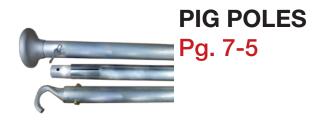
OPTIONS & ACCESSORIES







CD52 TRIP MAGNETS Pg. 7-3



ENVIRONMENTAL BAGS Pg. 7-6



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OPTIONS ACCESSORIES

MAGNETS





The addition of magnets to a pig is often used to remove iron-sulfides and ferrous debris in gas and hydrocarbon pipelines. Brushes can often be used in conjunction with magnets to assist in the ferrous debris being removed from the pipe wall. The resulting ferrous debris can then be collected with the magnets mounted on the pig. Magnets can also be utilized to trip a magnetic non-intrusive pig signaler (CD52 Bandit). Detection devises are looking for a change in magnetic field to indicate to an operator when a pig has passed a critical section in the line or has arrived at the launcher/receiver.

NEODYMIUM IRON BORON MAGNETS

Temperature Rating: 100°C / 212°F suggested maximum

| Туре | Pig Size | Part Number |
|----------------------------|----------|-------------|
| Cased, Small Block | 6-14" | 95-0113-14 |
| Cased, Large Block | 16-56" | 95-0113-48 |
| Circular Rare Earth Magnet | 3-4" | 95-1382-14 |

OPTIONS & ACCESSORIES CD52 TRIP MAGNETS

There are three compact and powerful permanent magnets for use with the CD52 Bandit Non-Intrusive Pig Passage Signaler. These magnets may be attached to or placed inside almost any type of pipeline pig and detected at both low and high speeds by the CD52 system.

CD52-M1

- The CD52-M1 Trip Magnet is a very small and very powerful trip magnet designed to be used with the CD52 Bandit Non-Intrusive Pig Passage Signaler in pipelines 4" to 12" to indicate passages to the CD52 Bandit system.
- The CD52-M1 is an epoxy-encased magnet with a PVC jacket and a 1/2-13 UNC mounting stud.
- Max Operating Temp: 200°C
- Magnet Type: Neodymium

CD52-M2

- The CD52-M2 Trip Magnet is a small and very powerful trip magnet designed to be used with the CD52 Bandit Non-Intrusive Pig Passage Signaler in pipelines 14" to 30" to indicate passages to the CD52 Bandit system.
- The CD52-M2 is an epoxy-encased magnet with a PVC jacket and a ½-13 UNC mounting stud.
- Max Operating Temp: 200°C
- Magnet Type: Neodymium

CD52-M3

- The CD52-M3 Trip Magnet is a large and very powerful trip magnet designed to be used with the CD52 Bandit Non-Intrusive Pig Passage Signaler in pipelines 32" to 48" to indicate passages to the CD52 Bandit system.
- The CD52-M3 is an epoxy-encased magnet with a aluminum jacket and a ½-13 UNC mounting stud.
- Max Operating Temp: 200°C
- Magnet Type: Neodymium





7-3

OPTIONS & ACCESSORIES

GAUGE PLATES

2-48" (51-1219mm)

Gauge plates are used to check ovality of the I.D. of pipelines. Typically used in either progressive pigging applications or new pipeline construction. Gauge plates are usually cut to 95% of pipe I.D., but can be custom made to any O.D.

| Size | I.D. (in) | Weight (lbs) |
|------|--------------|-----------------|
| 2" | 0.563 | 0.1 |
| 3" | 0.563 | 0.2 |
| 4" | 0.563 | 0.4 |
| 6" | 1.063 | 0.8 |
| 8" | 1.063 | 1.3 |
| 10" | 1.063 | 2.0 |
| 12" | 1.063 | 2.8 |
| 14" | 1.063 | 4.0 |



2" - 14" Standard Plates

- 1/4" Thick
- **Bevelled Edge**
- Non-Slotted

| Size | I.D. (in) | Bolt Circle Diameter (in) | # Holes |
|------|--------------|------------------------------|---------|
| 16" | 8.750 | 11.00 | 8 |
| 18" | 10.875 | 12.75 | 8 |
| 20" | 10.875 | 13.50 | 12 |
| 22" | 10.875 | 13.50 | 12 |
| 24" | 14.125 | 16.50 | 14 |
| 26" | 14.125 | 16.50 | 14 |
| 28" | 16.125 | 19.50 | 16 |
| 30" | 16.125 | 19.50 | 16 |
| 32" | 20.125 | 24.00 | 24 |
| 34" | 20.125 | 23.00 | 18 |
| 36" | 20.125 | 25.00 | 22 |
| 38" | 22.125 | 27.00 | 24 |
| 40" | 22.125 | 26.00 | 24 |
| 42" | 24.125 | 30.00 | 24 |
| 48" | 32.125 | 36.00 | 24 |



16" - 48" Standard Plates

- 3/8" Thick
- Non-Bevelled
- Slotted

SIZING RINGS

Apache can manufacture Pig Sizing Rings to any customer supplied dimensions, quickly and cost effectively. Sizing Rings are used to slide over a worn used pipeline pig to be used as an indication that the pig needs to be replaced by the operator. These rings should not be used as a go-no-go and only part of the operators decision making process if the used pig needs to be discarded.



- 2" 14" Sizing Rings
- No handles



16" - 48" Sizing Rings

Four (4) handles

OTHER ACCESSORIES Rattler



Transmitter Housing Custom design for any transmitter



OPTIONS & ACCESSORIES

PIG POLE/PUSHER COMBO

THE ONLY TOOL ON THE MARKET THAT HAS BEEN DESIGNED, MANUFACTURED, AND TESTED SPECIFICALLY FOR THIS PURPOSE.

The Pigging Poles consist of three sections pinned together for a total length of 18'. One end of the pole has a four-inch round ram, making it easy to seat the pig, and the other end has a hook for easy pig retrieval. An optional handle makes handling the pigs even easier. The poles are made of all aluminum, so they never create sparks. The rams, hooks, and poles are all attached using pins and can be separated into 6 foot lengths for easy transportation.



SAFE PIG RETRIEVAL IN FLAMMABLE GAS PIPELINES

Features & Benefits:

- Manufactured from durable, high strength, non-spark producing aluminum
- Limited flexibility ensures hitting the target every time
- Drilled with exacting tolerances for a precision fit
- Additional pole(s) can be utilized for added length
- Wheeled dolly can be used to increase stability
- Indexed parts allow the operator to know hook orientation for a trouble-free catch each time
- Modular components allow for multiple attachments and special orders
- The most durable and safest tool to use in a natural gas environment
- Multiple lengths available for different barrel lengths

STANDARD SET OF PIGGING POLES INCLUDES:

- 3 x 6' POLES
- 3 x LOCKING PINS
- 1 x RAM
- 1 x ALUMINUM ALLOY HOOK



HOGGING POLES

FOR LAUNCHING & RETRIEVING 24" AND LARGER PIGS

- #1 Pole
- #2 Pole (Extension Pole)
- Hook (Plastic Coated Steel)
- Ram
- Push/Pull Adapter
- Locking Pin
- Dolly (2 Wheel)

Custom sizes available upon request.

OPTIONS & ACCESSORIES

ENVIRONMENTAL CONTAINMENT BAGS





Environmental Containment Bags eliminate pollution arising from pigging a pipeline with air or nitrogen by trapping and containing dust particles as small as five microns, along with mill scale and construction debris. The heavy-duty polyester bags are secured around the discharge pipe with a drawstring type closure.

Operation is continuous and no change in standard pigging practice is required. Reinforced pulling and lifting handles facilitate positioning and subsequent emptying of the bag into the bed of dump trucks or other type containers for disposal. They can also double as a pig catching bag.

| Size | Package Dimensions | Weight (lbs) |
|-----------|-----------------------|--------------|
| 12" x 10' | 19" x 6" x 5" | 3 |
| 12" x 25' | 19" x 9" x 8" | 8 |
| 12" x 50' | 20" x 14" x 11" | 17 |
| 24" x 50' | 39" x 14" x 10" | 35 |
| 48" x 50' | 81" x 13" x 12" | 68 |

Bags come in 10, 25, 50 or 100 ft blanks.

Custom sizes available upon request.