



POWERED BY

**SYSTEM
FLEX** CONVEYOR
COMPONENT
SOLUTIONS



NEXT GENERATION ENGINEERING (NGE)

Plastic Chains & Modular Belts

+27 11 462 2241 | jhb@irp.co.za | www.irp.co.za
15 Amelia Lane, Lanseria Corporate Estate, Lanseria, Extension 26, 1739



WHAT ARE NEXT GENERATION ENGINEERING (NGE) PLASTIC MATERIALS?

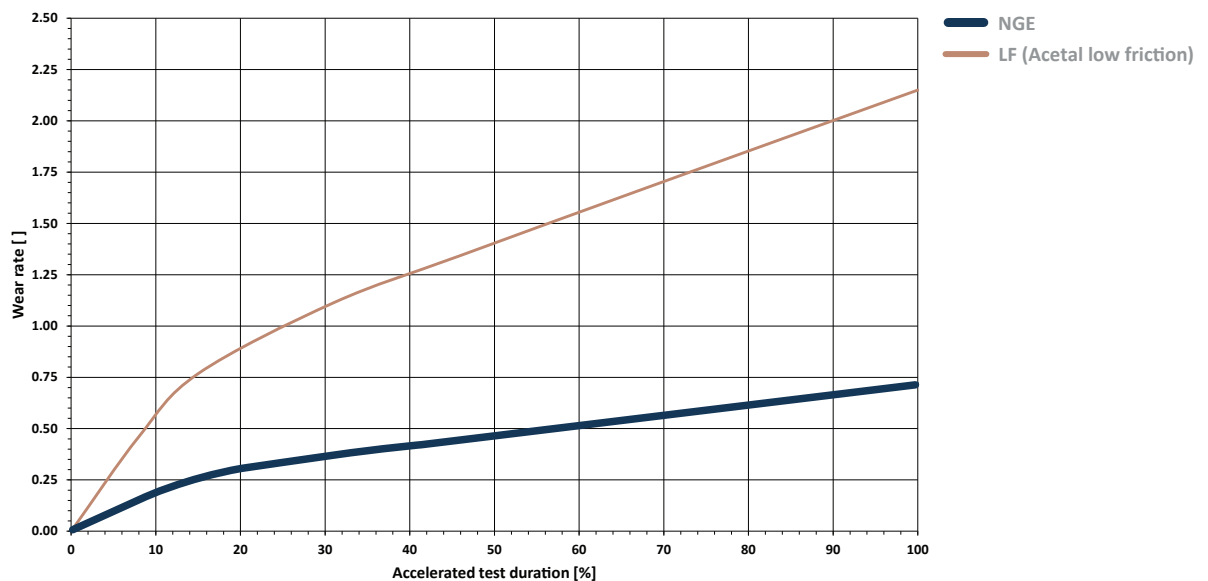
Next Generation Engineering (NGE) chains and belts are SystemFlex's new engineered resins designed to provide a sustainable advantage over "industry standard" materials. Their reduced coefficient of friction properties enable end users to reduce or eliminate their chain/belt lubrication thus providing a true "dry running" conveyor. Better sliding properties also result in reduced power consumption, increased wear life, reduced dust generation and the ability to run at higher speeds.

SYSTEMFLEX IS LEADING THE WAY WITH DEVELOPMENT!

SystemFlex is leading the way with local manufacturing and providing exciting new products and developments like that of our Next Generation Engineering material (NGE). Recognizing the opportunity to locally manufacture NGE products that offer new possibilities for running conveyors lines without lubrication. This enabled the reduction/elimination of soap & water or dry lubricants creating a safer work environment and cost savings. NGE material has also proven it provides longer wear life in comparison to acetal materials, and reduces noise levels in dry applications.

SystemFlex's expertise with unique materials, coupled with in-house integrated tool development and in-house manufacturing is critical for consistent control over the supply and delivery of the right replacement parts for production lines.

- ✓ Improved base material
- ✓ Improved additives
- ✓ Tested in our laboratory
- ✓ Tested in production



BENEFITS OF NGE:

- Cost savings on water and lubrication
- Improves safety - no slippery floors
- Easier access for maintenance
- No moisture on packaging material
- No false rejects due to foam on products at inspectors
- Improves housekeeping - no need to clean soap and water off floors
- Higher hygiene standards - less bacteria growth in a dry environment

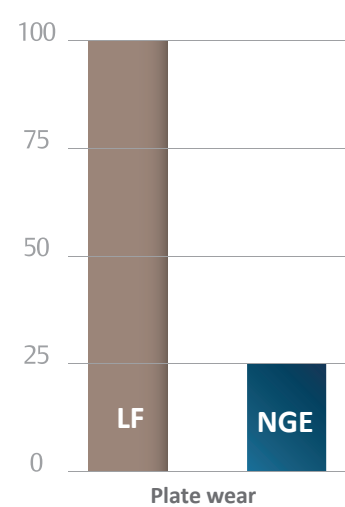
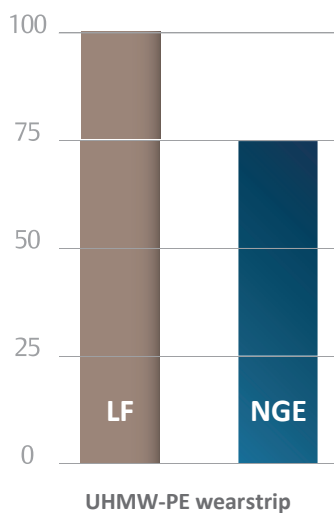
FEATURES OF NGE:

- PBT with additives to reduce friction and prolong wear life
- Particularly suitable for dry applications
- Heat resistant up to 120°C in dry environments. Wet up to 60°C
- UV resistant
- No drip trays needed
- Low noise = approximately 14 decibels
- Less corrosion attack on equipment
- Improved chemical resistance
- No water or foam on labels
- Breaking load approximately 80% on LF Acetal
- Lower COF between chain/belt and wearstrip - energy saving

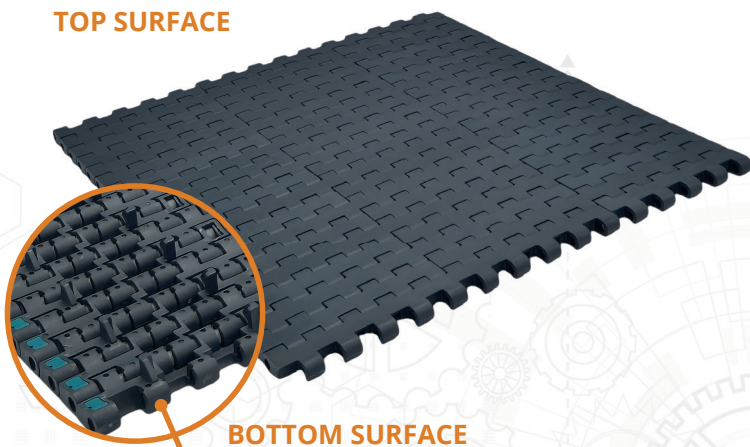
FACTORS TO CONSIDER WHEN USING NGE:

- Drive guides need to be lifted
- Suggest rubber rollers
- Lower COF between chain and wearstrip
- Lower COF between product and chain
- Power saving

GRAPHS & VISUALS



TOP SURFACE



POSI-TRACK GUIDING SYSTEM

TOP SURFACE



BOTTOM SURFACE

ENHANCED RUNNING DRY POSSIBILITIES WITH NGE:

Contact SystemFlex for assistance to help you achieve this goal. An overview of the process is shown below:

STEP 1: Goal to run dry

- Save water / lubricant consumption
- Eliminate wet floors - safety
- Less bacteria growth - hygiene
- Reduce maintenance
- Reduce energy consumption

STEP 2: Define process parameters

- Layout
- Production / hour - speeds
- Geometry bottle, can, etc.

STEP 3: Develop a robust process

- Analyze the data from the previous step
- Discuss requirements and conditions with OEM and End User
- Select the correct products

STEP 4: Implement dry running

- Advise during installation
- Train operators

STEP 5: Control and improve process

- Monitor, follow up and make changes if necessary
- Analyze the collected data