



BRAKE NOISE AND LINING SELECTION

Brake noise has been a problem for many years in heavy-duty brakes. Complaints are usually because of safety-related fears and customers' irritation. Brake noise can be a safety concern if it is not investigated and resolved. Noise-free operation is desired and can be achieved if the source and the cure are both found. Noise is vibration of components during operation of the brakes. If all components are in specification and working properly and the lining choice is correct for the application, noise should not be a problem. All of the considerations must be taken in to account to find the noise cure.

NOISE CONSIDERATIONS TO DIAGNOSE

Drum diameter and friction contact

New and reused drums should always be measured before use in a brake system. Improper contact between the brake drum and the friction material can and does cause noise. It should not be assumed that new drums are exactly the size they are intended to be. Measurement of the new drums will take out any concerns that they might be oversized and not making the proper contact. This is especially true with the practice of lightly machining the new brake drum before installation to insure roundness. New linings are designed to be for original-sized drums and will make less contact in a drum that is oversized. This is also true when reusing a drum for a second reline. If the drum is .060" oversized, oversized lining should be used to insure that proper contact is maintained.

Worn hardware and mounting component

All brake hardware should be replaced at each friction reline to insure proper brake operation. In the rush to do a brake reline some items are overlooked that are very important. S-cam bushings and worn S-cams can and do cause brake noise from movement and vibration. Always insure they are within movement specifications and that they are lubricated before checking and after the reline is done. Anchor pins that are overlooked are also one more problem that can be resolved by replacing them at each reline.

Friction material that is not designed for the load or use

There is a belief in the industry that soft or cheaper friction material is better to reduce noise. This thinking leads to faster wear out of the friction and in most cases will not resolve the noise problem. Slightly more expensive friction material that is designed for the specific load and use is more desirable to eliminate noise and provide the wear needed for long life. Softer frictions also create problems with stroke and over work of the adjusting system that in turn creates rapid wear. Brakepro Ltd. offers customers the right friction for the job and eliminates the noise problem.