

What speed of rotation can it be used down to/up to?

Standard MHC instruments characterising the AE signal in terms of Distress and dB Level are in general OK down to shaft speeds of 45 rpm or even lower. We don't know a top speed for it to be effective since most applications are at 1500 rpm or less. In reality we have detected mis-aligned cutting tools on 8,000 rpm routers without any difficulty. Similarly we had no qualms about on-line monitoring of the Thrust SSC wheel bearings which ran at speeds up to 8000 rpm. At high speed we would definitely recommend monitoring dB level as well as Distress.

For very slowly rotating machines we have developed a new algorithm which characterises the AE signal in terms of dB Level and three new parameters rather than Distress. In its standard implementation this method is OK down to 0.25 rpm (ie 4 minutes per revolution). Its available in the MHC-SloPoint machine surveillance DIN rail module. Did you know we spent more than 2 years beta trialling this new slow-mode at several industrial sites before launching our first commercial product incorporating it; the MHC-SloPoint? This demonstrates our long term commitment to AE technology and the respect with which we treat our existing and future customers.