



## *Pipeline Construction Terminology*

### **A.R.O.**

Abrasion Resistant Overlay, tough outer layer that is resistant to impact, gouge, abrasion and penetration commonly used for bores

### **Back End**

Crews behind welding crew comprised of pipe gang and firing line

### **Bead**

1<sup>st</sup> pass of weld also known as the root pass

### **Bell hole**

A ditch area made wide through proper slope for safe entry into excavation where hands enter and work during tie in

### **Berm**

Dirt or other earth material positioned by machine to contain fluids or constructed to divert water away from working area, may be used along trench to reduce exposure to vehicles

### **Blast Mat**

Assembled chain of tires connected by chain or bolt that are placed over blast area being worked to reduce exposure of flying debris

### **Blow Down**

A release of gas, air, or water from a compressed loaded pipe section, seen during hydro test completion and to isolate sections of live lines

### **Boom**

Pipe layer also known as a side boom tractor, very significant to pipeline construction and maintenance

### **Bottle Neck**

Area of pipeline right-of-way where the width of working space is reduced

**Break Over**

Point where equipment approaches and passes down peak of hill or mountain, also used to describe point for side boom position in relation to adjusting pipe in clamps during tie in process on big inch pipe

**Buffing**

Smoothing the surface of a bevel by use of an abrasive or wire wheel

**Bull Horns**

Parted blow off stacks in stations, also tie off points for load securement on side booms

**CAD Weld**

Metal fusion of test leads for cathodic protection to pipe cathode and casing

**Cap**

Last top pass of weld

**Charge**

A designated form of explosive that is placed accordingly to break up rock for pipeline installation

**Cherry Picker**

Crane mounted usually on mechanics rig

**Choker**

Used to encircle the pipe by bringing one end through an open loop on the other end around the pipe leaving other end available to hook, used to lift and pull

**Clam Bucket**

Used to remove rocks and debris from trench prior to lowering in of pipe, preferred method when reducing contact with trench wall to sustain trench integrity

**Coating**

Product chosen by client that is applied by spray or brush to protect welded area and butt up to factory installed coating on remainder of main line, also used in repair of minor coating defects and holidays

**Come a Part**

Someone who has lost the ability to effectively communicate with another person, an expression to describe a break down in patience in a highly upset individual

**Cookie Cutter**

A transitional piece used to make transition from drill pipe to bore pipe (dummy pipe), may be seen on laser guided track bores.

**Core Log**

Mesh roll stuffed with absorbent material such as straw and used to complete environmental containment along areas of right-of-way, to be moved by hand and not run over

**Cold Wrap**

Tape type pipeline protectant that serves same purpose as coating although does not carry same temperature application requirements

**Combo**

A sag, over bend, side bend or point of intersect (PI) in close proximity

**Coming Inside**

When work is on approach to a road, shu fly, or land mark known on project, technically should go with the direction of product flow, may also be defined by direction of construction, upstream side

**Coupons**

Sections of cut pipe used to practice welding, circular or egg shape pieces cut out of joint, magnetic device inserted into the ground during test lead installation that can receive product flow data

**Cradle**

Cable slings with hard rubber rollers used to support pipe and protect coating during the lowering in process

**Crew**

Assembled group of field workers usually assigned to one specific task, subject to change depending on operation factors and schedule

**Cross Clutch**

Tracking down hill, to prevent free wheel on one side, note-always turn to spoil pile if possible in the event control of boom is compromised

**Crotch**

"V" shape assembly of skids to hold section or joint of pipe in place

**Crumbing**

Removal of debris and rocks from ditch (trench) to maintain pipeline coating and structure integrity

**Cutter/Cutting Bit**

Front of auger on road bore or special reamer used for cutting bore hole hard material on horizontal directional drilling (HDD)

**Deadman**

I beam or pup that is positioned into the ground for cradle bore to pull on by cable and winch

**Dog Leg**

Where the lay of the right-of-way has caused for a slight bend in the straight mainline section

**Downstream**

Direction of flow for product that pipeline will carry following completion of construction

**Drag Up**

When a hand quits

**Drag up tank**

Fuel tank installed in the back of pick-up trucks or in the deck of welder rig, may become important in areas of frost law to keep iron fueled

**Drip Tank**

Tank that may be custom built or capped joint of pipe with a smaller diameter pipe welded to it to receive liquids gathered in launcher or receiver from P.I.G. or liquids from a nearby scrubber tank

**Dummy Pipe**

Joints of pipe that are reused multiple of times for boring, usually seen on road bores and used to hold auger and make initial entry

**Egging**

When pipe joint roundness is compromised during bending or other applications

**Fast Line**

3" fused water line inserted into bore section for buoyancy control when pulling through section

**Float**

A flatbed trailer

**Flume Pipe**

Pipe joints used to maintain flow of water in ditches and offer support to bridging

**Flyrock**

Flying debris from blasting area after controlled blast takes place

**Foreign Line**

Another pipeline in the path of construction that may belong to different company, need to know exact location, pressure, product information, representative for utility, etc. if being worked next to or crossed

**Foreman**

Designated competent person for crew, boss of field crew who should receive all information pertaining to crew, tasks to be designated from foreman to crew only

**Front End**

Crew's firing line forward

**Going Away Side**

When work is moving away from road, access road, or land mark known on project, technically should go with the direction of product flow, may also be defined by direction of construction

**Goose**

Internal clamp used by welders that is powered by hydraulics to line up pipe for weld on pipe gang

**Green Hand**

New worker to pipeline construction with less than 3 months experience

**Hand**

Pipeline field worker

**Hot Lines**

Pipelines under pressure, loaded lines

**Holiday**

Irregular showing of metal from possible coating loss or damage that may begin pitting

**Hot Dope**

Old material for coating pipelines comprised of heated coal tar pitch / hot tar

**Hot Pass**

Pass following bead where filler is applied

**Hot Tap**

The dangerous task of tapping into a loaded line for tie in

**Hustle Skids**

Work put in my hand to unload, place, remove, or assemble skids for crotch or slide

**Iron**

Heavy operating equipment used for pipeline construction

**In Stream Support (ISS)**

Support in middle of bridge with flume pipe and matting

**Jeep**

Device used multiple of times on same sections prior to lowering in that uses electrical current to detect holidays or coating loss

**Jet Line**

A cable used to pull a fast line through bore section of pipe on HDD

**Joint**

A length of pipe

**Junk Weld**

Also known as a temporary weld made on dummy pipe that is not tested and serves little purpose other than connecting joints of dummy pipe

**Key In**

To make mats level with terrain or provide support in declining terrain to support bridging for level approach

**Kick Off**

Where the start of the mainline construction begins

**Kicker Line**

Line found near front of launcher/receiver that applies product to back of P.I.G. by valve mimic to create differential pressure and launch P.I.G. into mainline pipeline to work and can also be used to loop pressure in front of P.I.G to reduce resistance to receive P.I.G. in receiver

**Line Pipe**

The mainline pipe

**Loop**

A section of pipe that runs parallel

**Launcher**

Extension of mainline equipped with a series of valves and kicker line to push P.I.G into pipeline by creating differential pressure from the front of the P.I.G. to the back possible by kicker line

**Lay Down Yard**

Temporary operating yard for pipeline construction operations and equipment storage

**Low boy**

Trailer used to haul equipment, detaches from truck and is lowered to pick up or drop off equipment

**Mandrel**

Inner die inside of bending machine that puts pressure on inside wall to prevent egging

**Mud Board**

A wooden platform used by welders to lay on that helps keep above wet or rough ground during welding

**Night Cap**

Cap made up of metal, cloth, rubber, plastic or wood placed on the open end of pipe to reduce introduction of foreign debris inside pipe

**OHP**

Overhead power

**Over Bend**

Bend in pipe that is high in or near the middle of joint

**Padding**

Fine grain material that could be made by OZZIE padders, Outlaw & ALLU grinder and or shaker buckets, or that is used as the first layer of backfill to provide an underbelly support for pipe and coating protection before original backfill is installed

**Pass**

A weld all the way around pipe diameter

**Peat Bog**

Damp saturated material made up of partially decayed vegetation

**Pendulum Effect**

Weight distribution caused by load and cable free movement in relation to center of gravity when a joint or pup is being carried up or down an incline or decline by a side boom, effect to increase with longer arm (stick)

**Pete**

Peterbilt truck

**P.I.**

Point of intersect where the direction of the pipeline changes and is usually identified by lathe or wooden stake in the ground

**P.I.G**

Pipeline Integrity Gauge that comes in multiple sizes and purposes and is used to clean, detect, and inspect inside of pipeline for debris, excess fluid, or anomalies

**Popsicle Sticks**

Placed in ground to identify location of bends in relation to joints and bending information that is left by designated bending engineer for the bending crew

**Pull Head**

A reinforced cap equipped with a towing eye that is welded to a section of pipe to be pulled, used on HDD, road bores, and water body crossings

**Pup**

Short length of pipe

**Quad**

A tractor with welding machines mounted to it

**Reach Rod**

Extended rod with control for mandrel that is seen coming out of the bending machine

**Reamer**

A specially designed cutting head attached to drill pipe to open bore following pilot hole and will increase in diameter following successful pass to meet desired diameter for that bore, may be used as a swab in harder material

**Receiver**

Extension off of mainline that is equipped with a series of valves designed to bring in P.I.G. through use of differential pressure

**Reject**

A weld that has been tested and has not met requirements for desired integrity and strength

**Ripper**

A vertical curved tooth or teeth located on the back of a dozer that is hydraulically powered and designed to break up hard ground usually before ditching takes place

**Roach**

Mound of dirt left over the pipeline to settle evenly with time

**Rollin**

Used to identify when a delivery of material or equipment is on its way, may also be used to express excessive speed during flagging operations

**Roping**

When a section of pipe is lifted by side booms creating a slight arch in order to insert the pipe at the desired angle required for bore hole

**ROW**

Pipeline right-of-way

**Safety Fuse**

A black powder fuse designed to burn inside a protective casing to ignite explosives

**Sag**

A low bend in the pipe in or near the middle, used to contour pipe to terrain

**Scrubber**

A tank installed that may work on gravity drop out or filters to filter product of condensate transported through pipeline

**Shaker Bucket**

Outlaw bucket with meshed bottom to filter through fine grain dirt for backfill, seen commonly on tie in's and congested areas

**Shoot a Bend**

Degrees of a bend calculated with a transit

**Shu Fly**

Access road leading to pipeline right-of-way

**Side Bend**

A sideward bend on the pipe to direct it to a desired direction

**Side Stepping**

Installation of steps for ingress and egress in excavated area

**Silkscreen**

Used to filter sediment and debris out of water by passing it through a mesh screen

**Sissy Bar**

A flat piece of metal welded to teeth on a bucket for intended safe digging, required for multiple gas companies and ground disturbance programs

**Skid**

42" in length 4" tall 6" wide hard wood used to hold pipe in desired position, usually identified as cribbing outside of pipeline industry

**Skid Hustler**

Custom machine used on right-of-way to collect skids and assemble for pick up

**Slide**

A simple assembly of skids to raise joint off of ground, usually seen with a crotch when stringing joints, etc.

**Sling**

Loop ended synthetic line or cable used for lifting, will have metal tag for cable or sewn patch for synthetic line to identify lifting capabilities

**Snoopy**

A hand made scooter cycle powered by a small engine designed to be inserted into pipe section and carry rope or jet line from one side to another, seen and used on HDD

**Soft Touch**

To track up hill, up a steep incline and not to steer tractor to fast

**Spread Boss**

Designated Superintendent of project, top person for contractor day to day field operations

**Spacers**

Defines material that separates mainline pipeline from casing, seen on river crossings or road bores and can be made from multiple of approved materials

**Spoil Pile**

Material that is dug from ditch and piled on right-of-way makes up spoil pile

**Spoon**

A modified garden tool with a modified long handle used to reach and pull out debris from trench just before or during lowering in of section

**Spotter**

A hand trained to help drivers and operators by watch and guide of vehicles and equipment while crossing under overhead power lines, backing up, passing on R.O.W., or digging in a sensitive/congested area

**Spread**

The entire group of pipeline workers who are on the project working for the contractor

**Stabber**

Hand who helps line up pipe joints for welding

**Stick**

Expression used to identify arm of excavator or side boom

**Straw Boss**

Foreman go to person, second in charge on crew

**Swamper**

Oiler for equipment

**Tack Rig**

Welding tractor, may also be used to carry welding huts

**Tag Line**

Rope or sling tied around or attached to equipment or pipe to assist in control for loading, unloading, transporting, and control to reduce swinging and damage to personnel and product, consider acceptable level of risk with use

**Tail Ditch**

Gradual ramp usually width of bucket that dug it and is left at the end of a dug trench, tail ditch and beginnings of bell hole before departure are usually a sign of respect for next crew to come, often crew will want and should dig their own bell hole for preferred integrity

**Travel Lane**

Where equipment and vehicles move up and down a segment of pipeline right of way, should always be left open or available to clear immediately in event of emergency

**Trench breaker**

Foam walls sprayed into ditch to reduce erosion around pipe and to help maintain integrity of ditch backfill on inclines or mountain/hill approach and descend, may also be made of sand bags

**Utility**

Communication line, gas line, oil line, electrical line, water line, sewer line, etc.

**Walking Through Itself**

Side boom becoming light on front end with the potential to tip back, concern when working in extreme incline

**Water Breaker**

Berms or shallow trenches constructed across right-of-way at an angle to divert water to edge or off right of way, helps with erosion mitigation and right-of-way conditions

**Whalers**

Top side support for sheet pile installed comprised of cut to fit I beams that are bolted to the vertically placed sheet pile

**Working Side**

The side of the pipeline right-of-way where equipment and vehicles travel

**Worm**

Modified pup with round ends pulled through bore hole and used to slick, verify bore hole passage, and clear out gouge potential on HDD's

**Yoyo**

A bucket used on a drag line to get to the desired depth of ditch being dug, commonly used at rivers