

rePETec



ALPIA

ENGEL

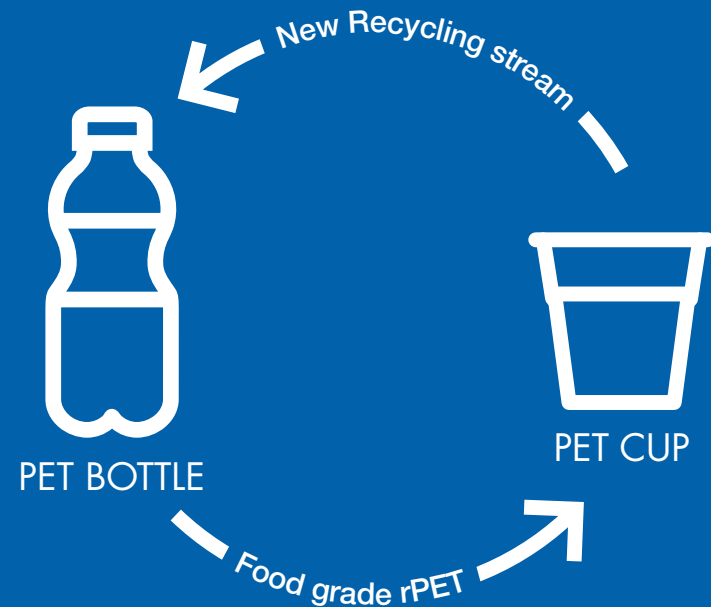
 **BRINK**

**The next
quantum leap
to improve**

**CIR
CUL
ARI
TY**

The STORY of the COLLABORATION

As the plastic world is changing and legislative as well as customers are claiming for new sustainability standards, ALPLA focused into the development of new packaging solutions. As global player and expert in plastic manufacturing ALPLA developed an additiv that allows a one-step injection process with standard bottle grade (r)PET. As expert in injection moulding and long-term partner of ALPLA, ENGEL joined and brought its machine expertise into the development. In order to handle the high pressures and injection speeds for the one-step injection process, BRINK accompanied the journey and delivers high performance moulds and automation. The partners now proudly introduce a solution for a more sustainable world.



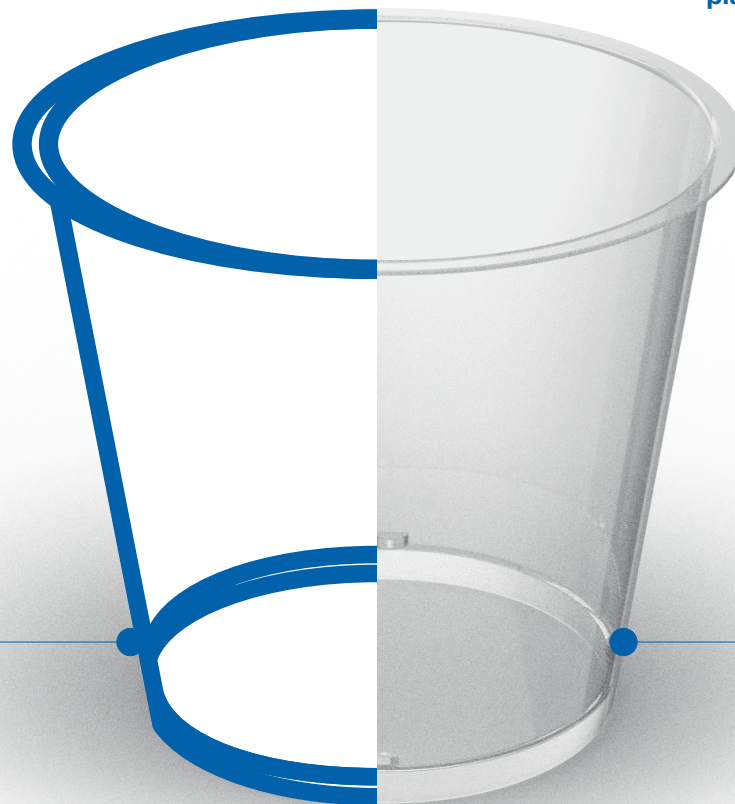
WHAT IF ALL CONTAINERS WOULD BE MADE OF (r)PET?

ALPLA

ALPLA produces innovative packaging systems, bottles, caps and injection-moulded parts for a wide range of industries. With more than 30 years of experience in recycling and 13 own recycling plants, ALPLA plays his part in ensuring that plastics remain in the materials cycle.

A CUP TODAY

Currently the majority of cups are based on PP



rePETec
The next Generation
Food grade rPET

PROBLEM

EU Plastic regulation forces brand owners to use a certain percentage of PCR content in its packaging to avoid penalty fees

No food-grade PP & PS PCR available on the market

Food-grade mechanical recycling of PP and PS is today not approved by EFSA (EU)

SOLUTION

Transfer to a thin-wall injected PET cup

1. use of rPET up to 100% technically possible

2. cup remains within the existing PET recycling loop – no downcycling

PRODUCT HIGHLIGHTS

7 CONVINCING FACTS FOR A MORE SUSTAINABLE CUP SOLUTION - rePETec

1



Fill-Volume
Customized 100-500ml

2



Ultra-thin
0,30 mm

3



Barrier properties
OTR: 20x better than PP,
30x better than PS

4



Sealing / Lidoptions
clear, foamed

5



ALPLA patented Additiv lowers
the IV of bottle grade PET by
not having an effect on the
amount of co-polymers

6



Food approved

7



Temperature resistance Hot fill
possible up to 55 degree, Sterilization
with UV pulse light possible

THE THIN-WALL INJECTED rePETec OFFERS A HIGHLY RECYCLABLE, CLOSED-LOOP SOLUTION TO PACKAGING WASTE



cyclos HTP
certified for Austria
and Belgium



bottle deposit
system in Germany
(98% of bottles
are returned)



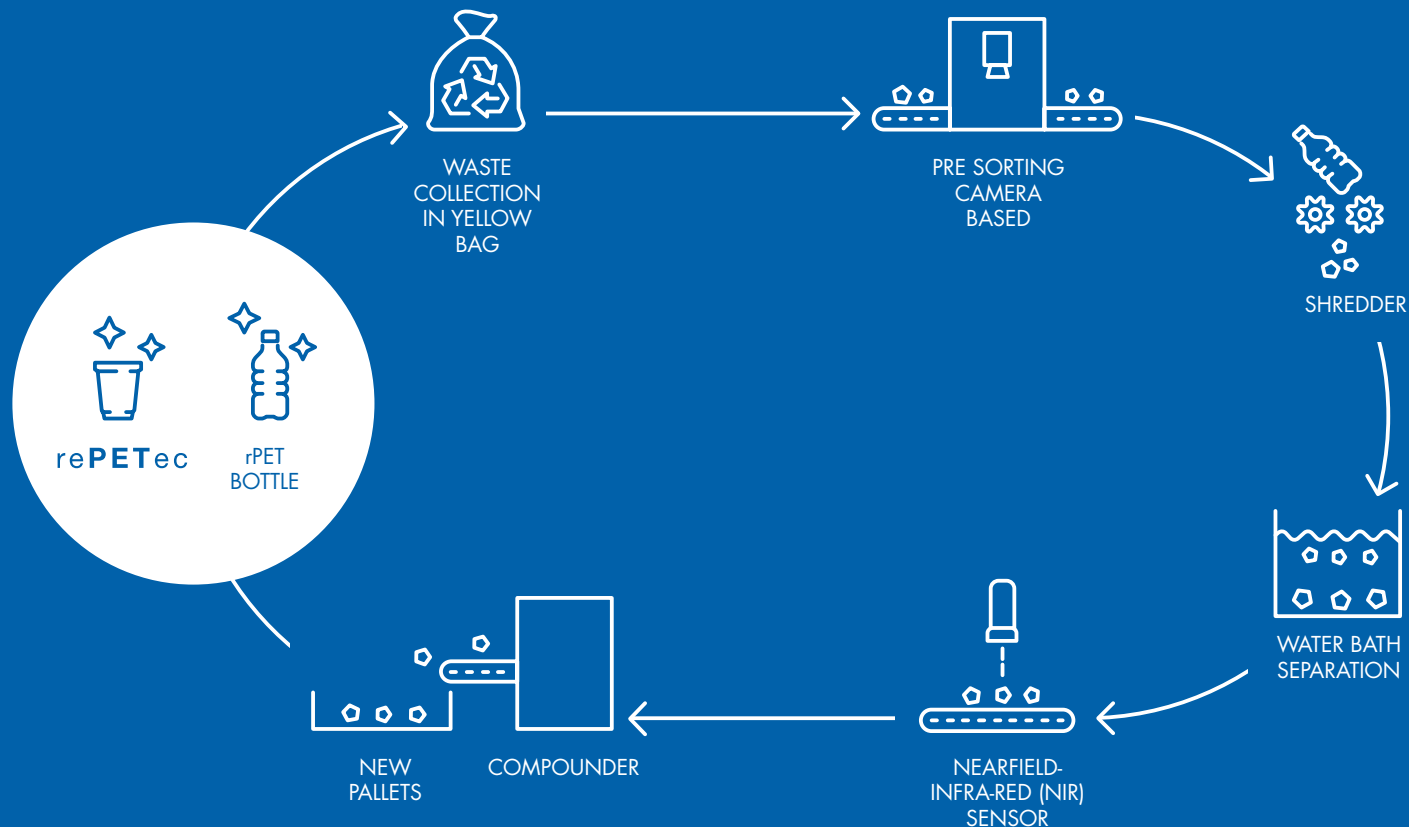
average of 60%
of PET bottles are
returned within
the EU



General Deposit
Refund System (DRS)
for PET bottles currently
under discussion in
EU Commission



Detection of Food
grade PET shall
be implemented in
future (Holy Grail 2.0,
CurvCode), Netherlands



ENGEL

ENGEL helps customers to be pioneers. With them, new standards in plastics processing are set - in injection moulding machines, technologies and digital solutions. This is how ENGEL is shaping the world of tomorrow. A world in which a modern and sustainable life is not a contradiction.

E-SPEED INJECTION MOLDING MACHINE

THE HYBRID, HIGH-SPEED INJECTION MOLDING MACHINE IDEAL FOR THIN-WALL PLASTIC PARTS

inject 4.0

energy
efficiency /
reduced
CO₂ footprint

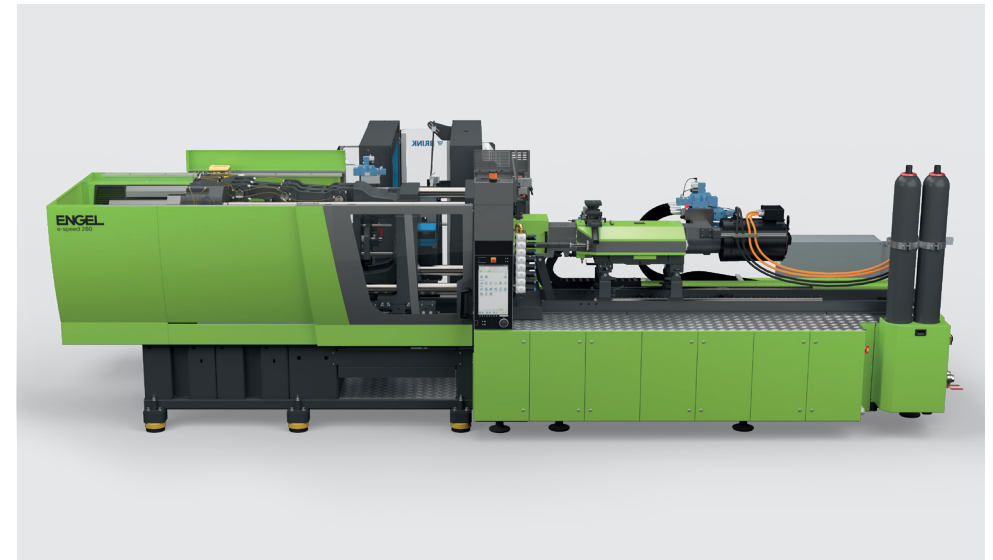
< 6.500 kN
Clamping Force

ADVANTAGES OF THE E-SPEED INJECTION MOLDING MACHINE

cycle time <2 sec.

highly dynamic injection - max. speed up to 1.400mm/s

absolute cleanliness



MOULDS AND AUTOMATION FOR THIN-WALL TECHNOLOGY

WITH PRODUCT DESIGN
COMPETENCES AND
KNOWHOW FOR BETTER
SOLUTIONS IN A SUSTAINABLE
PLASTIC WORLD

BRINK is the global partner for ultimate turn-key solutions in thin-wall packaging Moulds & modular Automation. We provide and support innovative and highly automated solutions of optimized production of sustainable plastic injection moulded products. Committed to Performance.

Long-life
moulds

Turn key
solutions

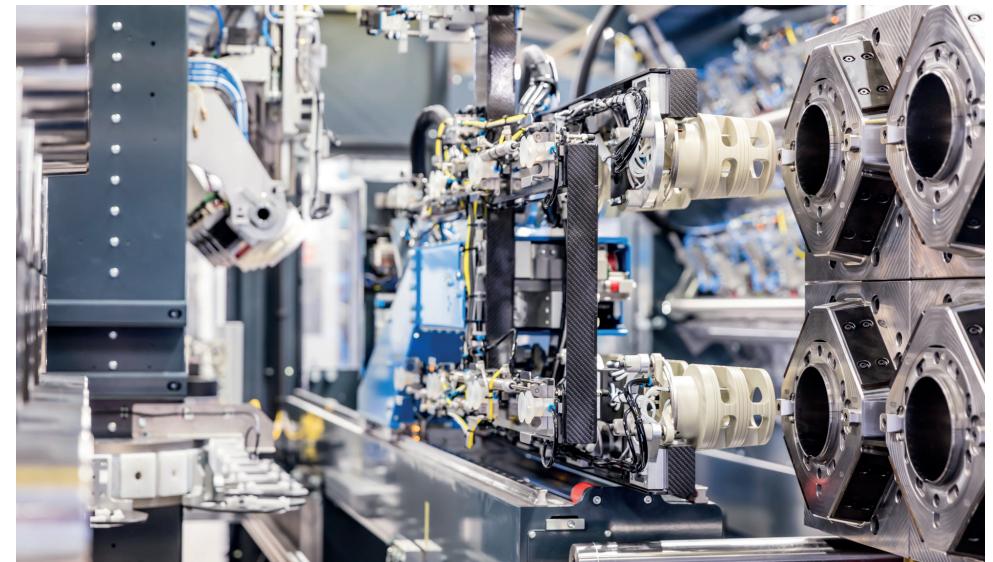
Ultrafast IML
Automation

ADVANTAGES THIN-WALL (r)PET PACKAGING MOULDS

Product design with L/T of 250 with sealing edges, straight or U shapes, snap locks and ribs. (Temper evident designs possible with some adaptations)

Fast cycle & optimised cooling for mould and injection point

IML Automation for PP (EU) or PET (USA) labels with cycle time below 3 seconds



ALPLA Werke Alwin Lehner GmbH & Co KG

Mockenstraße 34
AT-6971 Hard
repetec@alpla.com
www.alpla.com

ENGEL AUSTRIA GmbH

Johannes Hinterdorfer
Ludwig-Engel-Straße 1
AT-4311 Schwertberg
johannes.hinterdorfer@engel.at
www.engelglobal.com

BRINK

Allard Waaijenberg
Molenweg 10b
6732 BL Harskamp / Netherlands
a.waaijenberg@brinkbv.com
www.brinkbv.com