



Photos Courtesy of:  
**National Welding Corp. Midvale, UT**  
**Victaulic Depend-O-Lok Doraville, GA**

# STEEL PIPE INSTALLATIONS









# Sixty 6" – 60" $\Phi$ Field Connections to 2000' 102" $\Phi$ During 35 Day Turnaround in Tunnel



# Economies of Steel

- Steel Pipe Construction 144"  $\Phi$  & Greater
- Economy in Installation
- Longer Length Reduces Number of Field Joints
- Lighter Weight than Concrete
- Homogeneous Structural Composition
- Precision Rolled to Any Diameter





**Penstock 7000' – 90"Φ**





# Strength of Steel

- High Ductility
- Flexible Pipe Design – Works in Combination with the Soil
- High Strength – Handles High Working Pressures & Surges
- Great for Horizontal Directional Drilling



# 120" $\Phi$ Expansion Joint 12,000' of Pipe





# Almost Done! 90" Penstock



# Install it Anywhere

- Underground or Aboveground
- Tunnels
- Power Plants & Penstocks
- Under Bridges
- Inside Structures
- Etc.



39,000'  
84" Steel Pipe





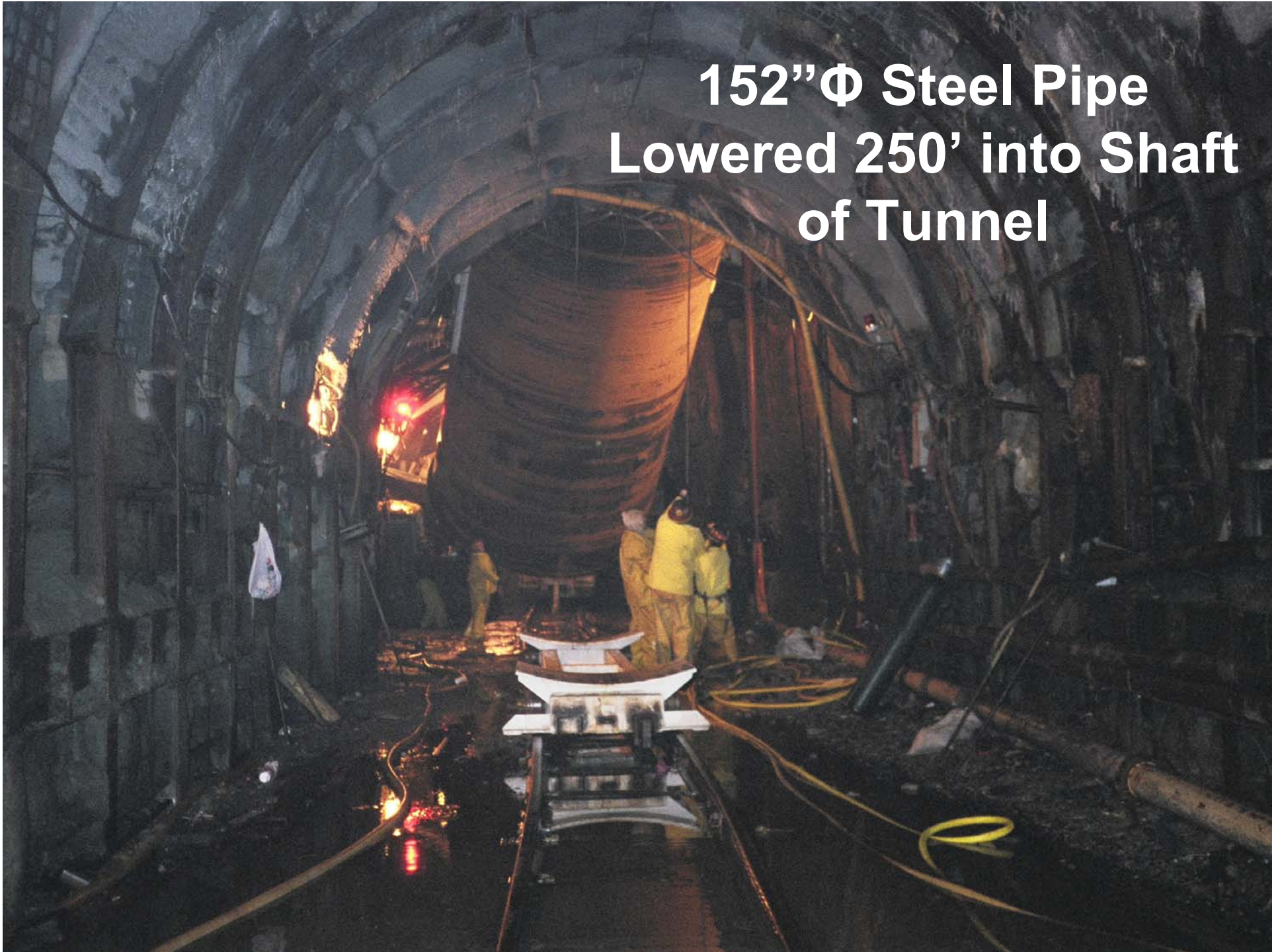








**152"Φ Steel Pipe  
Lowered 250' into Shaft  
of Tunnel**





**54" Pipe  
Inside  
Structure**



**48"  $\Phi$  Pipe  
Hangs on  
Bridge**



# Cooling Tower Connection

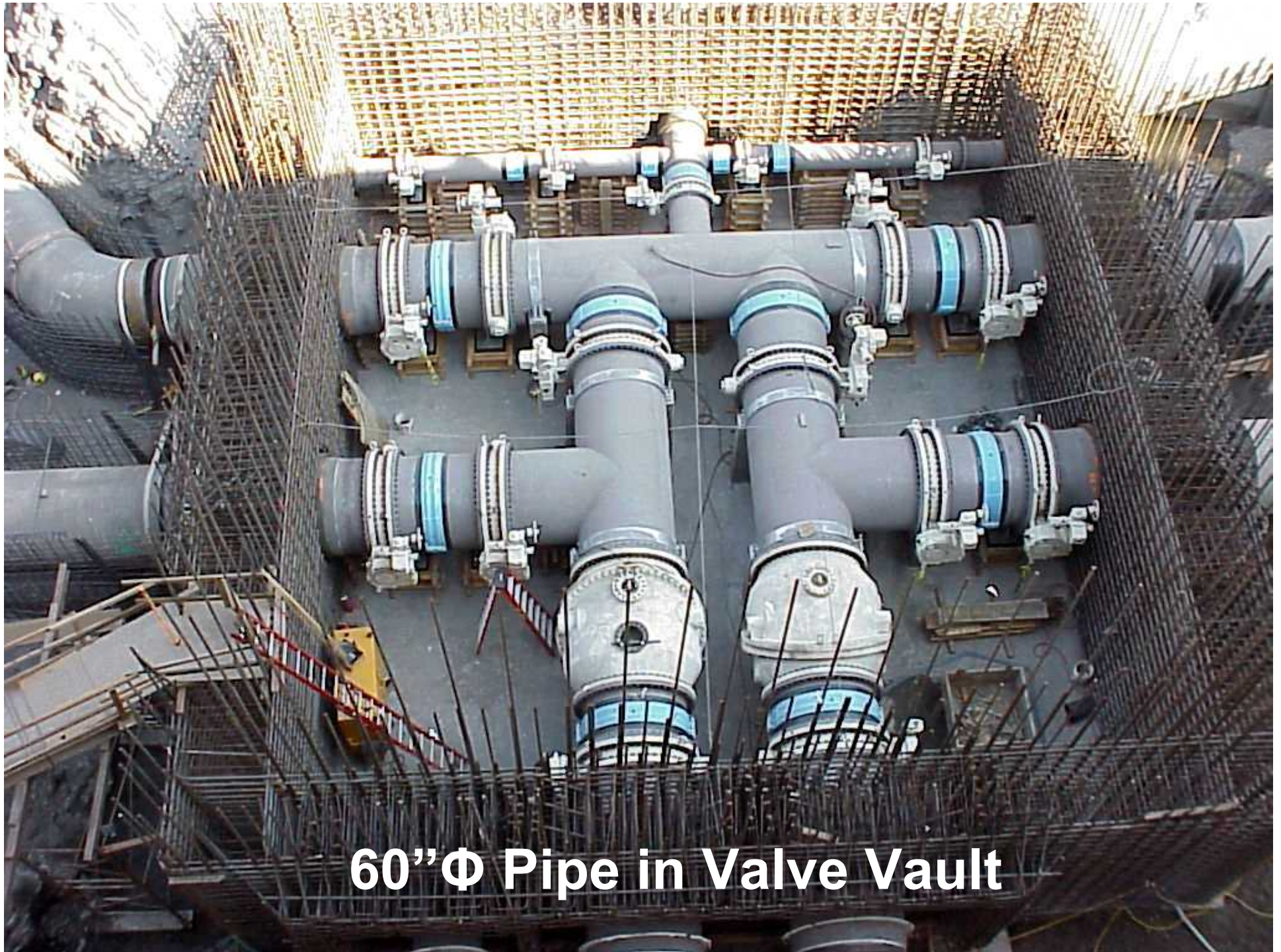


Field Joint



# Steel Pipe Design is Adaptable

- Pre-Fabricated Fittings  
Customized to any Dimension
- Can be Easily Modified in the Field



**60"Φ Pipe in Valve Vault**



# Connecting Water Main to Water Treatment Plant - 180" Diameter Steel Pipe



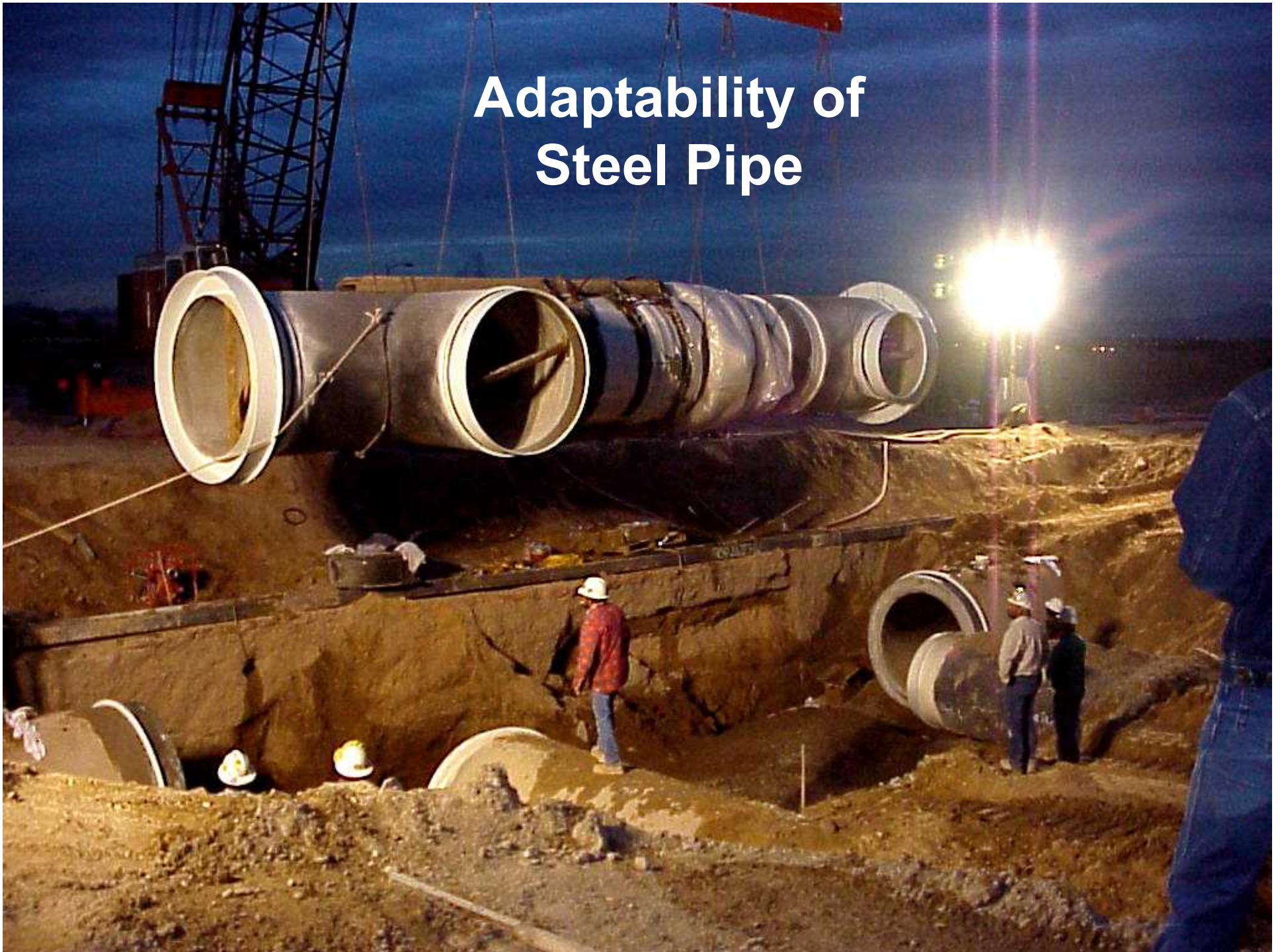


# Special Fittings to Handle Large Thrusts





# Adaptability of Steel Pipe

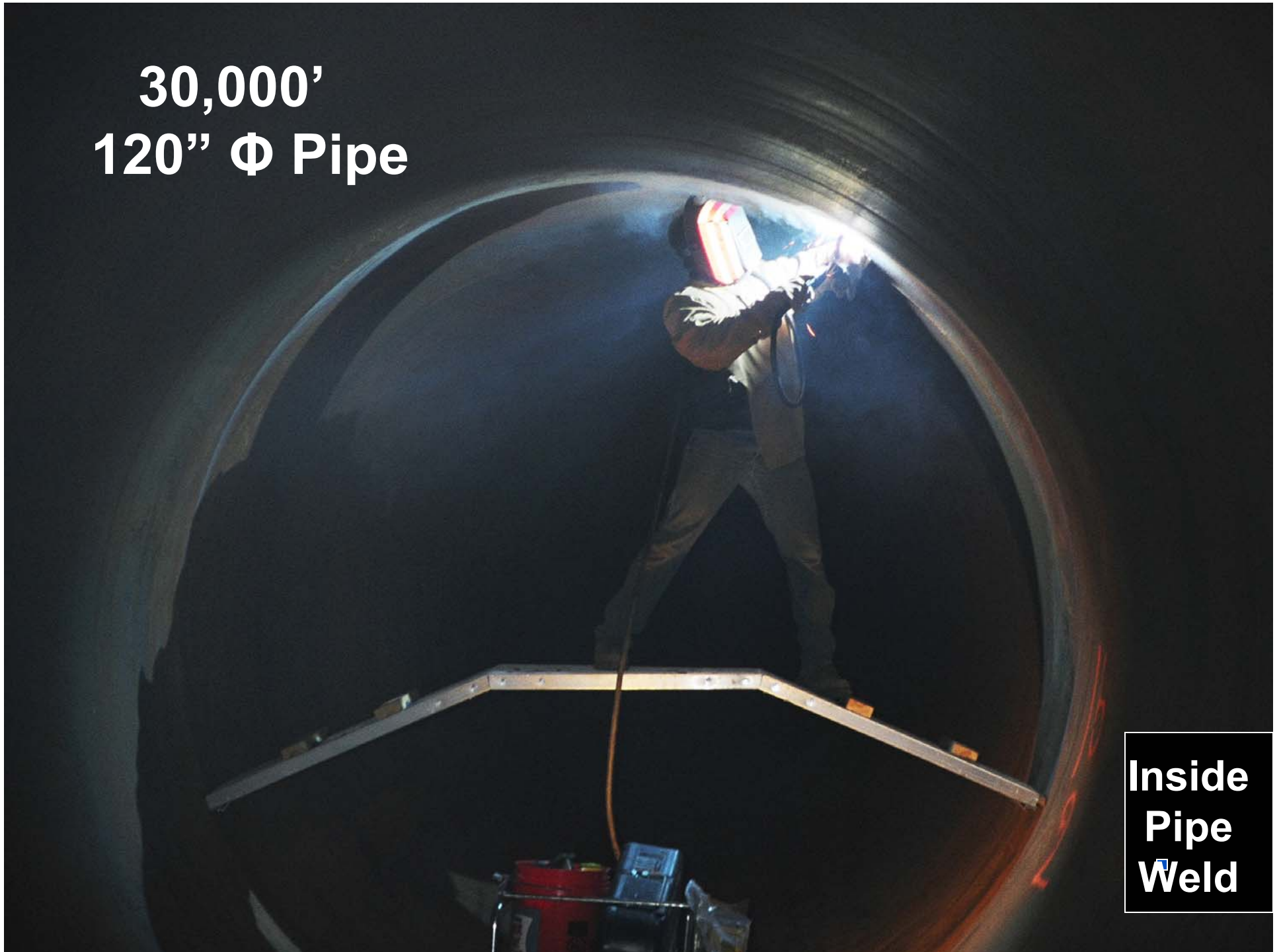


# Steel Pipe Welded Joints

- Water Tight
- Welded Joints Provide Restraint from Full Thrust Forces & Zero Leakage
- Great Beam Strength
- Single Lap Welds are Normally Adequate
- Capable of Being Welded After Bedding & Backfilling



**30,000'**  
**120"  $\Phi$  Pipe**



**Inside  
Pipe  
Weld**

# Field Joining Operations





# Corrosion Resistant

- Tape Wrap Coatings
- Polyurethane Linings & Coatings
- Cement Mortar Linings & Coatings
- Assured Corrosion Protection
- Does Not Fail Catastrophically

54"  $\Phi$   
60,000'





30" to  
108"  $\Phi$  Pipe

