



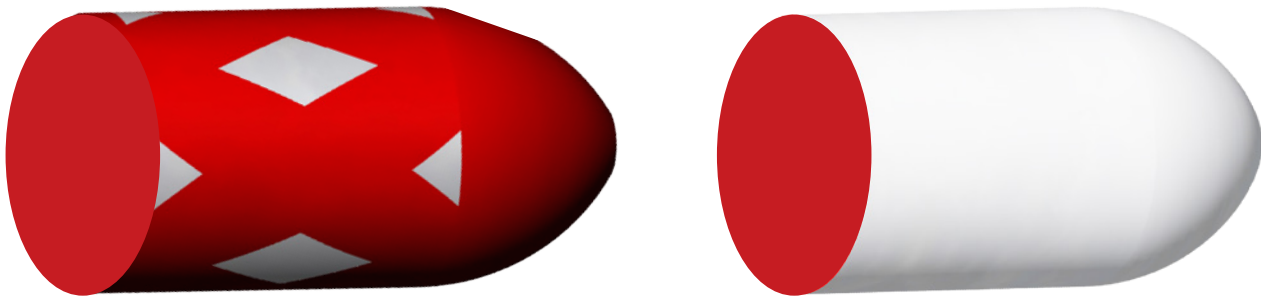
# F O A M

## FOAM PIGS

2-60" (51-1524mm)

Versatile. Economic. Field-proven. Known as the most common and cost-effective pigging solution for pipeline cleaning, Apache offers its line of multi-faceted foam pigs and spheres.

Not only do they remove liquids in natural gas pipelines, this specialist line reduces wax build-up in crude oil pipelines, de-waters lines following hydrostatic testing, dries pipelines, and provides light to moderate cleaning.



### Features & Benefits:

- To perform effectively, all Apache foam pigs and spheres are manufactured from the highest quality open cell polyurethane foam. This special composition of polyurethane is very durable. It resists abrasion, making it hard wearing, offering maximum flexibility for use in a wide range of applications.
- Foam pigs are exceptionally flexible, which is critical to their ability to operate in a variety of the most complex pipeline networks. They can easily negotiate short radius bends, miter bends, tees, and multi-diameter lines.
- The basic foam pig design can be customized to include a number of tough urethane coatings. For example, by simply adding aggressive wire brushes into urethane coating, the pig acts as a durable, efficient cleaner for hard pipe scale applications.
- Apache offers a number of different profiles of foam pigs, each with its individual characteristics. Here are just a few of them:
  - Double Dish - Ideal for bi-directional operations and evacuating liquids.
  - Double Nose - Perfect for bi-directional operations and in multi-diameter pipeline.
  - Foam Balls - Excellent for bi-directional operations, and navigating short radius bends for drying, wiping and scraping.

### Options Available:

- Polypropylene handling rope for one or both ends of the pig for easy handling.
- Transmitter housing to accommodate electronic tracking equipment.
- Custom designs and sizes are available. Please contact Apache for more details.

# FOAM DIAMETERS

## OUTSIDE DIAMETER OF BARE, UNCOATED FOAM PIGS

No two pipelines are alike. So when it comes to developing a custom foam pig solution to meet your needs, Apache offers some basic guidelines about foam pig diameter.

Apache recommends that the diameter of foam pigs be no less than 5% larger than the inside diameter of the pipe. Foam pigs are designed to navigate short radius bends and traverse up to a 35% anomaly in pipe bore.

At Apache, we manufacture foam pigs from 2" to 60". Our diameter range is in line with all standard pipe sizes, and features a finished diameter tolerance of +/- 2%. Bear in mind that applying a coating of polyurethane to the outside surface of a foam pig will increase the diameter by 0.125" to 0.250".

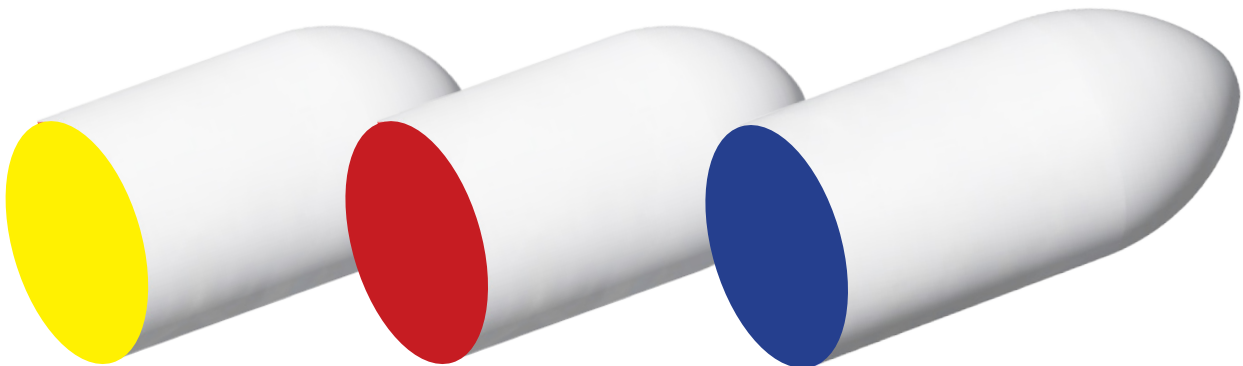
If you would like us to develop a custom solution for you, just get in touch.

### Available Diameters:

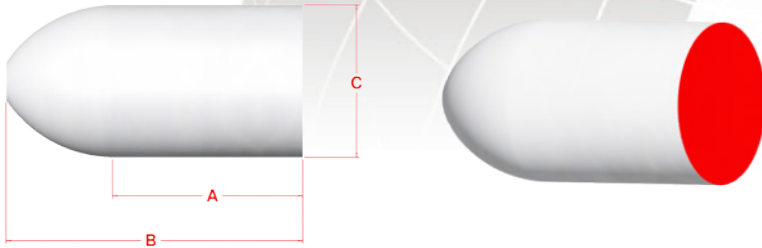
**2", 3", 4", 5", 6", 7", 8", 10" & 12"**  
available in +1/4" or +1/2"

**14" to 60"**  
even sizes only

*Other diameters are available on a custom order basis.*

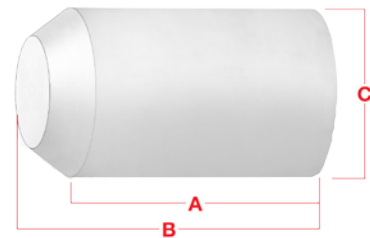


# F O A M



Size	A	B	C
2"	2.500	4.000	2.000
2-1/4"	2.875	4.500	2.250
2-1/2"	3.250	4.875	2.500
2-3/4"	3.500	5.375	2.750
3"	3.750	5.750	3.000
3-1/4"	4.125	6.250	3.250
3-1/2"	4.500	6.750	3.500
3-3/4"	4.750	7.250	3.750
4"	5.000	7.750	4.000
4-1/4"	5.375	8.375	4.250
4-1/2"	5.625	9.000	4.500
4-3/4"	6.000	9.250	4.750
5"	6.375	9.750	5.000
5-1/4"	6.625	10.250	5.250
5-1/2"	7.000	10.750	5.500
5-3/4"	7.375	11.250	5.750
6"	7.625	11.750	6.000
6-1/4"	7.875	12.250	6.250
6-1/2"	8.500	12.875	6.500
6-3/4"	8.625	13.250	6.750
7"	8.875	13.750	7.000
7-1/4"	9.250	14.250	7.250
8"	10.125	15.500	8.000
8-1/4"	10.375	16.125	8.250
8-1/2"	10.750	16.375	8.500

Size	A	B	C
10"	12.500	19.500	10.000
10-1/4"	12.875	20.000	10.250
10-1/2"	13.250	20.500	10.500
12"	15.000	23.375	12.000
12-1/4"	15.325	23.875	12.250
12-1/2"	15.750	24.375	12.500
14"	17.500	24.500	14.000
16"	20.000	28.000	16.000
18"	22.500	31.500	18.000
20"	25.000	35.000	20.000
22"	27.500	38.500	22.000
24"	30.000	42.000	24.000



Sizes 26" to 60" use our Tapered Nose Pig design.

Size	A	B	C
26"	39.00	45.00	26.00
28"	42.00	48.50	28.00
30"	45.00	52.00	30.00
32"	48.00	55.50	32.00
34"	51.00	59.00	34.00
36"	54.00	62.50	36.00
38"	57.00	66.00	38.00
40"	60.00	69.50	40.00
42"	63.00	73.00	42.00
48"	72.00	83.50	48.00
52"	74.00	86.00	52.00
56"	76.50	88.50	56.00
60"	90.00	104.50	60.00

\*Custom Sizes Available Upon Request



# F O A M

To perform effectively, all Apache foam pigs and spheres are manufactured from the highest quality open cell polyurethane foam. This special composition of polyurethane is very durable. It resists abrasion, making it hard wearing, offering maximum flexibility for use in a wide range of applications.






Foam pigs are exceptionally flexible, which is critical to their ability to operate in a variety of the most complex pipeline networks. They can easily negotiate short radius bends, miter bends, tees, and multi-diameter lines.

The basic foam pig design can be customized to include a number of enhancements. For example, by simply adding aggressive wire brushes into urethane coating, the pig acts as a durable, efficient cleaner for hard pipe scale applications.






Foam pigs and spheres: the most cost-effective, versatile pipeline cleaning solution available today. An excellent choice for progressive pigging scenarios.

Custom designs and sizes are available. Please contact Apache for more details.




## Heavy Density (8-10 lb/ft<sup>3</sup> or 128-160 kg/m<sup>3</sup>)

Style	Type	Function
	<b>HDBS</b> (Heavy Density Bare Squeegee)	Heavy Drying
	<b>HDCC</b> (Heavy Density Criss Cross)	Heavy Wiping
	<b>HDWB</b> (Heavy Density Wire Brush)	Heavy Scraping
	<b>HDSC</b> (Heavy Density Silicone Carbide)	Heavy Scraping
	<b>Porcupine</b> (Total Wire Brush)	Max Scraping


## Medium Density (5-7 lb/ft<sup>3</sup> or 80-112 kg/m<sup>3</sup>)

Style	Type	Function
	<b>MDBS</b> (Medium Density Bare Squeegee)	Regular Drying
	<b>MDCC</b> (Medium Density Criss Cross)	Regular Wiping
	<b>MDWB</b> (Medium Density Wire Brush)	Regular Scraping
	<b>MDSC</b> (Medium Density Silicon Carbide)	Regular Scraping
	<b>MDPB</b> (Medium Density Plastic Brush)	Regular Scraping in Lined or Plastic Pipe






## Light Density

Style	Type	Function
	<b>LDBS</b> (Light Density Bare Squeegee)	Light Drying 2 lb/ft <sup>3</sup>
	<b>MLS</b> (Medium Light Swab)	Light Drying 2-3 lb/ft <sup>3</sup>
	<b>SLS</b> (Super Light Swab)	Light Drying 1-2 lb/ft <sup>3</sup>

## ProVex FD™ Pig

	<b>Removes liquids in gas lines, wax in crude oil pipelines, de-waters after hydrostatic testing, nitrogen purge operations. Available with handling ropes or transmitter cavity.</b>
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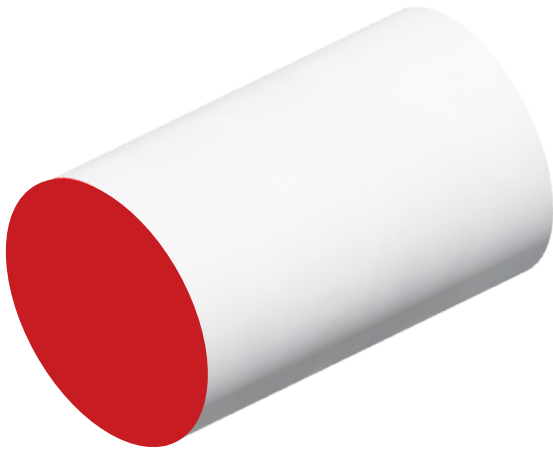
## Options

Style	Type	Function
	<b>Handling Rope</b>	Polypropylene rope for one or both ends of the pig for easy handling.
	<b>Transmitter Cavity</b>	Standard and customized cavity for encasing transmitters for pig tracking.
	<b>Double Dish</b>	Ideal for bi-directional operations and evacuation of liquids.
	<b>Foam Balls</b>	Bi-directional, short radius bends for drying, wiping and scraping.
	<b>Full Coat</b>	Regular Scraping

Foam densities are approximations and can change depending on several different factors. Figures above are industry standards.

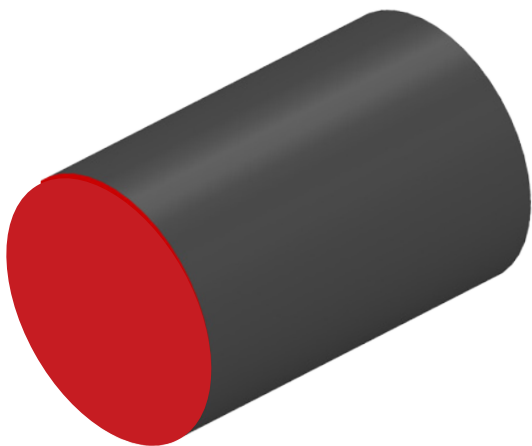
# F O A M

## DRYING



### SLS

- Super Light Swab
- Light Drying

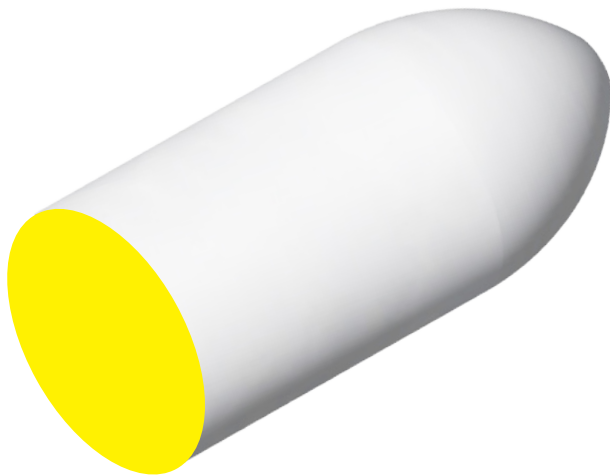


### MLS

- Medium Light Swab
- Medium Drying

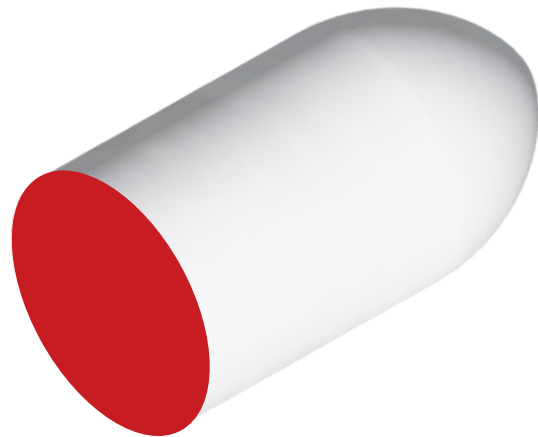
# F O A M

## DRYING & CLEANING



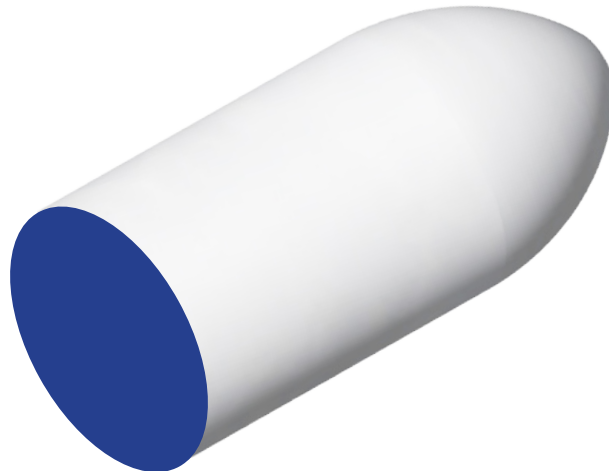
### **LDBS**

- Light Density
- Bare Squeegee
- Light Drying



### **MDBS**

- Medium Density
- Bare Squeegee
- Regular Drying

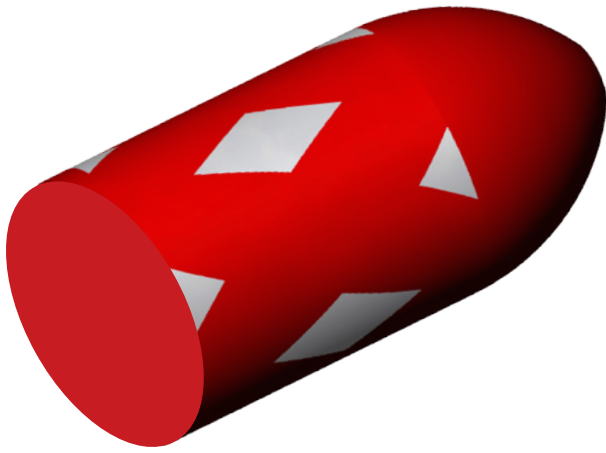


### **HDBS**

- Heavy Density
- Bare Squeegee
- Heavy Drying

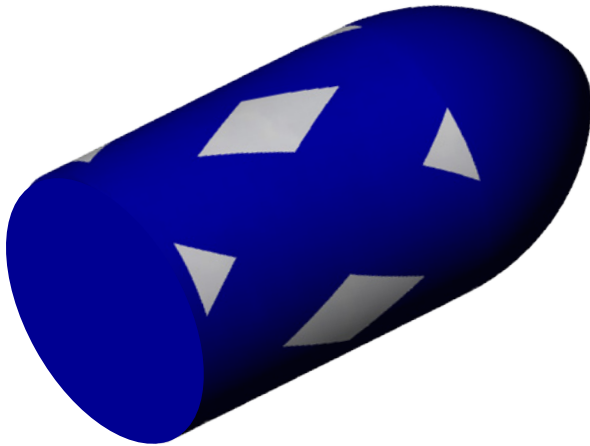
# FOAM

## WIPING & CLEANING



### MDCC

- Medium Density
- Criss Cross
- Regular Wiping



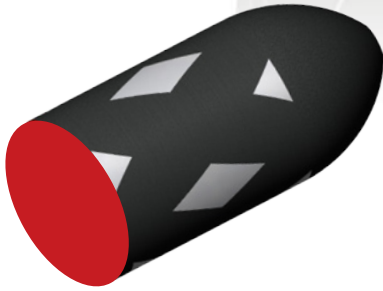
### HDCC

- Heavy Density
- Criss Cross
- Heavy Wiping



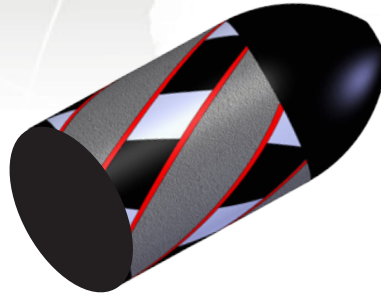
# F O A M

## SCRAPING



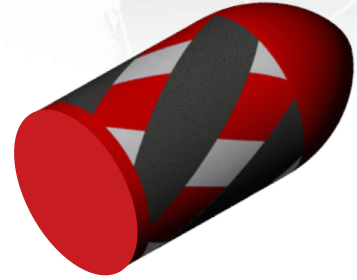
### MDSC

- Medium Density
- Silicone Carbide
- Regular Scraping



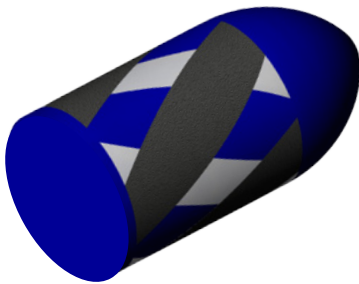
### MDPB

- Medium Density
- Plastic Brush
- Lined Plastic Pipe
- Regular Scraping



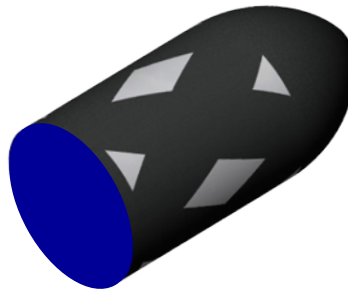
### MDWB

- Medium Density
- Wire Brush
- Regular Scraping



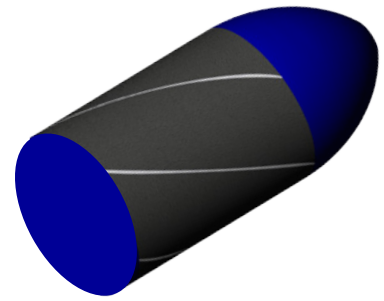
### HDWB

- Heavy Density
- Wire Brush
- Heavy Scraping



### HDSC

- Heavy Density
- Silicone Carbide
- Heavy Scraping



### PORCUPINE

- Heavy Density
- Total Wire Brush
- Maximum Scraping

# F O A M

## MEDIUM DENSITY PLASTIC BRUSH

The latest addition to Apache's world-class line of pipeline cleaners is the Medium Density Plastic Brush. It is manufactured with exclusive material that allows it to clean as thoroughly as a tough steel brush without damaging lined pipe.

Here are just some of its many benefits:

- No metal parts so no risk of scratching pipe.
- Cleans without damaging lined pipe.
- Cleans as well as a steel brush.
- Easily negotiates short radius bends.
- Acceptable for cleaning non-metallic, lined or internally coated pipe.
- Brush bristles are set farther apart than on a steel brush, eliminating "clogging."
- Available in all common sizes and configurations.



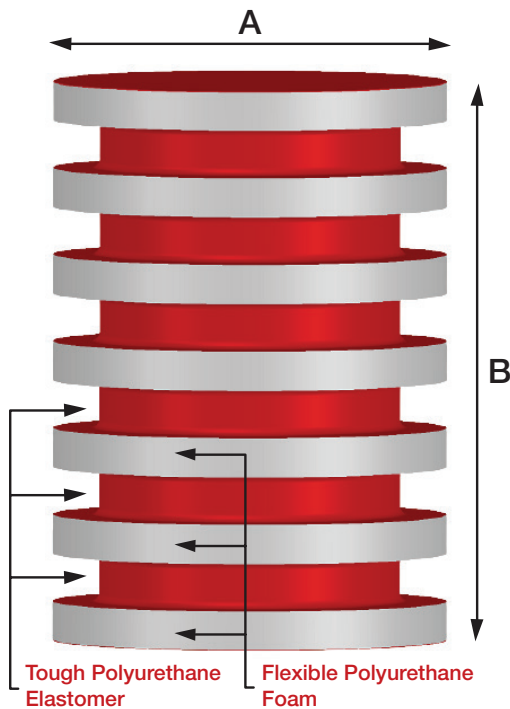
# F O A M

## ProVex FD™ Pig

2-42" (51-1067mm)

Versatile. Effective. Field-proven. To remove liquids from a pipeline, Apache offers the multi-faceted ProVex FD™ pig. Known throughout the pipeline industry as the ultimate pigging solution for achieving a liquid-free line, the durable ProVex FD is a particularly versatile bi-directional pig.

Not only does it remove liquids in natural gas lines, the ProVex FD™ successfully reduces wax build-up in crude oil pipelines, dewateres lines following hydrostatic testing, and executes nitrogen purging. In fact, it's one of the most multi-purpose pigs on the market today.



### Features & Benefits:

- Made from tough, flexible foam, the ProVex FD uses an engineered series of molded channels that provide multiple wiping discs. Each channel is coated with durable Apache Reliathane polyurethane elastomer to form a cutting edge on each disc, facilitating longer runs.
- It is bi-directional, so that it can run in either direction.

With its single piece construction, the ProVex FD pig easily negotiates 1.5D bends, allowing it to move reliably through piping systems.

### Options Available:

- Polypropylene handling rope for one or both ends of the pig for easy handling.
- Transmitter housing to accommodate electronic tracking equipment.

Size	A	B	Part #
2"	2.30"	3.38"	85800200
3"	3.00"	4.86"	85810300
	3.40"	4.86"	85800300
4"	4.00"	6.63"	85810400
	4.50"	6.63"	85800400
6"	6.50"	9.50"	85800600
8"	8.50"	11.25"	85800800
10"	10.50"	14.50"	85801000
12"	12.50"	17.76"	85801200

Size	A	B	Part #
14"	14.00"	22.38"	85-8014-00
16"	16.00"	24.00"	85-8016-00
18"	18.00"	18.25"	85-8018-00
20"	20.00"	31.00"	85-8020-00
24"	24.00"	35.50"	85-8024-00
30"	30.00"	41.25"	85-8030-00
34"	34.00"	51.31"	85-8034-00
36"	36.00"	51.31"	85-8036-00
42"	42.00"	63.25"	85-8042-00

# F O A M

## SPHERE/BALLS

Apache foam balls are fabricated from the highest quality open cell polyurethane foam. The flexible nature of these pigs allows for the negotiation of both short radius bends and unexpected reductions in pipe bore. Solid urethane spheres are available in a variety of different durometers.

**FOAM PIG BALLS AND URETHANE SPHERES ARE THE MOST COST EFFECTIVE, VERSATILE DESIGN OF PIPELINE CLEANER IN THE MARKET TODAY.**

### Features & Benefits:

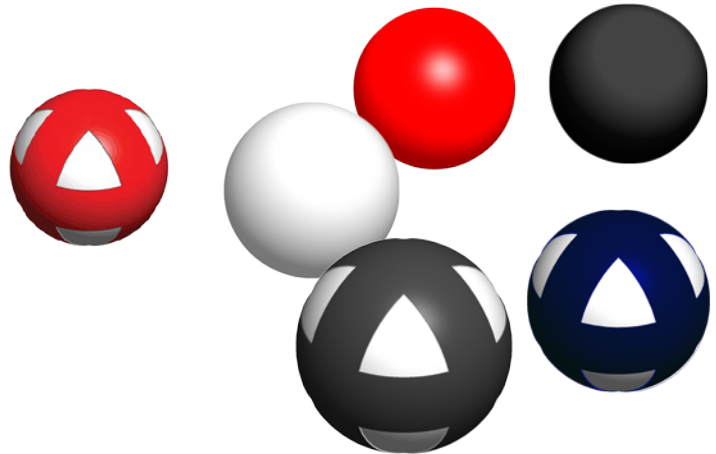
- Bi-directional, short radius bends for drying.
- Light wiping and scraping.

### Options Available:

- Bare Foam:
  - Light
  - Medium
  - Heavy Density
- Criss Cross Foam Balls
- Wire Brush Foam Balls
- Full Coat Foam Balls
- Silicone Carbide

### Available Sizes:

2.00"	3.00"	4.00"	6.00"
2.25"	3.25"	4.25"	8.50"
2.50"	3.50"	4.50"	10.50"



## CLEAN OUT BALLS



**Applications:**  
 LAY FLAT WATER LINES  
 IRRIGATION LINES  
 CONCRETE TRUCK LINES  
 MANURE LINES

Size	Part #	Size	Part #
3.50"	02-SPNG-0350	8.66"	02-SPNG-0866
4.50"	02-SPNG-0450	10.24"	02-SPNG-1024
6.30"	02-SPNG-0630	12.30"	02-SPNG-1230
7.87"	02-SPNG-0787		

### SOLID URETHANE SPHERES ARE AVAILABLE IN ALL DUROMETERS

**60-63 DUROMETER**  
 Very soft and pliable

**70-75 DUROMETER**  
 Somewhat firm, but quite flexible

**80-85 DUROMETER**  
 Firm with fair flexibility  
 Most common for solid-cast pigs



# F O A M

## OPTIONS



### HANDLING ROPE

- Polypropylene rope for one or both ends of the pig for ease of handling.



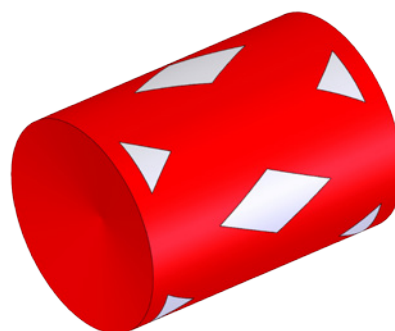
### TRANSMITTER CAVITY

- Standard and customized cavity for encasing transmitters for pig tracking.



### FULL COAT

- Regular Scraping



### DOUBLE DISH

- Ideal for bi-directional operations and evacuation of liquids.