

OPTIONS & ACCESSORIES



Magnets

Pg. 6-2



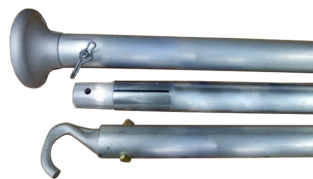
Other Accessories

Pg. 6-5



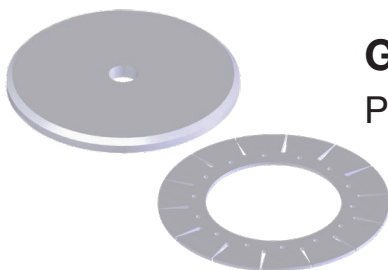
CD52 Trip Magnets

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Pig Pole/Pusher Combo

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Gauge Plates

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Environmental Bags

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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 devices 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

Type	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



**Ferrous
Debris
Collection**

CD52 Trip Magnets

There are three compact and powerful 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-M0

- The CD52-M0 Trip Magnet is designed to be used in very small pipelines ranging from 3/4" to 4"
- The CD52-M0 is an magnet assembly with a jacket and without a mounting stud.
- Max Operating Temp: 200°C
- Magnet Type: Neodymium

CD52-M1

- The CD52-M1 Trip Magnet is designed to be used 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 designed to be used 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 1/2-13 UNC mounting stud.
- Max Operating Temp: 200°C
- Magnet Type: Neodymium

CD52-M3

- The CD52-M3 Trip Magnet is designed to be used 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 1/2-13 UNC mounting stud.
- Max Operating Temp: 200°C
- Magnet Type: Neodymium



Gauge Plates

2-48" (51-1219mm)

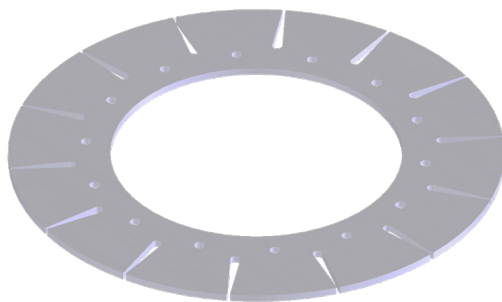
Gauge plates are used to check ovality of the I.D. of pipelines. Typically used in either progressive pigging applications or new pipeline construction. Gauge plates are usually cut to 95% of pipe I.D., but can be custom made to any O.D.



2" - 14" Standard Plates

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

Size	I.D. (in)
2"	0.563
3"	0.563
4"	0.563
6"	1.063
8"	1.063
10"	1.063
12"	1.063
14"	1.063



16" - 48" Standard Plates

- 3/8" Thick.
- Non-Bevelled.
- Slotted.
- Various bolt patterns and I.D.s available.

Size	I.D. (in)	# Holes
16"	8.750	8
18"	10.875	8
20"	10.875	12
22"	10.875	12
24"	14.125	14
26"	14.125	14
28"	16.125	16
30"	16.125	16
32"	20.125	24
34"	20.125	18
36"	20.125	22
38"	22.125	24
40"	22.125	24
42"	24.125	24
48"	32.125	24

*Plates are also available with the Series M or MDK metric bolt pattern.

Other Accessories

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 utilized 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.



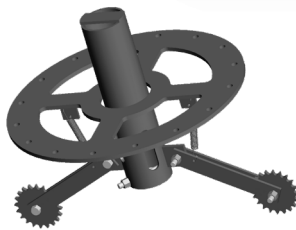
2" - 14" Sizing Rings

- No handles.

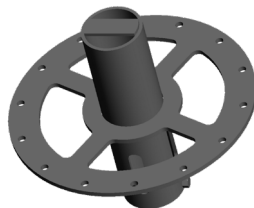


16" - 48" Sizing Rings

- Four (4) handles.



Transmitter Cavity with Rattlers



Transmitter Cavity

Custom design for any transmitter

Pig Pole/Pusher Combo

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

The Piggin' 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



Piggin' Poles

Sizes 3" - 24"

Standard set of piggin' poles includes:

- 3 x 6' Poles
- 3 x Locking Pins
- 1 x Ram
- 1 x Aluminum Alloy Hook

Hoggin' 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).

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.

Custom sizes available upon request.

ENVIRONMENTAL CONTAINMENT BAGS



This?



Or This?

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
12" x 10'	19" x 6" x 5"
12" x 25'	19" x 9" x 8"
12" x 50'	20" x 14" x 11"
24" x 50'	39" x 14" x 10"
48" x 50'	81" x 13" x 12"

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

Custom sizes available upon request.