Railway Friction Materials

LL Brake Blocks

Composite LL brake blocks offer the most cost effective measure in reducing the rolling noise of freight wagons. When used in place of cast iron brake shoes, they reduce the rolling noise emission by as much as 10 dB.

It is for this noise reduction characteristic that such products are gaining importance in the railway freight market to the extent that the International Union of Railways (UIC) initiated the Europe Train Project to assist with field data collection and the homologation process of LL brake shoes.

Developing a composite LL brake shoe is a complex task with a number of key technical challenges to overcome; such as:

(i)- Tare to laden performance ratio
(ii)- Winter performance
(iii)- Effect on track circuit and signalling system
(iv)- Frictional behaviour and wear characteristics during drag braking
(v)- Effect on Equivalent Conicity
(vi)- A direct and cost-effective alternative to cast iron brake shoes

MLP Friction Braking Limited with many years of hands-on experience in this product development area can provide the necessary technical support and assistance to its clients to develop such composite LL brake shoes to meet the requirements of UIC 541-4 leaflet.

If you would like more information about this product development consultancy service, please do not hesitate to contact us.

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