Reduce operational expenses

Empower the operator to compensate for differences in roller wear observed during operation, by fine tuning the torque delivered by each individual roller, based on real wear observed. This helps extend your roller life in the long term.

Avoid unnecessary process stoppage

Audiocal signals by included rollers is one of the main reasons downtime occurs. By adjusting the load share, you can reduce the number of process stoppages. This helps increase efficiency and overall performance.

Cut your CAPEX and downtime

By taking advantage of the roller creeping function on the main drive, the auxiliary drive system traditionally used for roller maintenance and inspection is eliminated. This not only saves time lost in engaging and disengaging the auxiliary drive, but also equipment cost.

Improve safety

Removing the auxiliary drive means abolishing manual engagement and disengagement procedures. As a result, the risks of accidents is decreased.

Extend drive train lifetime

Dynamic torque management ensures smooth torque transitions, reduces mechanical stress on the gearbox and rollers, increases maintenance intervals and extends equipment life.

RollXtend, how does it work?

RollXtend™ offers outstanding operational flexibility to improve HPGR performance, particularly roller life. Load taken by each roller can be set based on the wear they are experiencing, so that both rollers wear uniformly.

Without RollXtend™

When rollers (A and B) are new, they are similar in size and deliver equal torques. Over their operating lifetime they experience different rates of wear so that perhaps A reduces in size faster than B. Without RollXtend™, the operator cannot balance the situation: torque will be the same for both rollers and A continues to wear at a higher rate. Eventually the roller set will have to be replaced prematurely.

With RollXtend™

When A starts reducing in size faster than B, the operator can balance the situation by reducing the torque delivered by A. As a result, B will take more load than A, so that the total torque remains constant. During the next measurement, B may wear more than A, so RollXtend™ can apply more torque on A, and so on (speed will remain the same for both). If wear rates have equalized then the load share should be identical. This tends to force both rollers to have a similar wear rate, allowing full utilization of the roller set and longer life.