

## Steel Pig Selection Guide



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## Batching Pigs (Cup Type)



BGC-2

BGC-3

BGC-4

# Description:Sturdy carbon steel body equipped with easily replaceable<br/>polyurethane cups.<br/>2" through 6" are center-rod type and 8" and above are bolting pattern<br/>configuration. (6" through 14" offer the option of either center rod or<br/>bolting pattern)Design Function:Primarily used for standard pigging operation such as filling and<br/>dewatering during hydrostatic testing, routine batching operations, and<br/>product removal. When equipped with a gauging plate, they are used to

product removal. When equipped with a gauging plate, they are used to prove pipe roundness and to ensure excessive weld penetration or debris does not exist. Can also be used to prove minimum bend radius prior to intelligent pig use.



## Displacement Pig (Disc Type)



BGD-2

BGD-4

### **Description:** Sturdy carbon steel body equipped with easily replaceable polyurethane discs.

2" through 6" are center-rod type and 8" and above are bolting pattern configuration. (6" through 14" offer the option of either center rod or bolting pattern)

# **Design Function:** Primarily used for standard pigging operation such as filling and dewatering during hydrostatic testing, routine batching operations, and product removal. Steel body pigs equipped with discs allow for bidirectional use. When equipped with a gauging plate, they are used to prove pipe roundness and to ensure excessive weld penetration or debris does not exist. Can also be used to prove minimum bend radius prior to intelligent pig use.



## Multi-Disc Pigs



MD



**MDB** 

#### **Description:**

The multi-disc pig consists of a carbon steel body equipped with two guide discs, four sealing discs, and six spacer discs, all of which are easily replaceable. The brush model is equipped with either circular brushes or carbon steel block brushes depending on size. 2" through 6" are center-rod type and 8" and above are bolting pattern configuration. (6" through 14" offer the option of either center rod or bolting pattern)

#### **Design Function:**

**<u>1</u>:** The multi-disc series of pigs allow for excellent sealing capabilities for performing the duties of batching, gauging, product removal, pre-commission, and on-stream cleaning, or any pigging operation requiring bidirectional use. When equipped with a gauging plate, they are used to prove pipe roundness and to ensure excessive weld penetration or debris does not exist. Can also be used to prove minimum bend radius prior to intelligent pig use.



## Description:Sturdy carbon steel body equipped with easily replaceable<br/>polyurethane cups or discs. Brush options include circular brushes and<br/>carbon steel block brushes installed on wear-compensating springs.<br/>2" through 6" are center-rod type and 8" and above are bolting pattern<br/>configuration. (6" through 14" offer the option of either center rod or<br/>bolting pattern)

**Design Function:** Primarily used for pre-commission and on-stream cleaning of crude oil, refined product, and natural gas pipelines where rust, millscale, sand, wax, organic growth, mud, oxides, and other foreign matter exist. When equipped with a gauging plate, the pig can be used to prove pipe roundness and to ensure excessive weld penetration or debris does not exist. Also used to prove minimum bend radius prior to intelligent pig use.



## ARP - Brush Cleaning Pig



ARP (16" and up)

#### **Description:**

Sturdy carbon steel body equipped with easily replaceable polyurethane components, two cups and one disc. This pig is equipped with carbon steel block bushes installed on wear-compensating springs. The cup and disc combination on this pig, along with the brushes, creates a pig well suited for both cleaning and product removal.

#### **Design Function:**

**tion:** Primarily used for pre-commission and on-stream cleaning of crude oil, refined product, and natural gas pipelines where rust, millscale, sand, wax, organic growth, mud, oxides, and other foreign matter exist. When equipped with a gauging plate, the pig can be used to prove pipe roundness and to ensure excessive weld penetration or debris does not exist. Also used to prove minimum bend radius prior to intelligent pig use.



### **Conical Cup Pigs**





Description:Sturdy carbon steel body equipped with easily replaceable conical cups<br/>and steel brushes or urethane blades mounted on wear-compensating<br/>springs, providing 360 degree coverage of internal pipe surface.<br/>Capable of being fitted with gauging plate to prove pipe roundness.<br/>Designed to be versatile with the ability of being fitted with two, three,<br/>or four conical cups, and spring loaded brushes or blades.

## **Design Function:** The design of the conical cup pigs allows this pig to perform all operations of pigging, including filling, dewatering, batching, cleaning, gauging, and product removal. Equipped with conical cups, pigs can negotiate up to 15% reductions and deformations.



## Articulated Pigs







#### Description:

Articulated pigs are primarily used in small diameter applications (6" - 14") with tight-radius bends. Articulated pigs are connected in the center with a urethane chain (a solid steel chain molded in urethane).

**Design Function:** The articulated series of pigs are equipped with brushes for cleaning operations. such as pre-commission and on-stream cleaning where rust, mill scale, sand, wax, organic growth, mud, oxides, and other foreign matter exist. When equipped with a gauging plate, they can be used to prove pipe roundness and to ensure excessive weld penetration or debris does not exist. Also used to prove minimum bend radius prior to intelligent pig use.



### **Dual-Diameter Pigs**



DDP

#### **Description:**

Dual-diameter pigs are designed to negotiate varying diameter piping configurations that other pigs cannot. Available in sizes of 3" x 4" and larger.

Note: As with all special pigging applications such as dual-diameter or multi-diameter projects, it is best to discuss in more detail the characteristics of the pipe to determine the best-suited pig and/or pigging method.



## Additional Options

8:00/A

Body Material:	Standard material is carbon steel. Pig bodies are also available in stainless steel and aluminum upon request.
<u>Cup/Disc Material:</u>	Standard material is polyurethane. Cups and discs are also available in neoprene, viton, epdm, buna-n, and other elastomer compounds for special applications.
Cup/Disc Configuration:	Custom pig configurations are available to include various cup and disc combinations. Common configurations include two-cup, two-disc combinations, as well as additional discs being requested on cup pigs for additional support and sealing capabilities.
<u>Gauging Plates:</u>	Standard material for gauging plates is 1/4" aluminum. Gauging plates can be constructed of either aluminum or steel. Varying thicknesses are also available including 1/4", 3/8", and 1/2". Gauging plates can also be manufactured with slots upon request.
<u>Transmitter Cavity:</u>	Steel body pigs can be customized to accept transmitter cavities. This can include an internal transmitter cavity, as well as flange mount installations.
<u>Magnets:</u>	Steel body pigs can be equipped with magnets. Magnets can be used to signal magnetic pig detectors or to collect debris in the pipeline. The size of the pig and the intended purpose of the magnets will determine the quantity required.
<u>Replacement</u> <u>Components:</u>	Pigs Unlimited maintains a large inventory of replacement components for not only our pigs, but also competitor's pigs. Replacements cups, discs, brushes, assemblies, etc., are available.