

RP System™

Revolutionary Preservation System

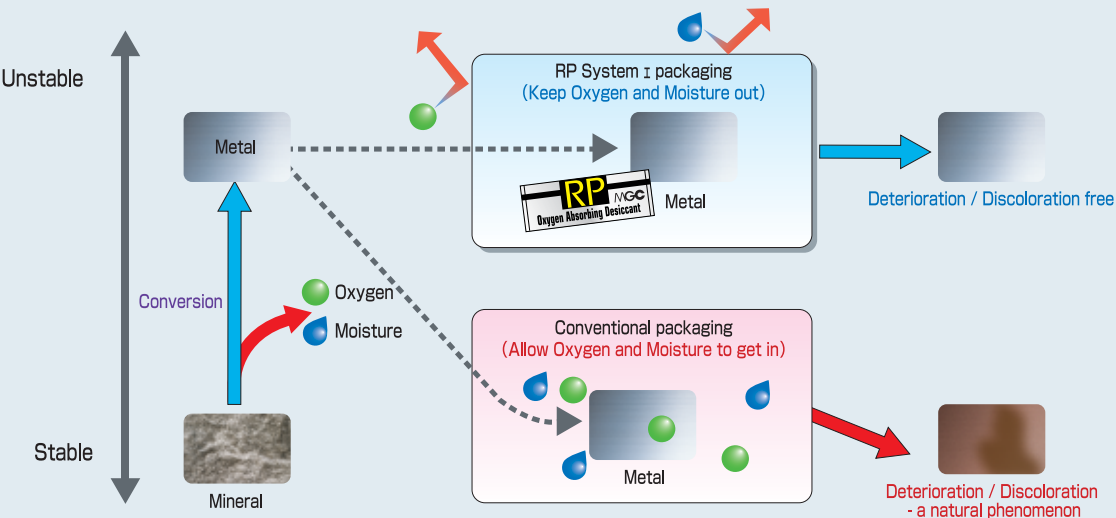


MITSUBISHI GAS CHEMICAL CO., INC.

Why Do Your Customers Complain About Your Product Quality In Spite Of The Fact That All Items Have Passed Outgoing Inspections?

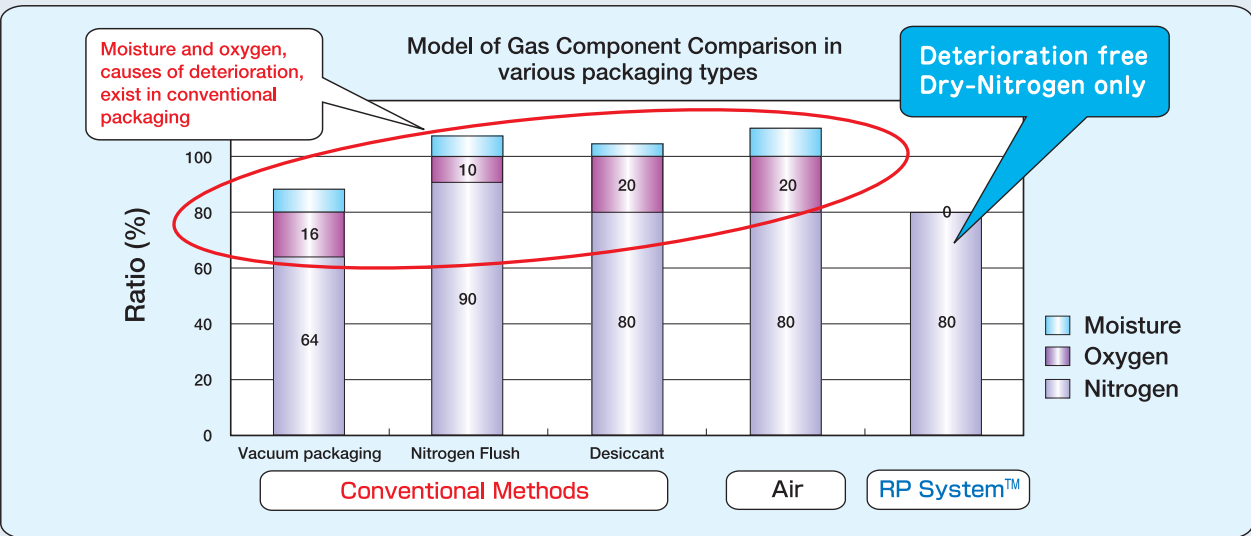
Because There Is No Atmospheric Control during Transportation / Storage

■ Metal Is Unstable According To Thermodynamic Theory. Ambient conditions during transportation / storage contain oxygen and moisture. In these conditions metals degrade spontaneously (a natural phenomenon).



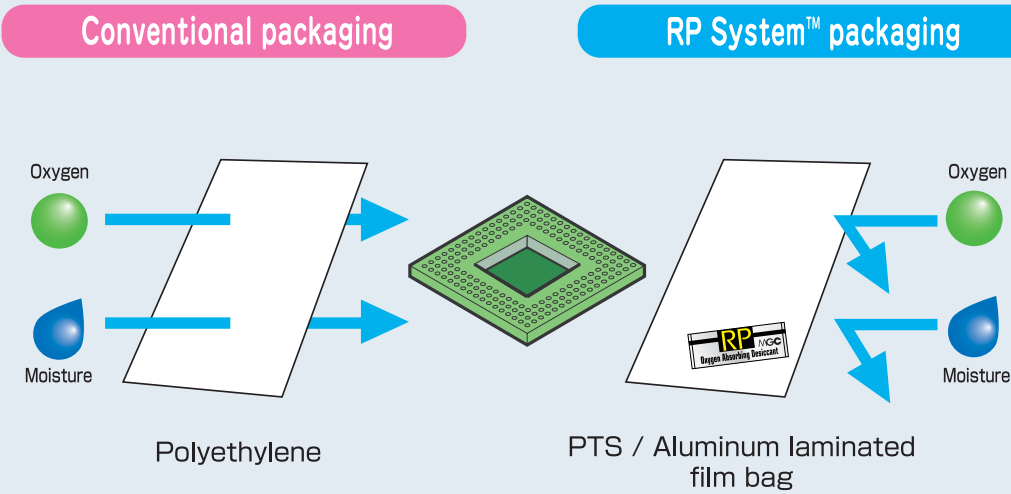
- Metal exists in a stable form as mineral ore in the earth. Therefore energy is required for Conversion to remove moisture and oxygen from the mineral ore to obtain pure Metal.
- When Metal, Oxygen and Moisture exist together, the more stable compound will form spontaneously. This is called degradation, such as discoloration, oxidation or corrosion.

■ There Is No Cause of Deterioration Inside The High Gas Barrier Packaging with RP Agent



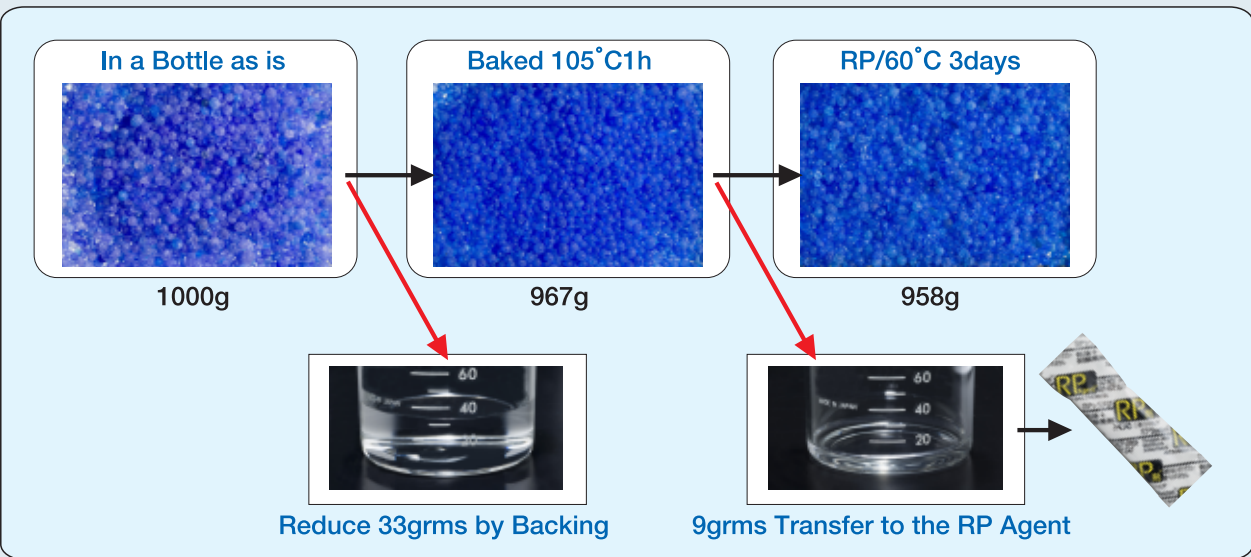
- ※Moisture is exaggerated in the figure For ease of understanding, moisture is shown above the air component.
- The gases which cause deterioration remain in conventional packaging
- RP System1 creates a dry Nitrogen only environment in the packaging, thus there is no product deterioration.

■ Conventional Packaging Keeps Water Out But Lets Moisture In



- Water does not permeate a polyethylene film but moisture vapor can because the polyethylene film is porous, has microscopic pores through which vapor and oxygen can pass.

■ Silica Gel Releases Moisture Depend up Situation.



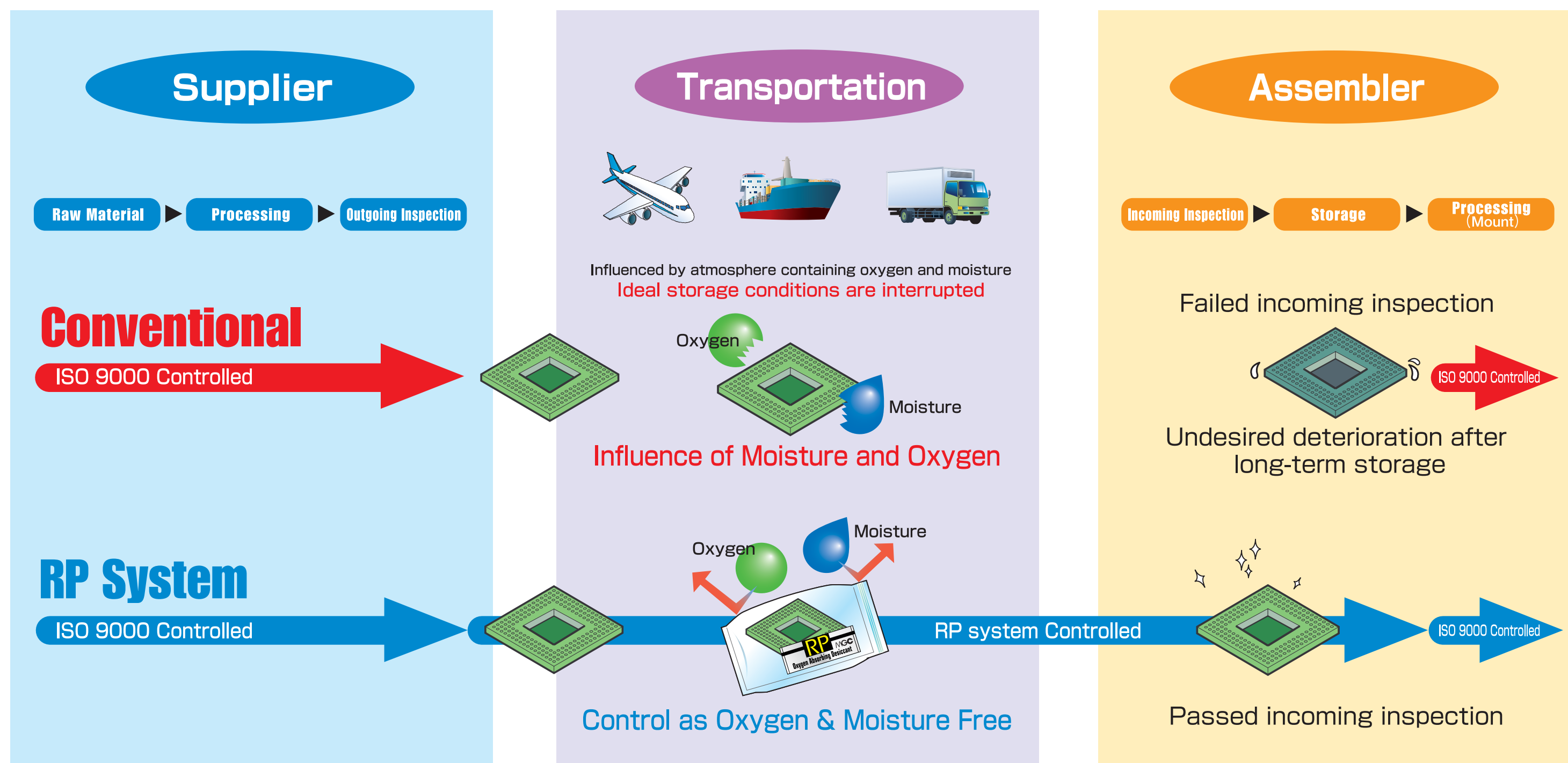
- Conventional desiccants, like silica-gel which are adsorbers, are reusable by re-baking. However, this means desiccants release moisture in some situations
- RP agent absorbs moisture by means of a chemical reaction. Therefore, moisture transfers from silica-gel to the RP agent exist together in the high gas barrier packaging.

Products Manufactured Under Strict Quality Control Should Be Delivered To Your Customers Under The Same Strict Control.

RPSystem™ Preserves Products as Manufactured under Oxygen and Moisture-Free Conditions During Shipment / Storage without Product Deterioration

Application Examples

- **Transportation: Export / Import Trading**
To / from humid and high-temperature area, transportation by boat and dewatering by air transportation
- **Long-Term Storage**
(Discontinued Components Especially Semi-Conductors and PWBs)
Maintenance parts and components for Automotive, Military, Avionic, Aerospace, Infrastructural etc





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