AGENDA:

- Gas Line Slitting - PVC, Aldyl-A, & MDPE
- Service & Main
- Decommissioning
- Steel Pipe Transmission & Distribution Replacement
Underground Pipe & Cable Market

Life of the Pipe
- Installation
- Maintenance
- Rehab
- Replacement

Application
- Telecom
- Electricity
- Oil
- Wastewater
- Water
- Gas

Geography

Customer Solution Components
- New Equipment
- Financing
- Service & Training
- Accessories
- Performance Parts
- Service Parts
- Used Equipment
PNEUMATIC PIPE BURSTING
GAS LINE SLITTING

- CONSTANT TENSION WINCH
- BLADED SLITTER
- BREAKAWAY CONNECTOR
- PULLER
- NEW MDPE PIPE
- EXTRACTION CAGE
- OLD PIPE
- EXPANDER WITH SWIVEL
PE PIPE SPLITTING ½” TO 4”

✓ PROVEN
✓ SAFE
✓ CLEAN
✓ FAST
✓ COST EFFECTIVE !!!!
HAMMERHEAD

- American Made Equipment
- American Made Tooling
- Local Machines, Local Support, Local Training
- Tracking, Electrical Strike Indicator Device
STANDARD BLADE SET
Slice through pipe, tees and couplers. Slit extracted pipe, available from $\frac{1}{2}'' - 4''$. 
EXPANDER
With incorporated swivel assembly and cable wedge connection assembly.
Available from ½” – 4”.
SLEEVED PULLER
Secure and protected connection of new pipe installed.
Available from 1" – 4".
BEACON HOUSING
Monitor progress and ID location of tooling. Easily incorporated into existing tooling string.
OPTIONAL FOR JOINT TRENCH

LOW PROFILE BLADE SET
Swap out standard blade set for low profile blade set when adjacent utilities are in close proximity and shots are without couplers or service connections.
INTEGRATED BREAKAWAY ASSEMBLY

Ensures pulling load does not exceed manufacturer and design specifications.
Designed to integrate directly into pulling expander.
Available for 2” and larger expanders.
BLAZING FAST
Payout speed of up to 111 feet per minute

12 TON CABLE WINCHES
AUTO BOOM
Patented self-deploying hydraulic downrigger. With the touch of a button, adjust the boom to the exact depth required.
ESID SYSTEM
Optional Electrical Strike Identification system provides additional safety features when working close to adjacent utilities.
12 TON CABLE WINCHES

PRECISION CONTROLS
Control platform allows for fully adjustable line speed and pull force
HG1200AT
Optional track-mounted configuration allows access in difficult areas

12 TON CABLE WINCHES
HYDRAULIC LEVELING JACKS
This optional feature makes for easy adjustments down hole increasing efficiency
ADVANTAGES

- Same Path
- Reduced risk of cross bore
- Speed/lower cost
- Short learning curve
ADVANTAGES

- **Proven technology**
  New application vs. new product

- **Illuminates need to decommission old pipe**

- **Same process may be used to decommission pipe when HDD process is utilized**
JOB SIGHT PHOTOS
HG375T ½” – 2”
HG1200T 1.5” – 3”
TRACKING ELECTRONICS
SAMPLE TOOLING STRING

- 2" DUCT PULLER
- TRACKING BEACON
- BREAK AWAY
- 2.5" OR 3" EXPANDER
- SEPARATION TUBE
- 2" CUTTER BLADE
JOINT TRENCH TOOLING
VIDEO:

SLITTING 2” PVC & ALDYL-A AND INSTALLING NEW HDPE IN BIG BEAR, CA
VIDEO:

SLITTING 2” ALDYL-A AND INSTALLING NEW HDPE IN AUBURN, CA
GAS LINE SLITTING VIDEO
AVISTA GAS 4" ALDYL-A- 4" MDPE
STEEL GAS LINE SLITTING VIDEO
STEEL GAS LINE EXTRACTION
GROUT BEHIND
STEEL GAS LINE EXTRACTION
PIPELINE REPLACEMENT VIDEO
STEEL GAS LINE EXTRACTION DISTRIBUTION REPLACEMENT VIDEO
TRAINING DAY(S)

1, 2, 3 DAY FORMATS

Step 2: Emergency Ticket

4216(f): “Emergency” means a sudden, unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.

- Examples of emergencies:
  - Hazards substance released into the environment
  - Construction equipment in contact with an electric line
  - Liquid line causing a sinkhole
  - 911 Call center down due to telecommunications line contact
  - Calling in an emergency does not absolve you of the liabilities if damages should occur

After hours emergencies require contacting utilities directly.
PGE after-hours emergency number is 1-800-743-5000.