



BEAUDREY

Water screens, debris filters & condenser tube cleaning systems since 1912

SPONGE BALLS DATA SHEET

Beaudrey Cleaning Sponge Balls

Beaudrey is an engineering and construction company specialized in the design, fabrication and installation of debris filters, Zero Ball Lose® systems and condenser tube-cleaning systems.

The feed-back from over 100 years of experience has ensured the constant improvement of these machines which use the most up-to-date technical features, components and materials.

The sponge rubber balls are the necessary maintenance products for power plants and other industry, which need to clean the inner side of condenser tube and the ultra-filtration membrane module.

As we know, for power plants and other industries, the heat exchange coefficient is the most important factor for condenser and heat exchanger. The factor will affect the production efficiency of the whole power generation system. The mineral in the hard water will be separate out and deposit on the inner side of the condenser tube, and become incrustation.

Any dirty substance in the water will deposit on inner side of the tube. All the deposits will reduce the heat-exchange coefficient. The sponge rubber balls can clean all the incrustation and deposit on the inner side of the tube, and ensure the equipments to run efficaciously.



Products

Beaudrey produces 4 kinds of sponge rubber balls. Which are :

- Standard sponge ball (BS).
 - Abrasive fully plastic coated ball (BP),
 - Abrasive fully carborundum coated ball (BF),
 - Abrasive ring carborundum coated ball (BR),
- => Other kind of sponge balls available on simple request.

The diversity of products can satisfy all kinds of needs for tube cleaning. They are used in different machine in different conditions. These balls can clean all the equipments of power plants and other industries that need maintenance.

Our sponge rubber balls are produced with selected high quality raw nature materials. As a result, these have a longer useful ball life. They can continue to work about 400 hours in normal conditions.



Type and usage

1 - Standard ball :

The standard balls are based on the regular balls that were peeled off, thus they are softer and more elastic. Their surface are coarser, so they can remove deposits and grime build-up easily. Standard balls are used in most conditions that have no special requirements. We recommend continuing the use use of these balls for fresh water and salt water. For most customers, the standard sponge ball is their first choice.

For new equipment, Very soft and soft balls are the best choice. For equipment in routine use, medium and medium hard balls are recommended. If heavy duty is required, then hard balls are the suggested choice.



Soft



Medium Soft



Medium



Medium Hard



Hard



2 – Abrasive fully plastic coated ball :

Plastic granule balls are formed with plastic granule on the surface. There is a tiny hole in each granule, so this ball can absorb water easier. The granule on the surface can help to remove some substance stuck on the inner side of the condenser tube. So they are used in some very difficult case. If there are some blind corners in the tube, the plastic granule ball is the best choice.

3 - Abrasive fully/ring carborundum coated ball

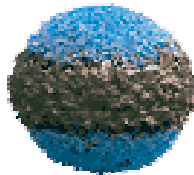
We offer two abrasive balls with a surface coating of carborundum. They are ring coated carborundum and fully coated carborundum balls. The carborundum is very hard. It can abrade hard deposits on the inner side of the tubes. So if on your condenser tube there is something stuck on the inner surface and very difficult to remove, the carborundum-coated ball is the best choice.

But these balls can be harmful for soft tube. So they can ONLY be used in extremely difficult case, and they cannot be used continuously or very often. Never use them for new equipment, and never use them for brass tube and other soft tubes.

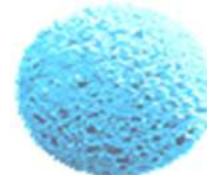
Ring carborundum coated ball only has a ring-like carborundum belt on the ball, so it will be recommended first for selection. For heavier duty, fully carborundum coated balls was recommended.



Abrasive fully carborundum coated ball



Abrasive ring carborundum coated ball



Abrasive fully plastic coated ball



Hardness and Characteristics

Beaudrey proposed each kind of sponge balls in 5 kinds of different firmness as describe below :

*Example : Standard balls series, soft hardness, 16mm diameter => **BS-A-16***















*Fully Carborundum coated balls series, medium-hard, 31mm diameter => **BF-D-31***

Code	Hardness	Colour
A	Soft	yellow
B	Medium Soft	blue
C	Medium	orange
D	Medium hard	green
E	Hard	red

Beaudrey reference code	
BS	Standard ball
BP	Plastic granule ball
BR	Ring Carborundum coated ball
BF	Ful Carborundum coated ball

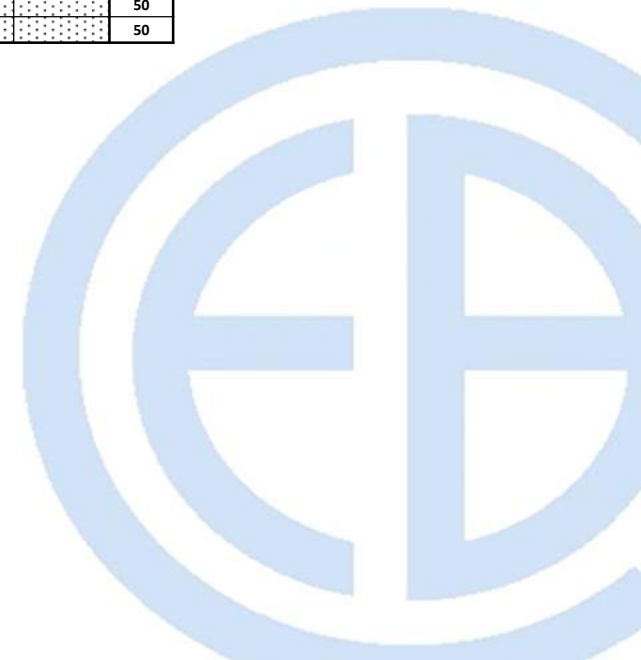
Characteristics	
Hardness tolerance	+/- 10kg/m3
Diameter tolerance	0 / +1 mm
Longevity	Extended life rubber formula
Temperature	130°C max.
Cautions	High flammable Do not use with acids, oils, fats and solvents
Material	Natural rubber

All diameters are available with all types and densities proposed.

Ball Diameter	Standard (BS)* Very Soft (A)	Standard (BS)* Soft (B)	Standard (BS)* Medium (C)	Standard (BS)* Medium Hard (D)	Standard (BS)* Hard (E)	Abrasive fully carborundum coated (BF) Very Soft Soft Medium	Abrasive fully carborundum coated (BF) Medium Hard	Abrasive fully carborundum coated (BF) Hard	Abrasive fully plastic coated (BP) Very Soft Soft Medium	Abrasive fully plastic coated (BP) Medium Hard	Abrasive fully plastic coated (BP) Hard	Abrasive ring carborundum coated (BR) Soft Medium Soft Medium	Abrasive ring carborundum coated (BR) Medium Hard	Abrasive ring carborundum coated (BR) Hard	Balls per bag
15 mm															250
16 mm															250
17 mm															250
18 mm															250
19 mm															250
20 mm															250
21 mm															250
22 mm															100
23 mm															100
24 mm															100
25 mm															100
26 mm															100
27 mm															100
28 mm															100
29 mm															100
30 mm															50
31 mm															50
32 mm															50
33 mm															50
34 mm															50
35 mm															50
36 mm															50
37 mm															50

(Biger Diameters are available on request)

The size, or nominal diameter, refers to the inner diameter of the tube of which the sponge balls are used to clean. The diameter of the sponge ball in their dry state is slightly smaller than the nominal diameter. In the wet state, or working state, the sponge ball will be come a little bigger than the nominal diameter. That is how we want it to be. When you order sponge balls, please be sure to confirm the inner diameter of the tubes.



You can contact us for any further information you may need at :

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