

TREMEC Friction Solutions

TR-FO24, TR-FC100 and TR-FC150

TREMEC provides a range of automotive friction solutions ranging from clutch systems to friction materials. Both organic and carbon based friction materials in the TREMEC portfolio provide unique advantages for a range of applications and Torque Transfer Solutions. The requirements for shift feel, torque capacity, friction coefficient stability and refinement are addressed by our materials – providing competitive advantages in demanding dual wet clutch of single clutch applications.

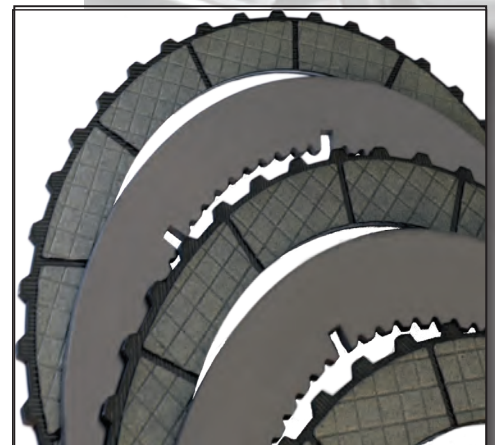
TR-FO24 friction material is an organic friction lining for demanding applications. The material is made from organic cellulose reinforced with materials that are encased in a thermosetting phenolic resin base to form a fiber reinforced friction material. This material has excellent characteristics for high thermal loaded applications that require both a high friction coefficient and good controllability of the friction system.

TR-FO24 is especially suitable for applications that require very good damping characteristics, comfort and consistent shift times – such as automated manual transmissions and double clutches. At the same time, it meets the demands for lower loaded applications of passenger car torque converter lock up clutches.

TR-FC100 and TR-FC150 are wet friction materials that consist of woven carbon fiber embedded in a synthetic resin. Carbon fiber is considered an exceptional friction material for its high thermal and abuse resistance with a consistent friction coefficient. The carbon friction materials are resin-reinforced, porous carbon fiber-based composite materials that contain no cellulose, making them more heat resistant than paper-based products.

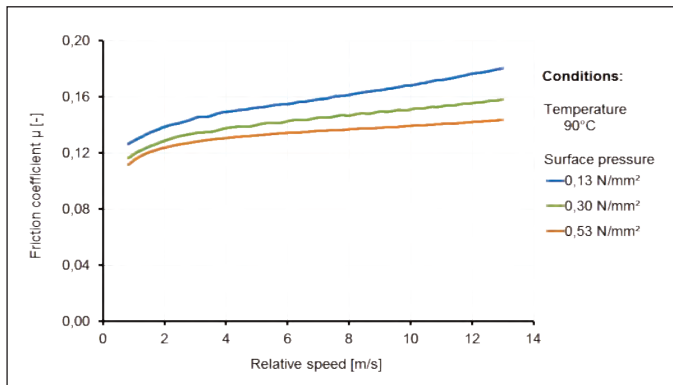
TR-FC100 and TR-FC150 provide high-quality friction lining for high-performance products, including friction lining in oil immersed applications – making it ideal for drive-away clutches with high loads.

TREMEC has a range of component and clutch system test facilities to support customers with product specific technical advice in choosing the right friction system. Contact a TREMEC engineer for more information on friction materials, steel plates and oil for your application.

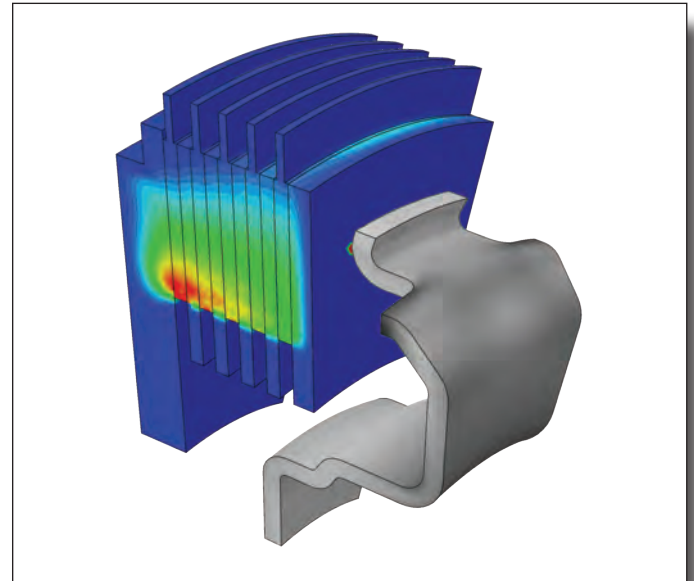


Testing

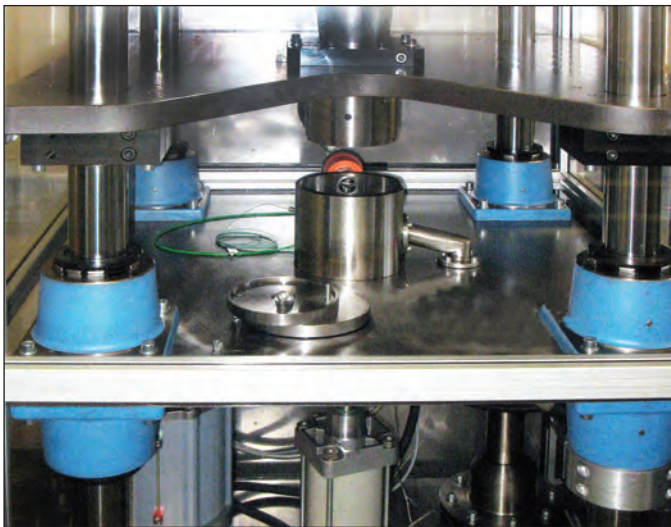
Test laboratories enable TREMEC engineers to characterize, validate and extensively examine every functional aspect of our transmission components, sub-systems and complete assemblies



Example of TR-FO24 measurements from the DKA Friction Coefficient test rig at TREMEC, using a defined friction system of friction plate, steel plate and DCT oil.



Stress evaluation of clutch piston to evaluate and validate design optimization.



Tribometer measurement of friction coefficient, friction force and wear volume of TREMEC materials.



DKA friction coefficient test rig to evaluate friction materials and fluids for wet clutch applications.