There are several different types of asbestos, and the type commonly used in friction materials is known as "chrysotile". This asbestos material is widely used in high temperature applications because of its thermal stability. The asbestos content in friction materials may vary between 25% and 60% by weight, dependent upon the friction material specifications.

The cause of friction lining wear for the most part is not due to abrasion, but rather due to minute spot areas of intense heat at points of contact between the drum and friction lining. At these high temperatures, the chrysotile asbestos breaks down into harmless minerals, so the actual amount of asbestos fiber that is liberated to atmosphere during the life of the lining is less than 0.3%. Exposure to high temperatures essentially destroys the asbestos fibers, and then the mechanical rubbing action produces a powder form with a particle size of less than 1 micron (micrometer). This is considerably smaller than the 5 micron limit specified by both OSHA and EPA, plus the fact that there is virtually no asbestos contact remaining.

Lining dusting or smoking during clutch or brake enagement is basically carbonized material from the binder, or nonasbestos material from the fillers.

In summary, there is no measurable amount of airborne asbestos fiber liberated to atmosphere during the clutch or brake engagement, so Airflex feels there is no cause for concern that a health hazard exists.

In light of the above information, please advise if you wish us to process your above referenced purchase order.

Very truly yours,

Allen H. Kerber
Sales Engineer

AHK/im
cc C. Krueger
R. Petkash