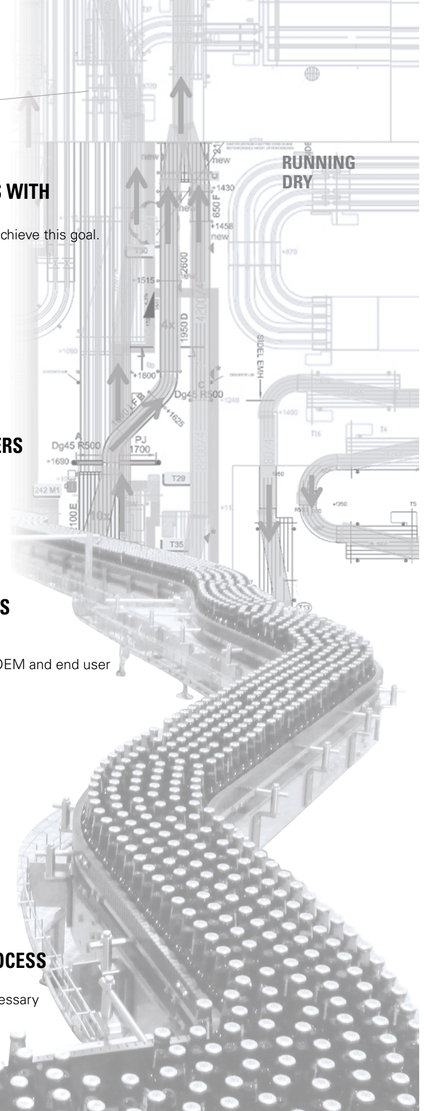
NG evo

ENHANCED RUNNING DRY POSSIBILITIES WITH NG®evo CONVEYOR COMPONENTS:

Contact Regal Rexnord 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

SYSTEM PLAST®

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RegalRexnord

SYSTEM PLAST®

NG® EVOLUTION

PLASTIC CHAIN & MODULAR BELTS
COMPARED TO ACETAL, NGEVO
COMPONENTS OFFER:
LONGER LIFE
LOWER FRICTION
GOOD CHEMICAL RESISTANCE
HIGH ABRASION RESISTANCE
APPROVED FOR DIRECT FOOD CONTACT
LESS DUST THAN WITH ACETAL CHAINS

RegalRexnord

WHAT PLASTIC MATERIALS ARE USED IN NEW GENERATION® COMPONENTS?

The New Generation family of chain and belt components use System Plast® proprietary 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.

SYSTEM PLAST PRODUCTS ARE LEADING THE WAY WITH INNOVATION!

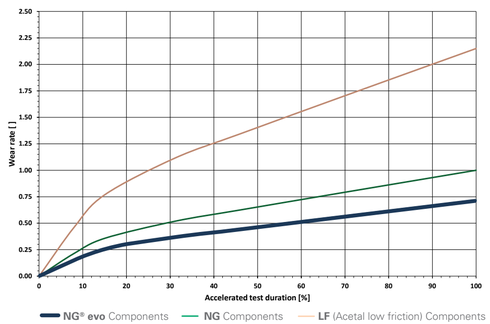
We introduced the New Generation® brand of components 20 years ago. It was soon recognized to offer new possibilities for running conveyors lines without lubrication. This enabled the reduction/elimination of soap & water or dry lubricants, creating a safer work environment and cost savings. NG® conveyor components have also proven than they provide longer wear life in comparison to acetal materials, and reduce noise levels in dry applications.

Regal Renord expertise with unique materials and in-house integrated tool development is critical for consistent control over design and manufacturing processes.

MATERIAL EVOLUTION TO MEET YOUR GOALS

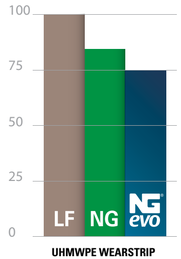
Understanding the growing demands on safety, hygiene, sustainability and total cost of ownership (TCO). Regal Rexnord challenged itself to improve the original formulation. This successful development created a new and improved resin used to make NG® Evolution conveyor components, which help to meet your goals. Your floors can be drier, bacteria growth can be reduced, energy and water consumption can be less and your TCO will be improved.

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



IMPROVEMENTS OF NG® EVO COMPONENTS COMPARED TO NG COMPONENTS

- Lower friction - Friction is reduced up to 15%.
- Higher strength - Up to 10%
- Higher abrasion resistance
- Approved for direct food contact according to EU and FDA regulations

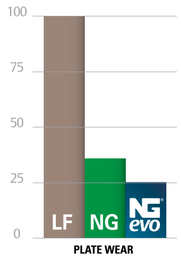


LOWEST COEFFICIENT OF FRICTION BETWEEN CHAIN /BELT AND WEARSTRIP

Coefficient of friction NG® evo components on UHMW-PE wearstrip:

25% lower than LF acetal chain
15% lower than NG chain

Coefficient of friction values of 0.10 or even less are achievable in running dry applications
- Less power consumption
- Improved product stability
- Improved product flow
- Improved productivity



HIGHER RESISTANCE TO PLATE WEAR

Plate wear in accelerated abrasion test after 5400 km run length

75% less wear than LF acetal chain
30% less wear than NG chain

Increased wear provides many advantages
- Less dust generation
- Reduced contamination
- Reduced cleaning requirements

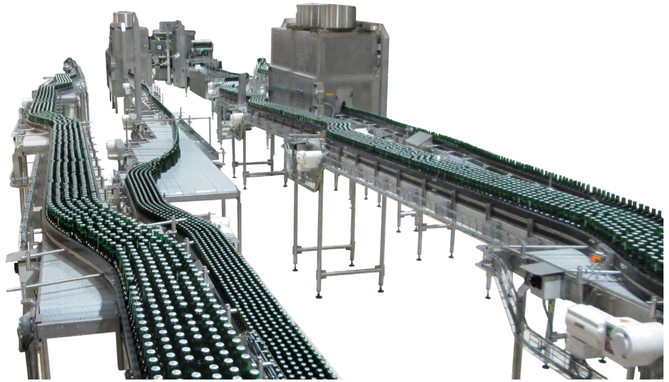
NG® EVO COMPONENTS ARE APPROVED FOR DIRECT FOOD CONTACT ACCORDING TO EU AND FDA REGULATIONS

NOISE REDUCTION:
With NG evo components, the risk of noisy chains is greatly reduced compared to LF acetal chains. Squealing curves can be resolved and improve the work environment.

HIGH PV (PRESSURE VELOCITY) LIMIT:
With NG evo components, higher speeds and higher loads are achievable in dry running lines compared to LF Acetal chains. Additional speed and wear advantages can be also gained when used in combination with NOLU®-S or NOLU-SR curves.

CHEMICAL RESISTANCE:
NG evo components have a better chemical resistance than LF acetal materials, being compatible with most cleaning agents, especially in aseptic filling with the presence of H_2O_2 (hydrogen peroxide). The material in NG evo components, unlike many other materials used in the same application, do not get attacked by this chemical.

A SUCCESS STORY OF NG® COMPONENTS



DRY RUNNING SYSTEM PLAST® CONVEYOR COMPONENTS HELP HEINEKEN BREW A BETTER FUTURE WITH WATERLESS BOTTLING CONVEYORS IN ZOETERWOUDE PLANT

THE TWO WATER FOOTPRINT NETWORK PARTNERS TEAM UP TO IMPROVE PLANT SAFETY AND SUSTAINABILITY BY REDUCING WATER USE, ENERGY CONSUMPTION, AND SOUND LEVELS AT ZOETERWOUDE BREWERY.

Zoeterwoude, Netherlands 2014 – Heineken* N.V.'s global sustainability strategy, known as "Brewing a Better Future," produced a company-wide reduction of 20 percent in water use between 2008 and 2013. Playing a role in that improvement are System Plast NG® conveyor chain/belts and NOLU®-S wear track from Regal Rexnord. The ultra-low-friction components, which are being deployed in phases at Heineken's Zoeterwoude brewery, eliminate the need for water and chemical-based lubrication on the filling lines – including those where abrasive particles from aluminum cans, party kegs and returnable glass bottles have been a problem in the past.
According to managers at the brewery, the dry running conveyor is producing a cascade of sustainability improvements with a cleaner, quieter, more energy-efficient and reliable plant. "We have experienced a wide variety of gains from the System Plast dry running conveyor," said Mr. Cok Duivenvoorden, Technical Line Manager at Zoeterwoude. "Specifically, we have improved plant safety and hygiene with dry equipment and floors. Maintenance is easier because of the cleanliness and better access where drip trays have been removed. We have reduced costs for water, lubricating chemicals and wastewater discharge. Dry operation is easier on conveyor bearings and frames, yet still reduces energy consumption because of the low-friction components. System Plast NG chain lasts up to five times longer than low-friction acetal in some of our applications. And when installed to replace worn-out conveyor, the new chain pays for itself in as little as a year."

A JOINT GOAL TO REDUCE WATER USE IN BEVERAGE PROCESSING

One goal of Heineken's "Brewing a Better Future" sustainability program is to reduce water consumption by at least 25% by 2020, and both Heineken and Regal Rexnord are pursuing dry conveying solutions as members of the Water Footprint Network. The network is a global organization of businesses, governmental agencies and environmental groups that promotes the transition to sustainable use of fresh water resources through increased awareness of how production and consumption of goods affect fresh water systems.

*Heineken is believed to be a trademark and/or trade name of Heineken Brouwerijen B.V. and is not owned or controlled by Regal Rexnord Corporation.