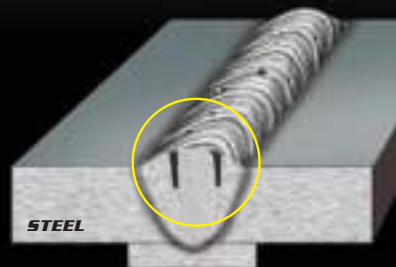


Weld Discontinuities

POROSITY



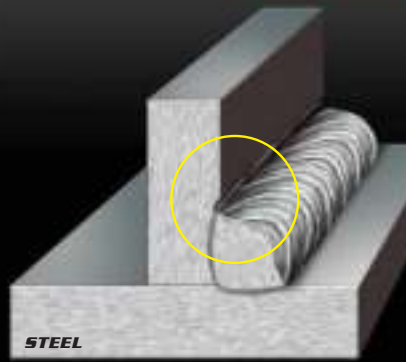
Possible Causes

Long Arc Length
Dirty Base Metal
Inadequate Gas Coverage

Possible Cures

Use Proper Arc Length
Clean Base Metal
Check for Proper Gas Coverage

UNDERCUT



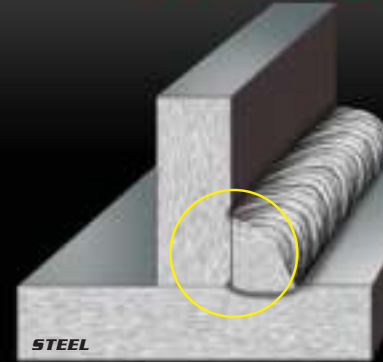
Possible Cause

Improper Welding Technique

Possible Cures

Reduce Arc Length
Reduce Travel Speed
Use Proper Electrode Angle

INCOMPLETE FUSION



Possible Causes

“Cold” Welding Procedures
Travel Speed Too Slow
Travel Speed Too Fast

Possible Cures

Increase Current
Use Proper Travel Speed

INCOMPLETE JOINT PENETRATION



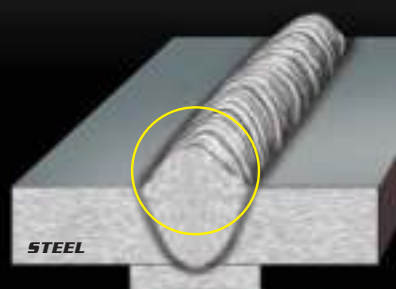
Possible Causes

“Cold” Welding Procedures
Travel Speed Too Slow
Travel Speed Too Fast
Improper Joint Detail

Possible Cures

Increase Current
Use Proper Travel Speed

EXCESSIVE REINFORCEMENT



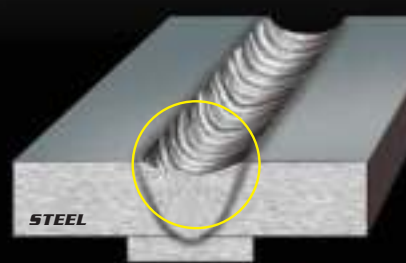
Possible Causes

Travel Speed Too Slow
“Cold” Welding Procedures

Possible Cures

Increase Travel Speed
Increase Current

UNDERFILL



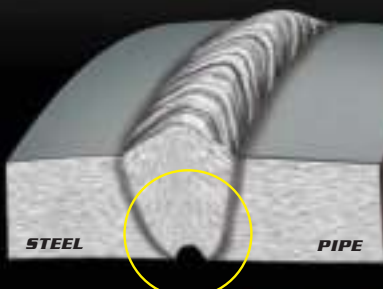
Possible Cause

Insufficient Weld Metal

Possible Cure

Reduce Travel Speed

CONCAVE ROOT SURFACE (Suck-back)



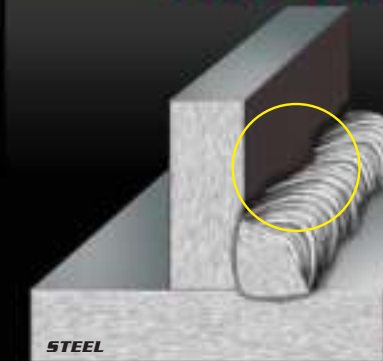
Possible Causes

Too Much Current
Arc Length Too Long
Root Face Too Small

Possible Cures

Reduce Current
Maintain Proper Arc Length
Use Proper Joint Fitup

NON-UNIFORMITY



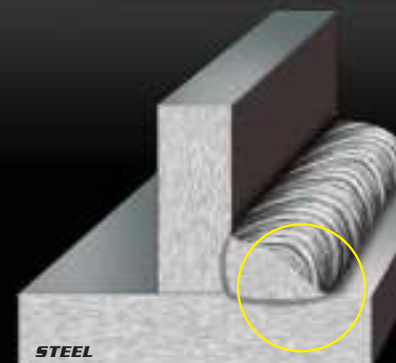
Possible Cause

Improper Welding Technique

Possible Cure

Maintain Constant Travel Speed

IMPROPER LEG SIZE



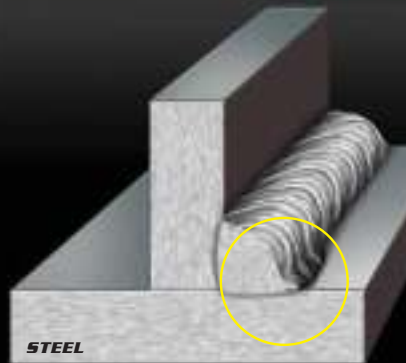
Possible Cause

Improper Electrode Angle

Possible Cure

Use Correct Welding Technique

OVERLAP



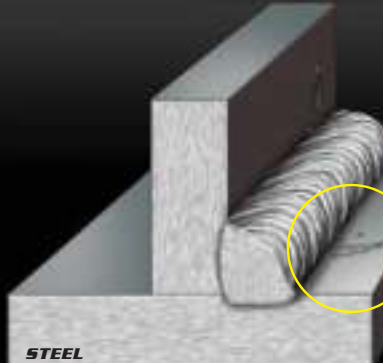
Possible Cause

Travel Speed Too Slow

Possible Cure

Use Proper Travel Speed

ARC STRIKES



Possible Cause

Improper Welding Technique

Possible Cure

Initiate Arc Inside the Weld Joint

SLAG INCLUSIONS



Possible Cause

Improper Welding Technique

Possible Cures

Use Correct Welding Technique
Clean Weld Between Passes

LINCOLN
ELECTRIC

THE WELDING EXPERTS®

lincolnelectric.com