

Automotive Industry

- Fuel Sender Float
- Engine Oil
- ABS System
- Carburettor
- Radiator
- Window-washer
- Power Steering
- Various monitors
- Fuel Filter for Diesel
- Fuel Gauge for LPG
- Constructing and Agricultural machines

Aero Space and Ship Industry

- Fuel Tank Gauge
- Fuel Sensor for Rockets
- Fuel Valves
- Sensor for LPG ships
- Fuel Sensor for Jet Ski
- Oil level sensor for Jet Ski
- Fuel gauge for Tanker

Industrial Machines

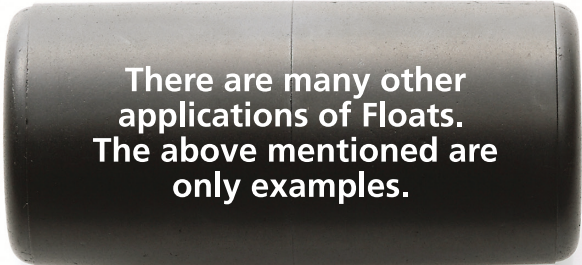
- Liquid level sensor for Plants
- Water Seal Float
- Oil Level gauge for Transformer
- Air-Leak Valve for Under waterworks
- Boiler control
- Auto-Drain for Pneumatic Filters
- Lubricating Units
- Generators
- Gasoline Fuel Dispensers
- Gasoline underground tanks

Electronic Machines

- Humidifier
- Copier
- Automatic bending machines
- Water Cleaner
- Detection for the liquid level of two different kinds of S.G. Liquids
- Supersonic cleaner
- Developer for pictures
- Oil baths for Testing instruments
- Atomic Power Plant

Home Appliances

- Stove
- Air-conditioner
- Solar system
- Fan-heater
- Sauna
- Dish-Washer
- Shower Toilet
- Cleaning machine
- Fuel Cell System



There are many other applications of Floats. The above mentioned are only examples.

The Features of RF-2 Floats

RF-2 Floats has been developed especially for good resistance to Oil / Fuel, and good resistance to high temperature. Floats have more excellent features in broad range. Please refer to our contacts when you have any questions.

Caution : Every application has different conditions, and Floats features under each application must be discussed before the actual application, or the test application on your own discretion is highly appreciated.



FLOATNICS EVOLUTION

Flexibility for diversified needs with "Desirable Structure and Shape"

Float for Valve

Riko's Float Technology



Fuel Sender Float for Motor-Bikes

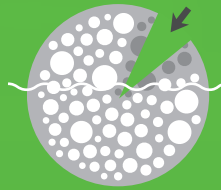
point
2

RF-2 Float, The high quality with the next generation level. It shows only limited or marginal changes in dimensions and S.G..

The merit of completely closed cell.

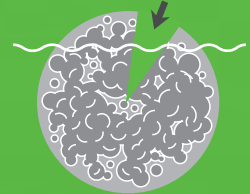
You can find the difference between completely closed cells and incompletely closed cells on the right pictures. If you cut floats with same size, the incompletely closed cell float will sink, while the completely closed cell float will be almost no change.

Desirable Specific Gravity can be achieved, and stable.
Targeted S.G. or Buoyancy can be realized.



Completely closed cell

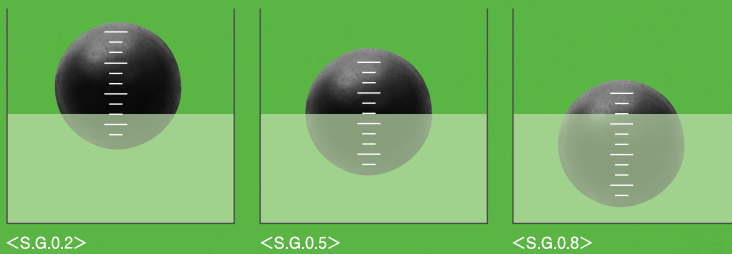
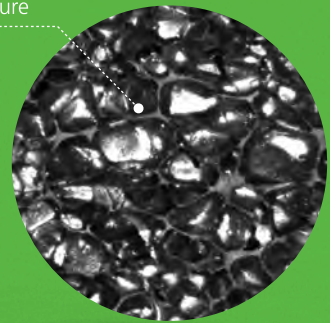
Each cell is independently closed, the liquid will not go into further, and the buoyancy will not be affected so much.



Incompletely closed cell

The liquid goes through in the cells, and the float is no longer buoyant.

Microscoped "Micro Cells"
— Honeycomb Structure



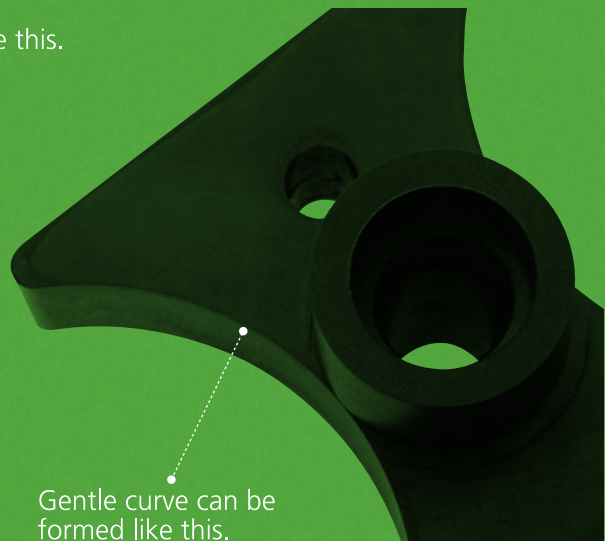
<S.G.0.2>

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<S.G.0.8>

Complicated shapes can be formed.

Magnet can be inserted like this.



Gentle curve can be formed like this.

point
1

Technique of brending NBR and Phenolic Resin and other materials and **Original Two Curing Processes** make an ideal shape "RF-2", an ultimate float.

Superb preciseness of Specific Gravity is achieved with Independently Closed Cell Foam Structure.

Riko has developed various kinds of products with high experienced skills, and our "RF-2" Floats are widely appreciated in various kinds of industries.

Generally speaking, Stable buoyancy, Specific Gravity, Resistance to Heat, and Resistance to Oils, Fuels and Chemicals are mostly required to floats. However, the then existing floats such as Brass, Cork and Plastic had been failing in those requirements.

Riko has realized the precise Specific Gravity with high brending skill and experienced know-hows of Curing Process. RF-2 Float has solved many kinds of problems in broad range of industries, and it has become an indispensable part for developing new sensors or meters.

Please just try RF-2 Floats, and you will find out how good they are.

Originally Experienced Know-Hows and many tests in the production process have RF-2 Floats kept High Quality.

Very light, but Rigid

1 Resistance to Heat

Under certain conditions, Temperature resistance is upto 180°C.

2 Resistance to Oils and Fuels

Weight change with soaking tests in Gasoline, Benzene, Alcohol and Toluene is below 0.5%. (In-House Test Results)

3 Mechanical Strength

RF-2 Floats are ebonite and strong enough for after-works for Metal or Magnet Incerts.

4 Resistance to Low Temperature

Stable upto -50°C with JISK6301 Fuel (Gasoline and Lubricant Oil).

5 Pressure Resistance

Float, with S.G.0.3kg/cm², withstands with almost no absorption of water under 2~3MPa.

6 Almost No Dimension Change

Very limited variation in dimensions and excellent quality. Easy control by Cp, Cpk.

Quality Control

Water Pressure Test

Water pressure resistance is shown on the chart. 0.5-3Mpa for 10-30 minutes.

Soaking Test in Fuel

Check the weights and Dimensions before and after soaking in Oil and / or Fuel Bath. Mechanical hardness can be measured, too. The heavier the S.G., more excellent resistance for Oils and Fuels.

Process	Check Items
Raw Materials	● Test Report and other data are kept.
Initial Kneading	● Mooney
Mixing with Open Roll	● Open Roll work sheet ● Mixing condition ● Recipe report
Extruding and Cutting	● Extruder Work Sheet ● Appearance ● Dimensions, Weights, Shape
1st Curing	● 1st Curing Work Sheet ● Daily Report ● Temperature and Time check
1st Inspection	● Weight and Appearance check ● Taking burrs
2nd Curing	● 2nd Curing Work Sheet ● Temperature and Time check ● Appearance check
Cool Down	● Water Temperature
After Work & Inspection	● Inspection report ● Appearance ● Foaming condition ● Dimensions, weights, and Tests
Packing and Shipping	● Quantity and shipping record

Comparison with other material floats

Conditions	RF-2 Float	Stainless Steel	Plastic Blown	Plastic Foam	Cork
Cut and break	◎	×	×	△	△
Temperature Resist.	◎	◎	×	×	△
Resist. To Fuel, Oils	◎	◎	△	×	×
Shock Resist.	◎	×	×	△	△
Metal Incert	◎	△	△	◎	△
Magnet Incert	◎	◎	△	◎	×
Water Pressure Resist.	◎	×	×	×	△
Anti-corrosion	◎	◎	△	△	△
Price Range	◎	×	◎	△	◎

※ This is the general features only. A specific float must be referred to our engineers.

An Introduction to the Recipe

The main raw materials are NBR (Synthetic Rubber) and Phenolic Resin. The recipe includes some other materials such as Curing Agent, Blowing agent and other chemicals. These are developed by our long experience and efforts.

The features of NBR	Nitril contained	Features
Very High Nitril	42~51%	● The higher the Nitril, the better resistance to Oil and Fuels.
High Nitril	36~41%	
Midium High Nitril	31~35%	● The lower the Nitril, lower heat resistance.
Midium Low Nitril	25~30%	
Low Nitril	18~24%	

Various shapes of Floats to meet our clients' diversified requests. From Custom types to OEM ones.

Magnet can be inserted like this.

Gentle curve can be formed like this.

RF-2 Floats are easy for after-works, and supplied to various kinds of industries. They have contributed for the technological developments, and they will in the future.

We will continue to supply RF-2 Floats in order to fulfill the requests from our clients, such as "We need more efficient float for the new project..." or "If only we have a float which can withstand the very severe application..."

A very tiny float can play an important role in automation industry, and also it can contribute the development of the electric machines.

— This is our Belief. Many kinds of shapes of Floats. Each one of them are the original to each client's needs. It also involve the client's desire and our techniques and Belief.