

REGINA CATENE CALIBRATE S.P.A.  
Via Monza, 90  
23870 Cernusco Lombardone (LC) - ItalyNogara, March 16<sup>th</sup>, 2018**SUBJECT: APPLICATION RESULTS OF REGINA e-F.A.S.T. CHAINS IN DRY RUNNING CONDITIONS**

In our Coca Cola plant in Nogara (Verona, Italy), PET line N.6 has been equipped in Feb. 2017 with Regina e-F.A.S.T. (ecologic Friction Abating Sliding Thermoplastic) chains in order to assess performance and potential benefits of the new material in full-dry running conditions for high performance bottling applications.

**Line N. 6 - Characteristics**

- Product bottled : Soft drink (Coke and Fanta)
- Bottle type : New PET - Petaloid Bottom (1.5L, 1.75L, 2L)
- Nominal output : 36.000 b/h (1.5L)
- Maximum chain speed : 85 m/min
- Working hours : H24, 6x7
- Wear strips : Standard UHMWPE for upper part, rubberized rollers for return part
- Cleaning : weekly (automatic system with nozzles)
- Lubrication (before e-F.A.S.T. application)
  - Type: : Dry Lube, temporized with nozzles
  - Tot. Nozzles : 150

**e-F.A.S.T. Application (Regina chain Series: 1600, 783M)**


- Application Area : INLINER and SINGLE-LANE (before Labelling Machine)
- Running Period : 6.000 h (on-going)
- Chains material previously installed : standard acetal resin (from other supplier)
- Cleaning : weekly (automatic system with nozzles) – as before
- Lubrication
  - Tot. Nozzles : 24 (in e-F.A.S.T. area)
  - Consumption : OFF. Previous consumption: 1,7 Liters/day

**Results with e-F.A.S.T.**

1. Saving of Lubricant (in the e-F.A.S.T. application area)
  - Lubricant Saving/year : about 400 Liters
  - Cost Saving/year : 1.800 €
2. No increase of bottle falling (in full dry-running conditions) vs. former set-up with lubrication (same line efficiency)
3. Optimum Performance of the material (e-F.A.S.T.)
  - Coefficient of Friction (CoF) : < 0,11
  - Extremely limited wear : < 0,5% Elongation after 6.000 working hours
  - CoF very stable during overall *Running Period*
4. Negligible wear on wear strips (Upper/Lower parts)

**Based on the above, we are pleased to express our full satisfaction on the results achieved with Regina e-F.A.S.T. and we do recommend the application of e-F.A.S.T. in high performing bottling applications.**

Best Regards,

  
Davide Morelli  
Nogara Plant-Manager