BI-DIRECTIONAL

UT
OPTION
Pg. 2-2

MDK-ED
16 - 48”
Pg. 2-8

ED
3 - 14”
Pg. 2-3

MD2
3 - 14”
Pg. 2-9

ED
16 - 48”
Pg. 2-4

MD2
16 - 48”
Pg. 2-10

EDX
16 - 48”
Pg. 2-5

MD4
3 - 14”
Pg. 2-11

EDR
6 - 14”
Pg. 2-6

MD4
16 - 48”
Pg. 2-12

EDR
16 - 48”
Pg. 2-7
Apache is pleased to introduce our newly revised Universal UT mandrel design. With the changes in design only one mandrel is required to make any configuration of pig. This can be accomplished with utilizing the same bolts that will accommodate the standard front and back bumpers.

The primary use for the UT pig is to house a transmitter located within the center of the mandrel. They can also be used for cleaning and batching of dissimilar fluids. The mandrel can accommodate any configuration of cups, disks and brushes.

**Features:**

The UT are the only small diameter steel mandrel pig that Apache manufactures with a transmitter cavity in the middle of the mandrel to accommodate electronic pig tracking equipment. Standard bumper noses prevent damage to both the pig and in-line auxiliary equipment.

**Options:**

- Circular flat carbon steel, stainless steel, plastic or pencil brushes.
- Aluminum or steel gauging plates are available in either slotted or standard styles.
- Magnets are available.
The Series ED pigs are bi-directional and used primarily for air and water displacement applications during the pressure test stage of construction. Designed to travel in either direction, the operator can fill the line with water and displace the water without removing the pig.

### Features:

- Aluminum or steel gauging plates are available in either slotted or standard styles.
- Magnets are available.
- Available with UT configuration with internal transmitter housing for 6” - 14” pigs.

### Options:

- 3-14” (76-356mm)

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The Series ED pigs are bi-directional and used primarily for air and water displacement applications during the pressure test stage of construction. Designed to travel in either direction, the operator can fill the line with water and displace the water without removing the pig.

The ED version, with a combination of four sealing and two guide discs, offers a sealing arrangement suitable for separation of dissimilar fluids or for dewatering during hydrostatic testing. Sealing discs experiencing wear can reverse direction without compromising sealing characteristics. Standard bumper noses prevent damage to both the pig and in-line auxiliary equipment. All Apache 16”-48” pigs are manufactured with by-pass ports. The ports have threaded plugs that can be removed if by-pass is required.

### Features:

Designed to traverse 1.5D bends.

### Options:

- Circular flat carbon steel, stainless steel, pencil or plastic brushes.
- Transmitter housing to accommodate electronic tracking equipment.
- Aluminum or steel gauging plates are available in either slotted or standard styles.
- Magnets are available.

### Table: Size, A, B, C, Weight, Part #

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The Series EDX cleaning pigs are designed for bi-directional cleaning of newly constructed lines or for existing lines where scale and debris are present. It is also an excellent choice for air and water displacement applications during the pressure test stage of construction.

**Features:**

EDX are an economical four sealing and two guide disc bi-directional pig which offers an optimum seal and also allows for aggressive cleaning with wear compensating, spring loaded brushes. The pig is equipped with durable guide disks designed to center the sealer discs in the line, forming a quadruple seal that virtually eliminates product by-pass. Standard bumper noses prevent damage to both the pig and in-line auxiliary equipment. All Apache 16”-48” pigs are manufactured with by-pass ports. The ports have threaded plugs that can be removed if by-pass is required.

**Designed to traverse 3D bends.**

**Options:**

- Carbon steel, stainless steel, pencil or plastic brushes.
- Transmitter cavity for electronic tracking equipment.
- Aluminum or steel gauging plates are available in either slotted or standard styles.
- Magnets are available.
- Plow blades.

**Size** | **A** | **B** | **C** | **Weight** | **Part #**
---|---|---|---|---|---
16” | 18.000 | 25.250 | 15.875 | 157 | 60722816
18” | 20.500 | 27.750 | 17.875 | 194 | 60722818
20” | 23.000 | 31.000 | 20.000 | 252 | 60722820
22” | 26.250 | 34.250 | 22.000 | 283 | 60722822
24” | 26.750 | 35.250 | 24.125 | 355 | 60722824
30” | 29.750 | 39.500 | 30.250 | 530 | 60722830
36” | 35.250 | 47.000 | 36.500 | 812 | 60722836
42” | 42.250 | 55.250 | 42.625 | 1209 | 60722842
48” | 46.500 | 61.750 | 48.875 | 1511 | 60722848
The Series EDR pigs are bi-directional and used primarily for air and water displacement and debris removal applications during the pressure test stage of construction and day-to-day maintenance. Designed to travel in either direction, the operator can fill the line with water and displace the water without removing the pig. EDR are designed to traverse 1.5D bends in either direction.

Simple replacement of a disc with a circular wire brush enhances the versatility of the ED Series. This EDR version offers a sealing arrangement suitable for separation of dissimilar fluids or for dewatering during hydrostatic testing. Sealing discs experiencing wear can reverse direction without compromising sealing characteristics.

Designed to traverse 1.5D bends.

**Features:**

Simple replacement of a disc with a circular wire brush enhances the versatility of the ED Series. This EDR version offers a sealing arrangement suitable for separation of dissimilar fluids or for dewatering during hydrostatic testing. Sealing discs experiencing wear can reverse direction without compromising sealing characteristics.

**Options:**

- Circular flat carbon steel, stainless steel, pencil or plastic brushes.
- Aluminum or steel gauging plates are available in either slotted or standard styles.
- Magnets are available.
- Available with UT configuration with internal transmitter housing for 6” - 14” pigs.

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The Series EDR pigs are bi-directional and used primarily for air and water displacement and debris removal applications during the pressure test stage of construction and day-to-day maintenance. Designed to travel in either direction, the operator can fill the line with water and displace the water without removing the pig. EDR are designed to traverse 1.5D bends in either direction.

This EDR version offers a sealing arrangement suitable for separation of dissimilar fluids or for dewatering during hydrostatic testing. Sealing discs experiencing wear can reverse direction without compromising sealing characteristics. Standard bumper noses prevent damage to both the pig and in-line auxiliary equipment. Most Apache 16”-48” pigs are manufactured with by-pass ports. The ports have threaded plugs that can be removed if by-pass is required.

**Features:**

- Designed to traverse 1.5D bends.
- Circular flat carbon steel, stainless steel, pencil or plastic brushes.
- Transmitter housing to accommodate electronic tracking equipment.
- Aluminum or steel gauging plates are available in either slotted or standard styles.
- Magnets are available.

**Options:**

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MDK-ED bi-directional pigs are designed for use in long-run pipeline construction applications during the hydrostatic test stage. Designed to travel in either direction, the operator can fill the line with water and displace the water without removing the pig. The MDK-ED mandrels are engineered to easily be adapted to a cleaning pig by the addition of flat steel wire brushes.

MDK-ED pigs have both an inner mandrel and outer mandrel. The MDK-ED dual mandrel are favoured by contractors, as the inner mandrel withstands the battering inherent during construction phases, while the outer disc carrying mandrel remains untouched.

The pigs are equipped with durable guide discs, one at each end. They provide a positive centering affect which allow the four sealing discs in the center to effectively seal during the displacement period. Bumper noses are also included with MDK-ED pigs. They prevent damage of expensive in-line auxiliary equipment. Handling hooks are standard features on the MDK-ED.

**Designed to traverse 1.5D bends.**

**Options:**
- Circular flat carbon steel, stainless steel, pencil or plastic brushes.
- Transmitter housing to accommodate electronic tracking equipment.
- Aluminum or steel gauging plates are available in either slotted or standard styles.
- Magnets are available.

<table>
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The MD2 bi-directional pigs are designed to be both economical and efficient. They have multiple uses including separation of dissimilar fluids, batching and light cleaning, however, the primary use for the MD2 is water displacement during the hydrostatic testing stage of construction. The steel bodied pigs are designed to travel in either direction in the pipeline.

MD Series, in sizes 14” and smaller, have a through bolt mandrel design, complete with a pull hook. Sealing discs experiencing wear after traveling one direction, can reverse direction without compromising their sealing characteristics. All discs are produced from Apache’s special blend of wear resistant Reliathane.

The discs are manufactured from a special blend of wear resistant polyurethane but inevitably wear will occur. The advantage of a bi-directional pig is that after traveling in one direction, the pig can be run in the other direction and still maintain a positive seal.

Designed to traverse 1.5D bends.

Options:

- Aluminum or steel gauging plates are available in either slotted or standard styles.
- Magnets are available.
- Available with UT configuration with internal transmitter housing for 6” - 14” pigs.
The MD2 bi-directional pigs are designed to be both economical and efficient. They have multiple uses including separation of dissimilar fluids, batching and light cleaning however the primary use for the MD2 is water displacement during the hydrostatic testing stage of construction. The steel bodied pigs are designed to travel in either direction in the pipeline.

MD Series, in sizes 16" and larger, are equipped with either two or four disc combinations, bolted to a rugged steel mandrel. Typically, the longer the pig run the more discs you would install. Sealing discs experiencing wear after traveling one direction, can reverse direction without compromising their sealing characteristics. The discs are made from a special blend of wear resistant polyurethane. The advantage of a bi-directional pig is that after traveling in one direction, the pig can be run in the other direction and still maintain a positive seal. Bumper noses prevent damage to both the pig and in-line auxiliary equipment. The MD Series are available in either the standard MD2 or the heavy duty MD4 design.

**Design to traverse 1.5D bends.**

**Options:**

- Transmitter cavities for electronic tracking equipment.
- Gauging plates can be custom made to suit your application and are available in aluminum or steel, slotted or standard.
- Magnets are available.
The primary use for the MD4 is liquid displacement during the hydrostatic testing stage of construction; however the 4 disc design allows the pig to be used for light cleaning, separation and batching. Designed to be run in either direction in the pipeline the operator can fill the line with liquid and displace the liquid without removing the pig from the line. The sealing discs experiencing wear after traveling in one direction can reverse the direction without compromising their sealing characteristics.

**Features:**

MD Series, in sizes 14” and smaller, have a through bolt mandrel design, complete with a pull hook. The pigs can be equipped with two or four discs to suit the application. Typically the longer the pig run the more discs you would install. The MD4 are available in sizes 3” – 14” in diameter and comes with a single through bolt mandrel design, complete with a pull hook. The discs are manufactured from a special blend of wear resistant polyurethane.

Designed to traverse 1.5D bends.

**Options:**

- Gauging plates can be custom made to suit your application and are available in aluminum or steel, slotted or standard.
- Magnets are available.
- Available with UT configuration with internal transmitter housing for 6” - 14” pigs.
MD4 are very economical and efficient and are manufactured for medium to long pigging runs and vary in size from 16” to 48” in diameter. Although the primary use for the MD4 is liquid displacement during the hydrostatic testing stage of construction they can be used for cleaning, separation and batching as well. All Apache discs are manufactured from a special bend of wear resistant polyurethane and the MD pigs are designed to traverse in either direction in the pipeline.

Features:

These pigs can be equipped with two or four discs to suit the application. Typically the longer the pig run the more discs you would install. Standard bumper noses prevent damage to both the pig and in-line auxiliary equipment. All Apache 16”-48” pigs are manufactured with by-pass ports. The ports have threaded plugs that can be removed if by-pass is required.

Designed to traverse 1.5D bends.

Options:

- Transmitter cavities for electronic tracking equipment.
- Gauging plates can be custom made to suit your application and are available in aluminum or steel, slotted or standard.
- Magnets are available.