## **BOOSTER PO**

## GENERAL OPERATING INSTRUCTIONS

## IN RAFFIA PRODUCTION:

1. **Preparation**: If using a 95% PP/ 5% HDPE raffia blend, change to:

91% (weight) PP

5% (weight) HDPE

4% (weight) Booster PO

Optimize results by using LLDPE instead of HDPE (optional).

- 2. The temperature setting should remain unchanged, as long as the temperature zone directly behind the hopper is at least 220°C
- 3. Start production under standard conditions for about 15-30 minutes, for the mix to be fully introduced into the system.
- 4. After 15-30 minutes, the following will be observed:
  - a. The raffia directly behind the slitter will be significantly more flexible.
  - b. The power consumption of your extruder will visibly decrease (amperage down)
- 5. At this point, **two options** are available:
  - 5.1 Improve tenacity with unchanged material quantity/smaller fibre diameter.

Action:

- leave screw RPM of extruder unchanged
  - increase RPM filament winding equipment
- increase oven temperature by approx. 10°C
- continue this process until an "optimal improvement" in tenacity has been accomplished by gradually stepping up the stretch ratio.
- 5.2 Improve tenacity with increased material quantity/standard fibre diameter.

Action:

- increase screw RPM of extruder
- increase RPM of filament winding equipment
- increase oven temperature by approx. 10°C
- continue this process until an "optimal improvement" in tenacity has been accomplished by gradually stepping up the stretch ratio

Notes:

- steps 5.1 and 5.2 can be performed in sequence, with the same feedstock
- depending on the starting point, stretch ratios can be increased by 20-40% typical bottleneck: max speed fibre winding equipment
- results using LLDPE in the mix tend to yield better performance than with HDPE.

