

Essentially, the basic component is wire covered with spinning asbestos fibers. The asbestos yarn is saturated in a resin or rubber-resin bath and then air dried in a twoer. It is then fed randomly into barrels.

When making the pre-molded biscuits the yarn is fed in a turning form, usually mounted vertically, where the I.D. is formed on a mandrel. The yarn fills the form until the O.D. is formed. The loosely woven biscuit is then placed in a hot mold and the facing formed under heat and pressure. The I.D. and O.D. are formed to size with the pinch off of excess material. The part is apparently not cured in this operation because there is a subsequent oven cure. A grinding operation on both sides finishes the facing. It is obvious that the facing must be flat and parallel in the finished state. This factor was not emphasized and is taken for granted, but is most significant, in our opinion.

DESIGN FACTORS

Both the Thermoid and R-M facing are flat and unformed. The Rusco designs have angular grooves which are differentially distributed from I.D. to O.D. around one face of the facing. Rusco stamps patent #2,901,388 on their facings. It has expired late in 1967. It is assumed that the patent refers to the grooves.

The fact that RM and Thermoid do not incorporate grooves indicates that they don't consider them necessary.

PATENT INTERFERENCE

It is assumed that Victor could work on the flat facings, without patent interference, because both Thermoid and R-M follow that. We shall ask John Teigland to search this out and give us an opinion.

MARKET POTENTIAL

All in all, the clutch facing business seems to invite a new and progressive approach. There certainly is old art existing in today's technology. In our opinion, it is possibly too old.

Dana can get little technical advice, from current suppliers, because they haven't got the answers. Considering that Dana buys \$1,500,000 of clutch facings per year, we would be working with a captive market to develop capabilities to cover the rest of the market.