

SUBJECT: HUNTING OF FREIGHT CAR TRUCKS EQUIPPED WITH RESILIENT FRICTION WEDGES

THIS BULLETIN IS INTENDED TO EXPLAIN THE PHENOMENON OF ELASTOWEDGE FRICTION ELEMENT PAD DEGRADATION THAT CAN OCCUR AS A RESULT OF SEVERE TRUCK HUNTING.

Stucki Elastowedge column snubbing systems are designed to provide column normal forces **equivalent to the conventional systems they replace**. Vertical friction, or snubbing level, has been shown to be the same as standard systems. Pad thickness and hardness has been optimized to minimize any loss of squaring restraint between the bolster and side frames. **Truck hunting tests have consistently demonstrated little or no effect on hunting threshold speed.**

Elastowedge elements, however, cannot improve resistance of a truck to hunting. Thus, if a given car has experienced truck hunting while equipped with conventional, all rigid friction wedges, it will probably experience similar hunting after conversion to Elastowedge elements. Whereas in the conventional system, hunting causes rapid wear in the column snubbing system, in the case of Elastowedge elements the effect can be an adverse generation of heat in the pads due to hysteresis. This heat generation can, in the case of severe hunting,,

produce a softening effect which will further reduce squaring restraint, allowing the condition to worsen to the point that the urethane material will literally melt and flow, **rendering the RFE elements useless.**

For this reason, **it is important that cars that are or will be prone to hunting problems be equipped with RFE's only if also equipped with suitable hunting control, such as Stucki resilient side bearings.** This includes cars that will generally be running above 55 mph, cars having light body weights, and cars with significant truck wear. Barber style trucks are usually more susceptible to hunting, at lower speeds, than Ride Control style, typically exhibiting a 5 to 10 mph lower threshold speed.

A. Stucki Company will be pleased to answer any questions concerning the suitability of Elastowedge elements for any particular car program.