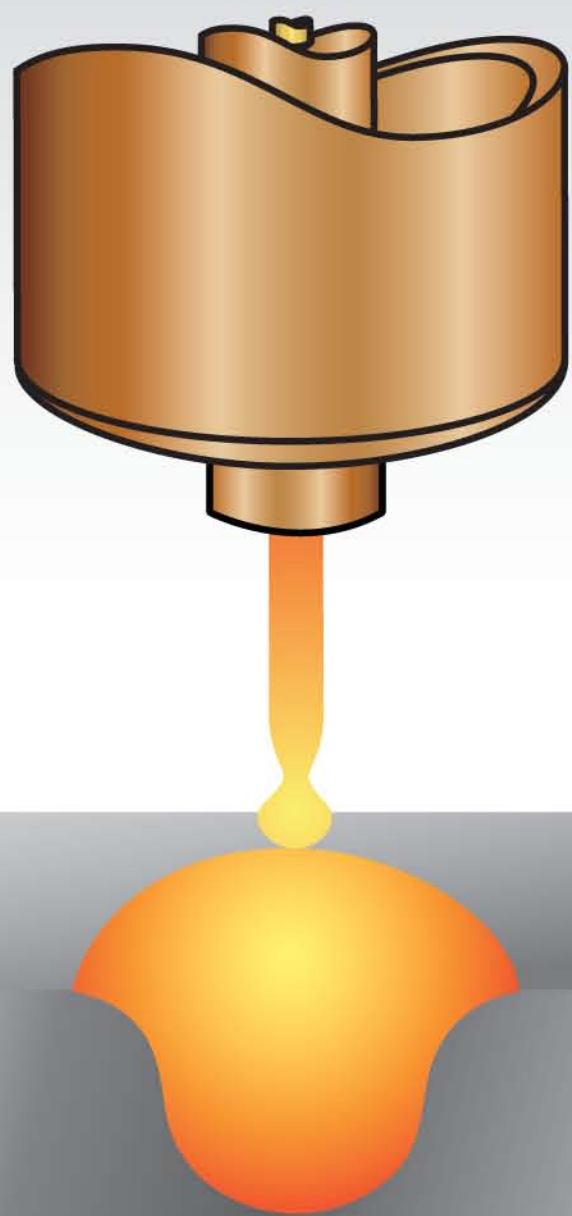


MIG PROCESSES



When it comes to choosing the right MIG transfer process for your application, there are many variables to consider. How thick is the metal? How important is a good bead? How will the final product be used? Find the answers to your questions below.

Short Circuit Transfer



Advantages

- Suitable for thin materials
- Good for:
 - Out-of-position work
 - Open root
 - Poor fit-up

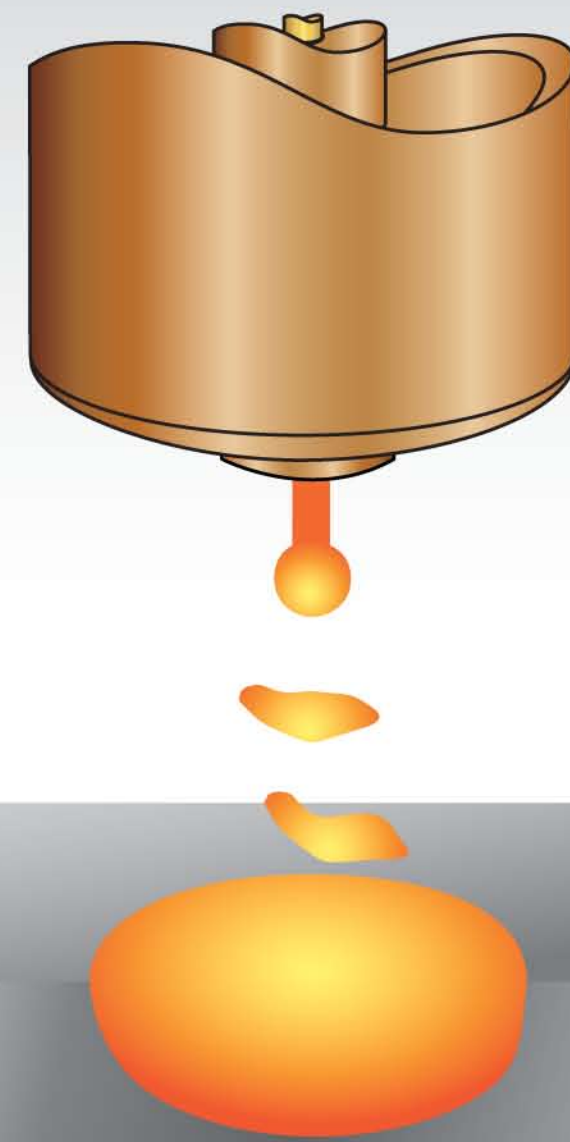
Limitations

- Lack of penetration on thicker materials
- Unsuitable for aluminum
- Produces spatter

Common Applications

- Sheet metal
- Automotive repair and restoration
- Root passes on pipe

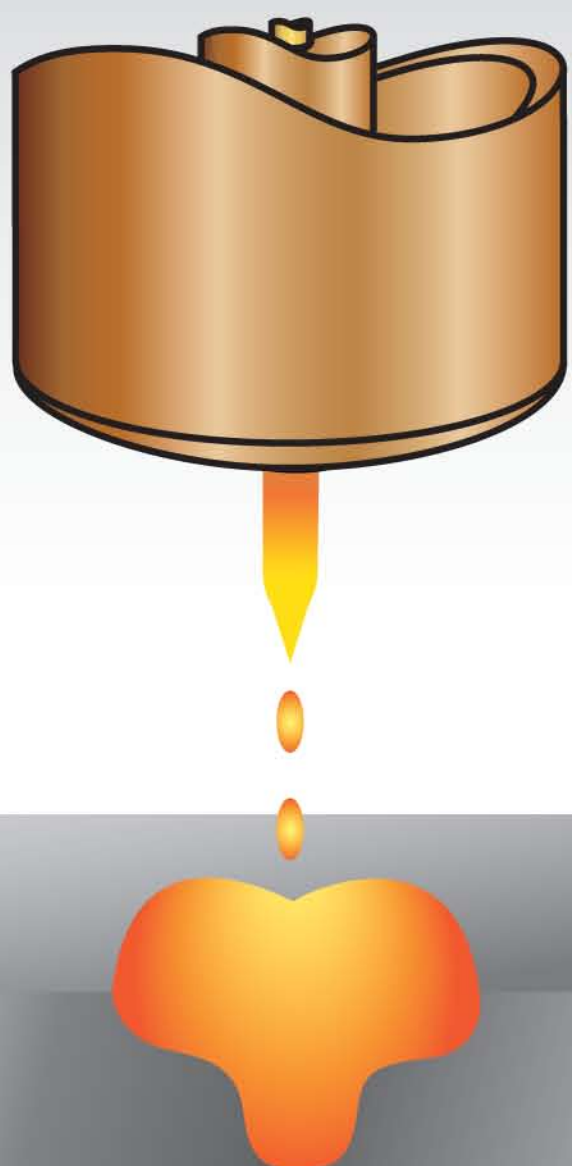
Globular Transfer



Generally not recommended for use

- Excessive spatter
- High risk for:
 - Incomplete penetration
 - Cold lap
 - Incomplete fusion

Spray Transfer



Advantages

- High deposition
- Good fusion and penetration
- Good bead appearance
- Ideal for larger-diameter wires
- Very little spatter

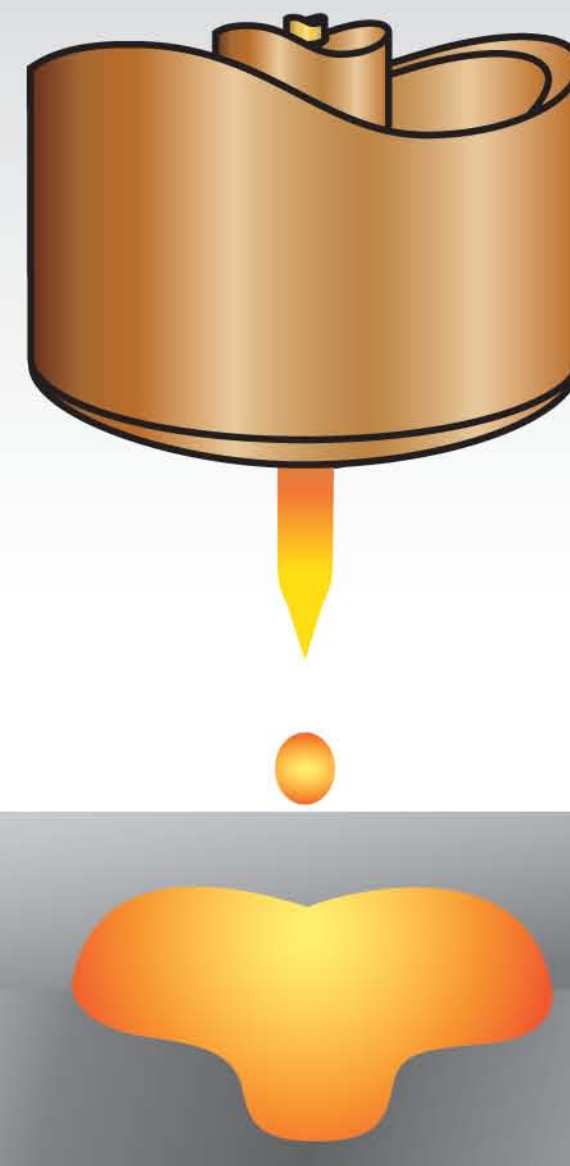
Limitations

- Suitable only on material thicker than 1/8 in.
- Effective only in the flat and horizontal fillet positions
- Good fit-up is always required

Common Applications

- Heavy plate
- Aluminum
- High volume manufacturing

Pulsed Spray Transfer



Advantages

- Effective in all positions
- No spatter
- Suitable for thick or thin materials
- Perfect for joining all weldable metals

Limitations

- Equipment is more expensive
- Cannot be used on poor fit-up
- Difficult to use on open root

Common Applications

- Sheet metal
- Heavy plate
- Aluminum, stainless steel, carbon steel and exotic metals
- Automotive
- Heavy equipment
- Piping systems