



PIPELINE PIGS CLEANING BATCHING GAUGING



**GIRARD
PIPELINE PIGS**



Cleaning pigs

Model GWB

Cleaning Pig
Sizes 2 to 8

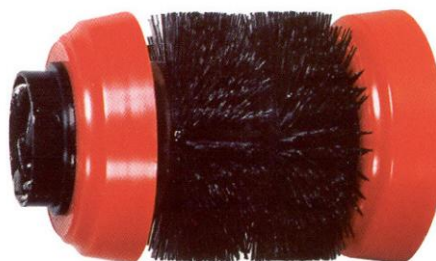
Standard with polyurethane cups.*
Standard with steel wire wheel brushes.
Specify discs for bidirectional operation.



Model GDB

Cleaning pig
Sizes 6 to 14

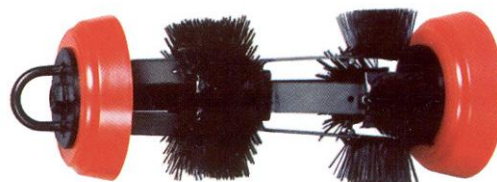
Standard with polyurethane cups.*
Standard with split ring steel wire brushes.
Available with stainless or prostran brushes.
Specify discs for bidirectional operation.



Model GBK

Cleaning pig
Sizes 6 to 14

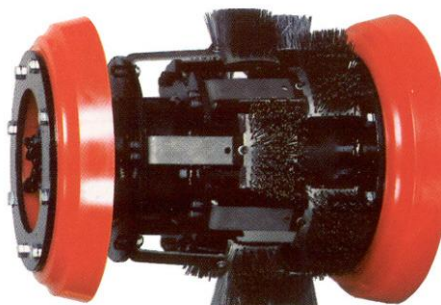
Standard with polyurethane cups.*
Standard with spring loaded steel brushes.
Available with steel or prostran brushes.
Also available with steel or polyurethane blades.
Dual diameter units available.



Model GSB

Cleaning pig
Sizes 10 to 24

Standard with polyurethane cups.*
Standard with spring loaded steel brushes.
Available with stainless or prostran brushes.
Also available with steel or polyurethane blades.
Pig transmitter mounting optional.



Model GZB

Cleaning pig
Sizes 16 to 48

Standard with polyurethane cups.*
Standard with spring loaded steel brushes.
Available with stainless or prostran brushes.
Also available with steel or polyurethane blades.
Specify discs for bidirectional operation.
Pig transmitter mounting optional.

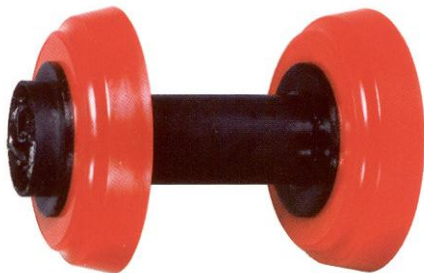


* Available with neoprene or nitrile cups and discs.



Batching - Gauging

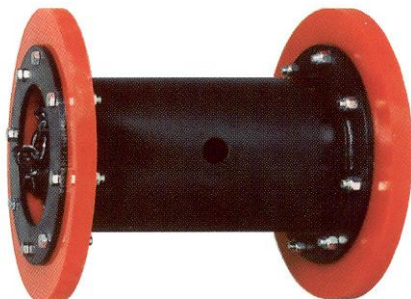
Model GBC-2, GBC-3, GBC-4
Cup pigs for unidirectional operation
Sizes 2 to 48



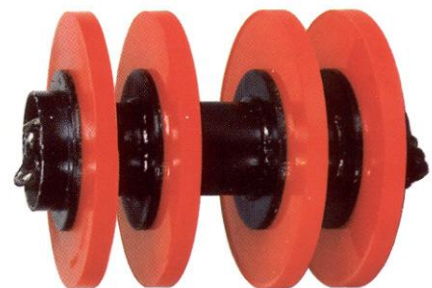
For batching, displacement, hydrostatic testing and paraffin removal.
Standard with polyurethane cups. *
For gauging, add aluminium or steel gauging plates.
Pig transmitter mounting optional (Sizes 8 & up).



Model GBD-2, GBD-3, GBD-4
Disc pigs for bidirectional operation
Sizes 2 to 48



For batching, displacement, hydrostatic testing and paraffin removal.
Standard with polyurethane discs. *
For gauging, add aluminium or steel gauging plates.
Pig transmitter mounting optional (Sizes 8 & up).



Model GBDX-6
Bidirectional operation
Sizes 2 to 48

For batching, displacement, hydrostatic testing and paraffin removal.
Standard with 6 polyurethane discs.
Steel wire brushes optional.
Pig transmitter mounting optional (Sizes 8 & up).



* Available with neoprene or nitrile cups and discs.

**GIRARD
PIPELINE PIGS**



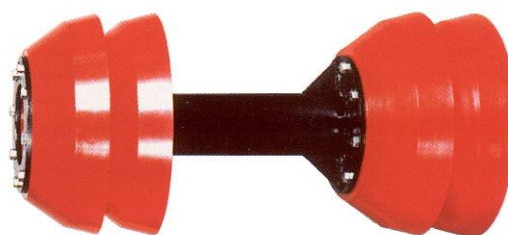
Conical cup pigs

GIRARD Conical Cup Multi-Purpose Pigs

For cleaning, batching and gauging. Models available with two, three or four polyurethane conical cups which allow maximum flexibility and positive seal for traversing out of round pipelines.
Sizes 4 to 48

Models GCC-1, GCC-3, GCC-4

Batching pigs for separation or displacement of products.
Available with aluminium or steel gauging plates.
Pig transmitter mounting optional (Sizes 8 & up).



Models GCC-BR-2, GCC-BR-3, GCC-BR-4

Standard with steel wire brushes.
Available with stainless or prostran brushes or polyurethane blades.
Available with aluminium or steel gauging plates.
Pig transmitter mounting optional (Sizes 8 & up).



**Replacement polyurethane
conical cups, scraper cups and
scraper discs.**





POLYURETHANE CONICAL CUPS SCRAPER CUPS SCRAPER DISCS



GIRARD polyurethane cups and discs:

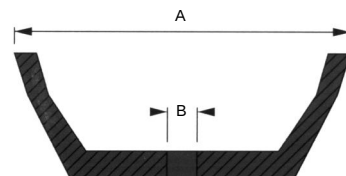
- Are made of the highest quality polyurethane
- Are engineered for longer wear and abrasion resistance
- Are designed to maintain a positive seal while supporting the pig body
- Are available to fit all pipeline pig mandrels

**GIRARD
PIPELINE PIGS**

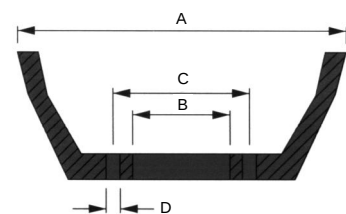


POLYURETHANE CONICAL CUPS

Size	A Outside diameter	B Center hole	C Bolt circle	D Bolt holes No. - size	Approx. Wt (lbs)
3"	3-3/16	9/16	N/A	N/A	0,2
4"	4-1/4	9/16	N/A	N/A	0,4
6"	6-3/8	1-1/16	N/A	N/A	1,2
8"	8-3/8	1-1/16	N/A	N/A	2,2
10"	10-3/8	1-1/16	N/A	N/A	3,5
12"	12-1/2	1-1/16	N/A	N/A	6,0
14"	14	1-1/16	N/A	N/A	7,0
16"	16	6-1/4	8-1/2	8-9/16	9,0
18"	18	8-1/4	10-1/2	12-9/16	12,0
20"	20	8-1/4	10-1/2	12-9/16	15,0
22"	22	10-1/4	13	14-9/16	20,0
24"	24	10-1/4	13	14-9/16	27,0
30"	30	15-1/4	18	18-9/16	48,0
32"	32	15-1/4	18	18-9/16	54,0
36"	36	17-1/4	20	22-9/16	88,0



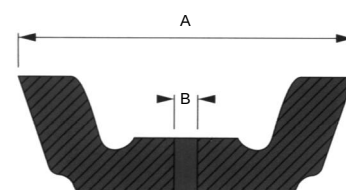
Size 3" to 14"



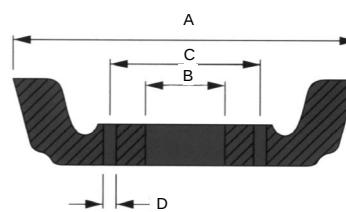
Size 16" and larger

POLYURETHANE SCRAPER CUPS

Size	A Outside diameter	B Center hole	C Bolt circle	D Bolt holes No. - size	Approx. Wt (lbs)
2"	2-3/16	9/16	N/A	N/A	0,1
3"	3-3/16	9/16	N/A	N/A	0,2
4"	4-1/4	9/16	N/A	N/A	0,3
6"	6-3/8	1-1/16	N/A	N/A	1,2
8"	8-3/8	1-1/16	N/A	N/A	2,2
10"	10-3/8	1-1/16	N/A	N/A	3,5
12"	12-3/8	1-1/16	N/A	N/A	5,0
14"	14-1/8	1-1/16	N/A	N/A	7,0
16"	16-1/8	8-1/4	11	8-9/16	9,0
18"	18-1/4	10-3/4	12-3/4	12-9/16	12,0
20"	20-1/4	10-3/4	13-1/2	12-9/16	15,0
22"	22-1/4	10-3/4	13-1/2	14-9/16	18,0
24"	24-1/2	14	16-1/2	14-9/16	22,0
30"	30-1/4	16	19-1/2	18-9/16	45,0
36"	36-1/4	22	25	22-9/16	55,0
40"	40-1/2	22	26	24-5/8	75,0
42"	42-1/4	24	30	24-5/8	85,0
48"	48-1/4	32	36	24-5/8	100,0



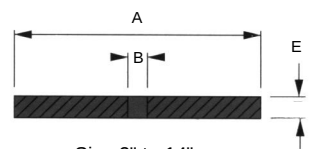
Size 2" to 14"



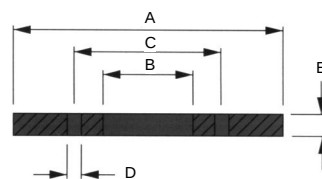
Size 16" and larger

POLYURETHANE SCRAPER DISCS

Size	A Outside diameter	B Center hole	C Bolt circle	D Bolt holes No. - size	Approx. Wt (lbs)
2"	2-1/8	9/16	N/A	N/A	0,1
3"	3-1/4	9/16	N/A	N/A	0,1
4"	4-1/4	9/16	N/A	N/A	0,2
6"	6-3/8	1-1/16	N/A	N/A	1,0
8"	8-3/8	1-1/16	N/A	N/A	1,5
10"	10-3/8	1-1/16	N/A	N/A	3,0
12"	12-3/8	1-1/16	N/A	N/A	5,0
14"	14	1-1/16	N/A	N/A	6,5
16"	16	8-1/4	11	8-9/16	6,5
18"	18	10-3/4	12-3/4	8-9/16	7,5
20"	20	10-3/4	13-1/2	12-9/16	10,0
24"	24-1/4	13	15-7/8	10-9/16	14,0
24"	23-3/4	14	16-1/2	14-9/16	26,0
30"	30-1/1	13	15-7/8	10-9/16	26,0
30"	29-3/4	16-1/8	19-1/2	16-9/16	44,0
36"	36-1/2	16-1/8	19	16-9/16	36,0
36"	38-3/4	22	25	22-9/16	55,0



Size 2" to 14"



Size 16" and larger

INFLATABLE PIPELINE SPHERES





GIRARD Polyurethane Spheres

- Minimize product contamination when used to separate fluids being transported through a pipeline
- Purge air and dewater during hydrostatic testing
- Confirm accuracy of flow meters
- Pass through out-of-round pipe
- Navigate through tees, ells, and full port valves
- Are suitable for automatic launching
- Remove condensate and paraffin build-up

GIRARD Polyurethane Spheres have a variety of uses

Liquid Batch Separation

GIRARD spheres are used for separating various products such as gasolines, fuel oils, crude oils, jet fuels, and other petroleum products transported through a pipeline. Product integrity is maintained while navigating tees and ells.

Line Testing

GIRARD spheres purge air from the pipeline to insure accurate hydrostatic testing. This is achieved by inserting a sphere ahead of the water column which displaces the air.

GIRARD spheres can remain in the line throughout all phases of testing. Once the test is complete, the spheres are used to dewater the pipeline.

Line Maintenance

GIRARD spheres maintain pipeline integrity by removing paraffin and condensate. During pipeline corrosion control maintenance, spheres are used to batch corrosion inhibitors.

Meter Provers

GIRARD spheres gauge volume displacement to confirm the accuracy of flow meters.

GSY - GSG - GSR

GIRARD spheres are manufactured in a range of durometers for meter prover and pipeline applications. The GSY is designed for meter prover use and the GSG and GSR are designed for pipeline use. GIRARD spheres are available in sizes from 2 to 36.

Maximum benefits are obtained when spheres are properly filled and sized. Specific applications will determine the most effective sizing and filler fluid to be used. In general, GIRARD spheres should be sized 1% larger than pipe ID. Information on recommended use is available from GIRARD or your local distributor.

Sphere Pump from GIRARD

A pump is recommended to properly inflate a GIRARD sphere.

The pump is easy to operate by placing the appropriate fluid in the filling cup, attaching the hose to the valve body in the sphere, and manually pressing the handle. The pump and attachments are available from GIRARD Industries.

