

100% biodegradable and cost-saving resin for water bottle packaging

# WEI LI has successfully developed a 300ml water bottle in clear colour using a new and innovative material - PLA.

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It is not surprising that most people still can not associate a corn with a clear water bottle in our daily life. Using WEI LIs two-stage reheat stretch blow moulding (SBM) machines, PLA bottles can be blown from PLA performs with perfect neck finish and better strength & excellent transparency.



"We would never dream of packing our water in bottle made of corn! WEI LI was recommended by our business partner as a pioneer of new applications in their reheat stretch blow moulding machine manufacturing. We are very much excited to learn from WEI LI about the idea of packing our precious water in our island in a 100% bio-degradable bottle. We are in the middle of the Central Pacific where plastic waste will be our top priority of concern!" said the owner of a newly invested water factory. "WEI LI offers us a very flexible and compact blowing line which best fits our capacity. We had no experience at all in bottle production and packaging line before. Luckily we have found WEI LI as our reliable partner, who not only provides us the most cost-effective solution, but also comprehensive proposal for 100% bio-degradable process for used PLA bottles!" added the new client of WEI LI. WEI LI also offers turnkey project upon request, from PLA preform design, bottle design,capping, filling to shrink wrap packaging.DLA is mainly used for thermoforming and injection products, such as, cups, trays, food containers, straw, trash bags, etc. But WEI LI has successfully blown bottles with its reheat stretch blow mould technology using PLA resin. And the outlook & transparency of the PLA bottles are very promising (see enclosed photos) due to its stretching and blowing process.

The usage of PLA material for bottles production is especially raised. There are marketing researches clearly shows that

consumers believe that beverages and products packaged in containers made from nature material are fresher and better for health. Brands which sell healthy foods and beverage can consider to change using PLA containers and bottles for their products packaging. It could make a strong point of differentiation with other brand and stand up its selling point.

## The nature of PLA

PLA stands for Polyactide, it is mainly made from corn, this is the key why PLA is 100% annually renewable, biodegradable and compostable. PLA is made from lactic acid which is made from dextrose by fermentation. And dextrose is made from cornstarch which is made from carbon dioxide and water.

#### **Environmental saving**

It offers more disposal options and showing a significant reduction in greenhouse gas emissions, is more environmentally friendly to manufacture than traditional petroleum based plastics. PLA is fully compostable and biodegradable. Under common composting conditions, PLA will compost in approximately 30 to 45 days. Composting may take longer in a home composting bin. PLA will react in landfills like other organic waste such as food, so it is fully compostable in a composting facility. Since PLA is made from a renewable resource (corn) instead of regular plastic that is made from oil.

#### **Cost saving**

PLA is now a price competitive material compared with PET. Most of the PLA model is less expensive than PET. Moreover, as PLA is not made from oil, its price will not be affected by the frequently fluctuated oil price.

## WEI LI Profile

WEI LI has more than 12 years experience in the development of PET/PP reheat stretch blow moulding technology, manufacturing stretch blow moulding machines of the .WEI LI. brand for PLA, PET, PP, PC, PMMA, PS, SAN bottles with volume ranges from 15ml to 20L. Apart from standard machines for PET bottles, the company's range includes specialized machines for PLA, PP, PC, PMMA, PS, SAN bottles. With production establishments in Foshan, China and a marketing office in Hong Kong, WEI LI is maintaining an effective market presence across the world.