

**PURPOSE/APPLICATION**

To provide guidance on the process for setting in an above ground pipeline. The process for the welding of the pipeline is specifically covered in SJP-31 Pipeline Welding.

**PPE**

- Hearing Protection
- Strike Minimum PPE
- Welding Helmet
- Face Shield

**TRAINING**

- Minimum Strike and Site Requirements
- Equipment Operator Competency

**TOOLS/EQUIPMENT**

- Mechanical
- Welding Equipment
- Slings
- Grinders
- Propane Tanks and Torches

#	Job Steps	Hazards	Control Measures
1	Buff pipe ends	<ul style="list-style-type: none"> <li>❖ Flying Debris/Sparks</li> <li>❖ Pinch/Crush Points</li> <li>❖ Rotational hazards</li> <li>❖ Awkward body positioning</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ensure double eye protection is being utilized while grinding, buffing, chipping, etc.</li> <li>▪ Ensure all required PPE is being utilized.</li> <li>▪ Stay out of the line of fire.</li> <li>▪ Ensure combustible materials are managed on ROW and have adequately placed fire extinguisher present.</li> </ul>
2	Pre-heat pipe with tiger torch to specified temperature	<ul style="list-style-type: none"> <li>❖ Fire and Explosion</li> <li>❖ Burns/Hot surfaces</li> <li>❖ Trip hazard from hose</li> <li>❖ Compressed gas cylinder</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fire extinguisher present.</li> <li>▪ Ensure appropriate hand protection is being worn.</li> <li>▪ Ensure hot work permit is in place, as required.</li> <li>▪ Ensure heating torch gas tanks and hoses are out of the line of fire to not create a trip hazard.</li> </ul>
3	Lift clamp into place, halfway over the end of the pipe to accept the next pipe and hand tighten (for larger clamps or at high elevation utilize side boom and sling)	<ul style="list-style-type: none"> <li>❖ Pinch/Crush points</li> <li>❖ Mechanical failure</li> <li>❖ Rigging failure</li> <li>❖ Dropped objects</li> <li>❖ Falls from height</li> </ul>	<ul style="list-style-type: none"> <li>▪ Utilize pipe clamp handles to place clamps at the edge of the pipe and hand tighten to secure and eliminate from movement.</li> <li>▪ Wear task appropriate gloves to prevent cuts, pinches, and abrasions while placing clamps.</li> <li>▪ Complete a pre-use inspection on all rigging and lifting devices; remove all damaged</li> </ul>

			<p>equipment from service.</p> <ul style="list-style-type: none"> <li>▪ Ensure all access equipment is inspected and level prior to accessing elevated work.</li> <li>▪ Keep non-essential workers clear of immediate work area and ensure no workers are below when setting clamps.</li> <li>▪ Never walk under a suspended load.</li> </ul>
4	<p>Fit sling onto pipe, lift pipe with Side Boom/Picker truck/Mobile crane and insert pipe end into clamps</p>	<ul style="list-style-type: none"> <li>❖ Pinch/Crush points</li> <li>❖ Mechanical failure</li> <li>❖ Crush potential</li> <li>❖ Suspended loads</li> <li>❖ Rigging failure</li> <li>❖ Struck by/Against an object</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pre inspect all equipment and rigging prior to use and take any damaged equipment out of service.</li> <li>▪ Never work under a suspended load.</li> <li>▪ Never drag the sling down the pipe section with the side boom, always unhook the sling to move to the next lifting section.</li> <li>▪ Ground worker to pass tagline to stabber when working at an elevated position in order to maintain control of pipe.</li> <li>▪ Control pipe motion into the clamps by manipulating pipe on the down-work side (opposite of the clamp) by pushing/pulling on the body of the pipe (not the pipe ends).</li> <li>▪ Spacer to signal when all worker's hands are clear of the working end of the pipe prior to signaling equipment to bring pipe end into clamps.</li> <li>▪ Stabber to visually verify pipe is free of debris prior to inserting pipe into clamps.</li> <li>▪ Never stand between pipe in motion and sleeper/pile or any other crush point.</li> </ul>
4	<p>Tack pipe together at joint ends</p>	<ul style="list-style-type: none"> <li>❖ Welding flash</li> <li>❖ Flying debris</li> <li>❖ Sparks</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ensure welding helmets are being utilized.</li> <li>▪ Use double eye protection.</li> </ul>

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**Pipeline Set-in (Above Ground Construction)**

		<ul style="list-style-type: none"> <li>❖ Stored energy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ensure sufficient tack welds are in place before releasing clamps (pipe cover at least 50% before removing clamps).</li> </ul>
5	Set pipe onto pipeline supports or skid column to protect weld tack integrity	<ul style="list-style-type: none"> <li>❖ Uneven ground conditions</li> <li>❖ Pinch/Crush points</li> <li>❖ Damaged skids or cones</li> <li>❖ Miscommunication</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ensure pipe cones or skids are sitting on level ground.</li> <li>▪ Stay out of the line of fire.</li> <li>▪ Ensure cones or skids are in good condition and replace all damaged ones.</li> <li>▪ Ensure cones and/or skids are of adequate size and rated for the pipe weight.</li> <li>▪ Use a spotter when necessary to give signals to operator.</li> <li>▪ If on skids, make sure the pipe is chocked and cannot roll off.</li> <li>▪ If setting pipe on above ground racks, ensure pipe is placed in shoes or secured with wedges or straps to limit potential to shift/roll.</li> </ul>

**ADDITIONAL PRECAUTIONS:**

- When utilizing handles to positioning clamps be aware of latch pinch points.
- Lift in trams or use mechanical lifting devices to move clamps, as required.
- Utilize equipment when lowering clamps from elevated positions.

**March 16, 2022****Pipeline Set-in (Above Ground Construction)****REFERENCE/REGULATIONS****Alberta OH&S Code**

- Part 10 Fire and Explosion Hazards
- Part 18 Personal Protective Equipment
- Part 14 Lifting and Handling Loads
- Part 18 Personal Protective Equipment
- Part 19 Powered mobile equipment
- Part 21 Rigging

**British Columbia OH&S Regulation**

- Part 4 General Conditions – Section 4.13
- Part 4 Emergency Preparedness and Response
- Part 8 Personal Protective Clothing and Equipment
- Part 14 Cranes and hoists
- Part 15 Rigging
- Part 16 Mobile Equipment

**Saskatchewan OH&S Regulations**

- Part 7 Personal Protective Equipment
- Part 13 Hoists, Cranes and Lifting Devices
- Part 22 Controlled Products
- Part 25 Fire and Explosion Hazards

**Manitoba OHS Regulations**

- Part 6 Personal Protective Equipment
- Part 22 Powered Mobile Equipment
- Part 23 Cranes and Hoists

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