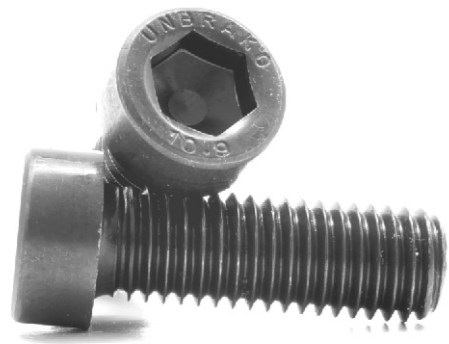


# ENGINEERED FASTENERS SOLUTION

## Challenge

Paper mill equipment manufacturer required a fastener for their replaceable plates on log crushing rolls. Fasteners hold external replaceable crushing plates to a 4' diameter x 15' long roll. There are extreme alternating loads between compression and tension as well as a corrosive environment. Short grip length and low head profile plus high torque requirements presented additional challenges.



## Solution

Unbrako engineers determined the proper alloy steel to be utilized, as well as rolling threads after heat treatment to enhance the fatigue resistance. The design included the use of our proprietary WR thread manufacturing technique. Unbrako optimized the head and socket size for no embedment and high torque simultaneously.

## Benefit

The life of the fastener exceeds the lift of the plate thus preventing premature failure that would cause damage to the plates and processing downtime.

Unbrako Engineered Fasteners specializes in developing custom fastening systems for one-of-a-kind, high volume applications. Services include engineering, manufacturing, accredited quality control and post-delivery liability insurance supporting protection of the manufacturer.

