

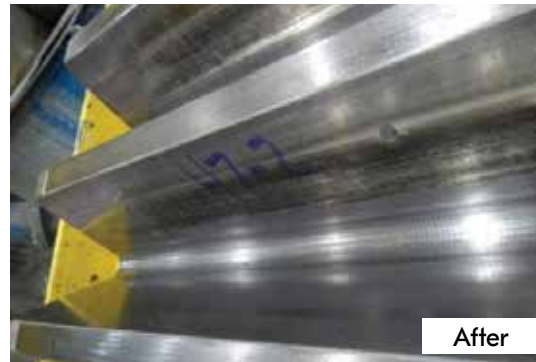
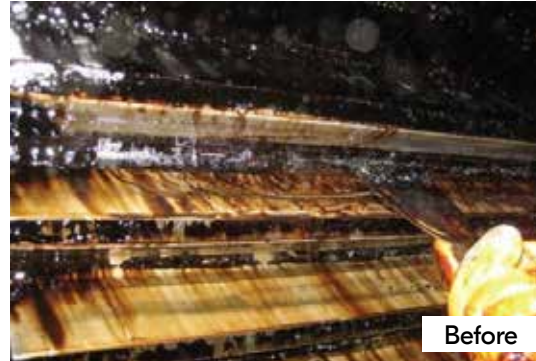
# Metso:Outotec

Professional services

## Girth gear cleaning and flushing



Minimize downtime by removing contamination and lubricant build up on girth gears prior to inspections to get a clear view of the condition of the gear.



The cleaning of production equipment is a fundamental aspect of maintenance to control the risk of contamination, to ensure quality and plant safety. Clean equipment is imperative for visual inspections to ascertain the condition of the equipment and maintenance required to keep the equipment in optimal working condition.

### Cleansolv High Flash EP Cleaner

The Cleansolv High Flash EP formulation is designed to remove contamination and lubricant build up on girth gears and pinions prior to inspection. This is accomplished by flushing the girth gear when the mill is about to stop, during grind out minimizing downtime.

The actual time of flushing a gear set is under an hour. There is no need to wipe the gear teeth down or rinse after, to remove residue as in Magnetic Particle or Dye penetrative inspections; if using ASTM E2905 inspection method.

Gear Engineers utilize visual interpretation to analyze the gear teeth condition, such as contact patterns and wear patterns; hence, a clean gear set is a must. Clear or translucent lubricants still require cleaning to conduct a thorough visual inspection, as the lubricant can obstruct critical details on the tooth surface.

Procedures that used to take days can now be completed in less than an hour. Using this procedure, gears are safe from damage due to the specifically formulated Cleansolv High Flash EP. As a result, gears are fully cleaned and ready for inspection faster than ever before.

### Benefits

- Removes contamination and lubrication build-up
- Minimizes downtime
- Cleaning performed during production
- Non-corrosive
- Non-hazardous

Part number

Cleansolv High Flash EP Cleaner  
GF460EP Flushing Lubricant

ZX11984563  
ZX11984560



## Cleansolv High Flash EP features

- Safe and user friendly, this non-corrosive product is safe on all metals and is designed to rapidly clean gear surfaces
- High Flashpoint of 160° F (71° C)
- No hazardous solvents such as Stoddard or chlorinated solvents
- No large special pressure sprayers or pumps to deal with
- No rinsing or wiping after cleaning with additional chemicals
- Follows ASTM E2905 Standard for girth gear cleaning
- Exceeds ASTM D5183 for Coefficient of Friction
- Over 20 years experience in large girth gear cleaning
- Full training programs available
- Attractive Pricing

# Cleaning is mandatory before performing complete risk assessments and inspections

## GF460EP Flushing Lubricant

The GF460EP Flushing Lubricant is an exceptional Flushing Lubricant for open gear flushing applications; designed to remove contamination and lubricant build up on girth gears and pinions prior to inspection or any related maintenance procedures.

### Gear engineer gear teeth analysis

Gear Engineers worldwide use visual interpretation (AGMA 1010-F14) as the standard used to analyze gear tooth condition, such as contact patterns, alignment and wear patterns.



## GF460EP Flushing Lubricant features

- Can clean a 40' SAG gear in less than <2 hours making it an excellent solution for inspections
- Superb for annually flushing contamination out of the gear set without having to shut down the mill
- Exceptional for flushing out slurry ingress
- The GF 460EP flushing lubricant contains high levels of EP & AW additives to protect the gear teeth during the flushing process
- Brilliant for preparing for pinion change-outs
- Provides the ability to perform visual interpretation (AGMA 1010-F14); of the failure modes present, if any, their severity, and how these might impact the operational function of the mill