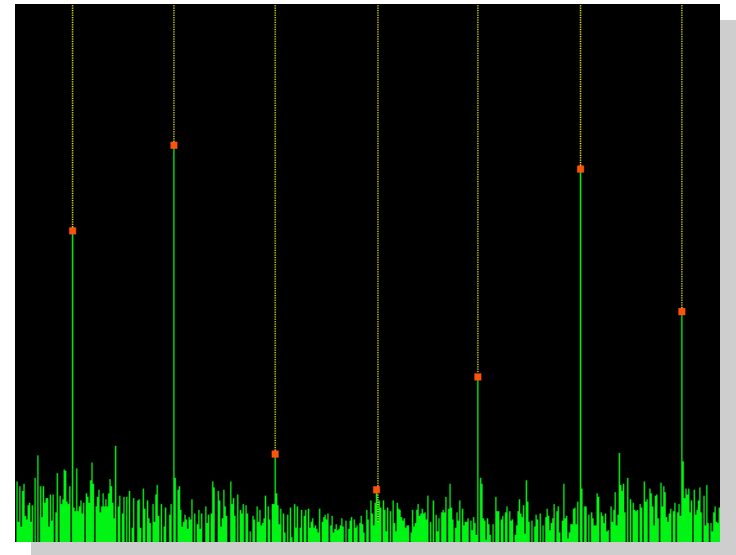
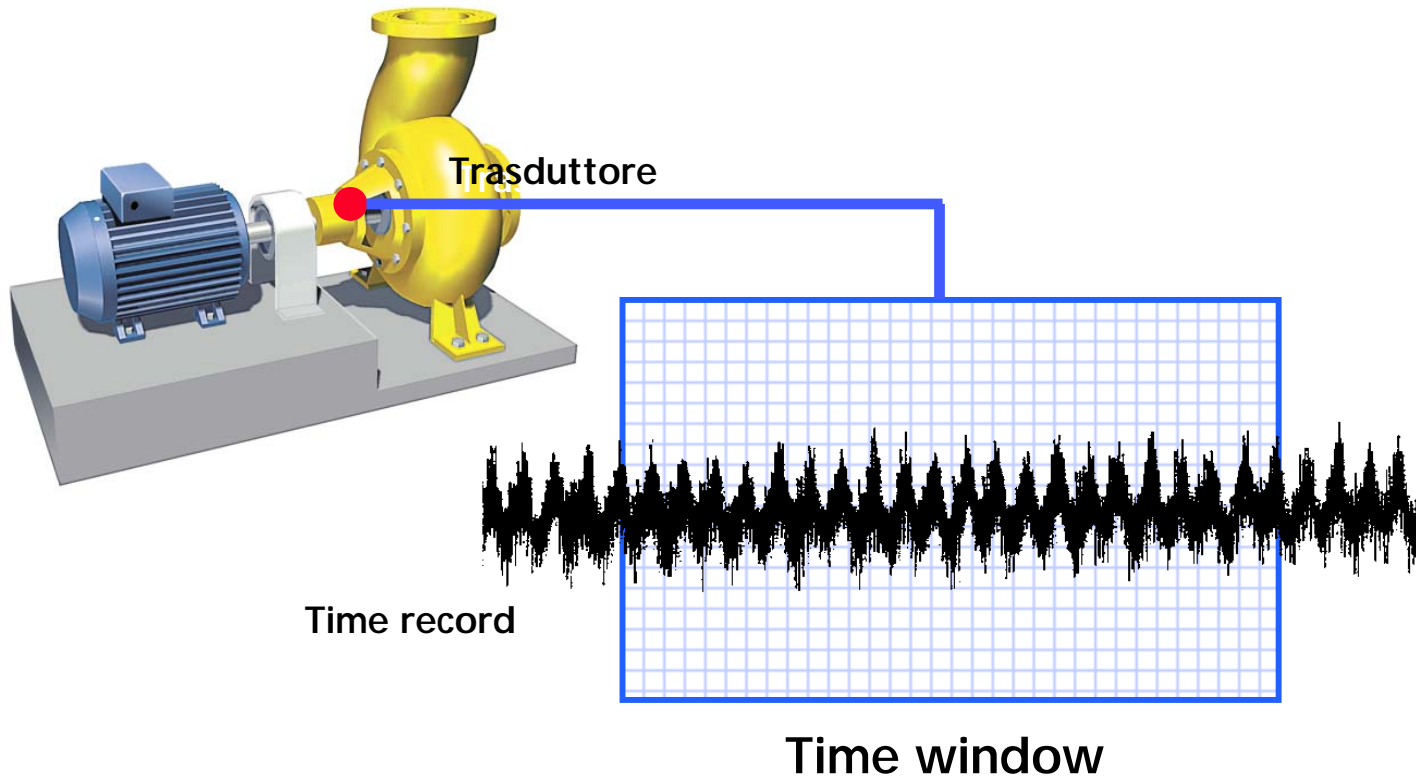


SPM Spectrum

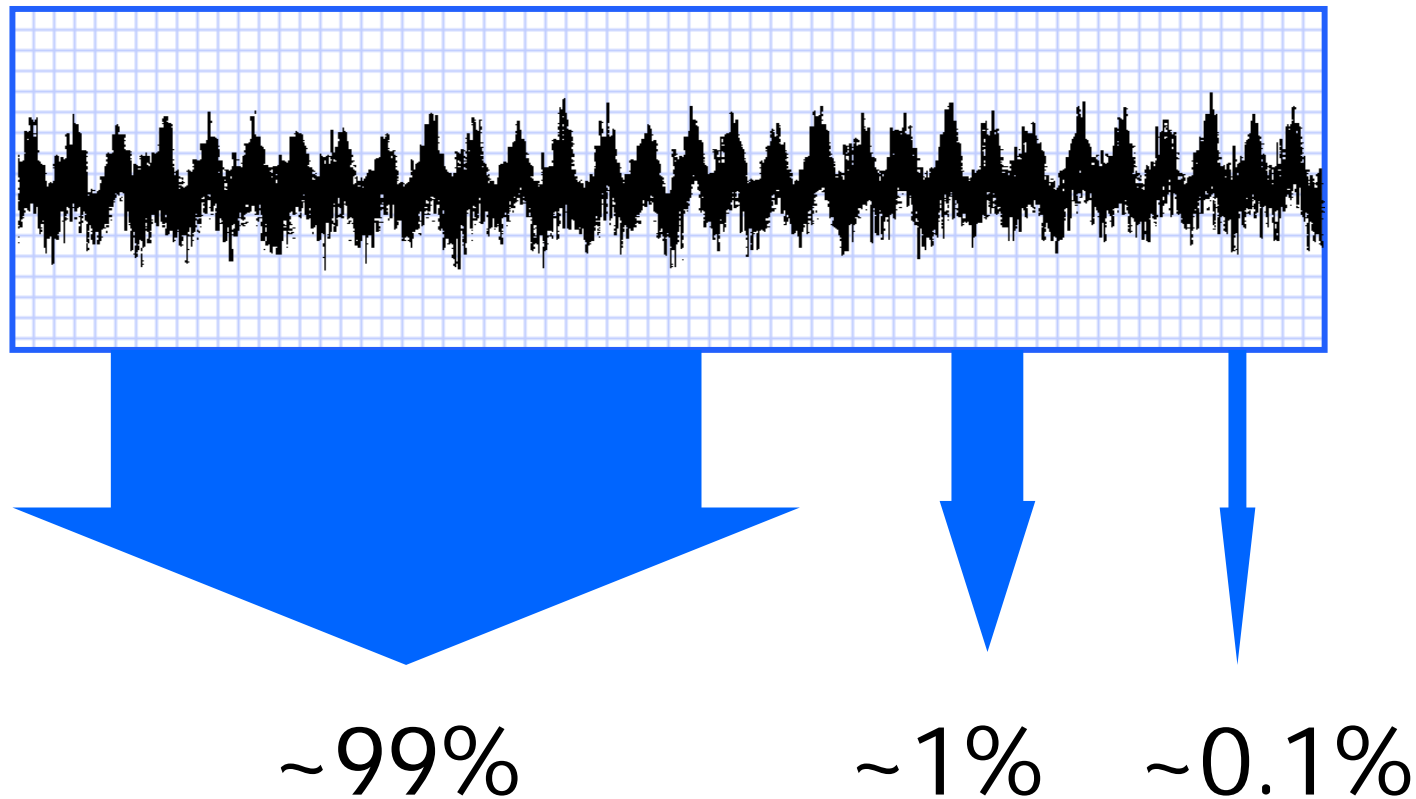
Una nuova tecnica per
la diagnosi delle
condizioni operative
dei cuscinetti volventi



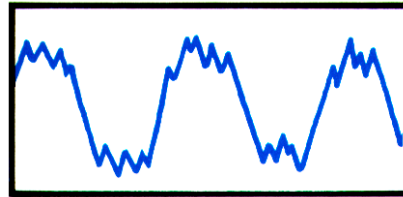
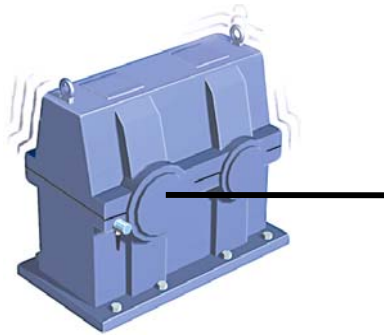
Vibrazione delle macchine



Le forze che causano la vibrazione



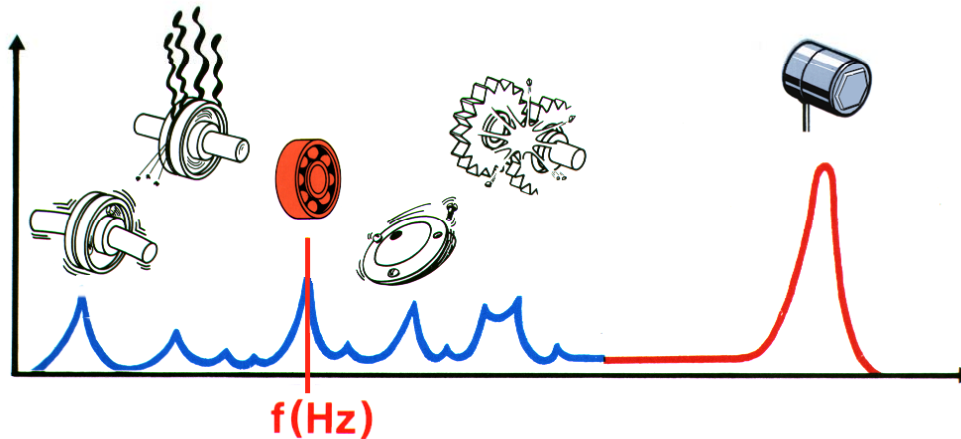
Analisi di un cuscinetto tramite l'analisi di spettro



$$\text{B.F.O. } f \text{ (Hz)} = \frac{n}{2} f_1 \left(1 - \frac{BD}{PD} \cos \beta\right)$$

$$\text{B.F.I. } f \text{ (Hz)} = \frac{n}{2} f_1 \left(1 + \frac{BD}{PD} \cos \beta\right)$$

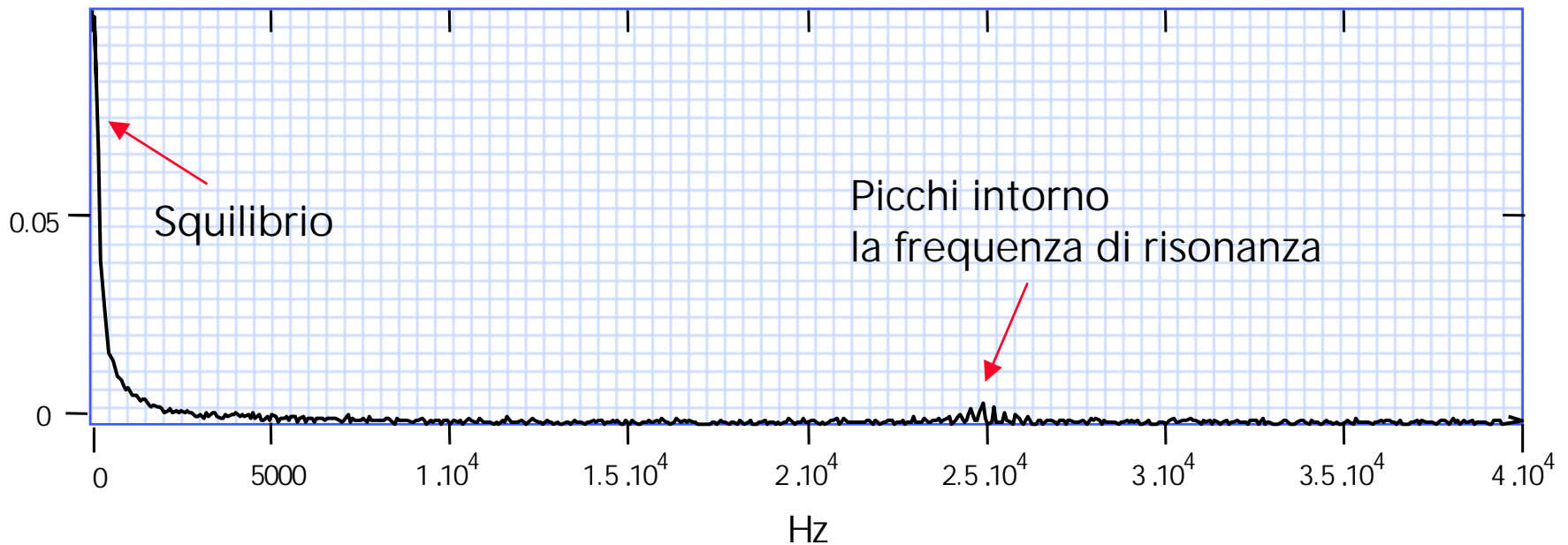
$$\text{B.S.F. } f \text{ (Hz)} = \frac{BD}{PD} f_1 \left(1 - \frac{BD}{PD}\right)^2 \cos^2 \beta$$



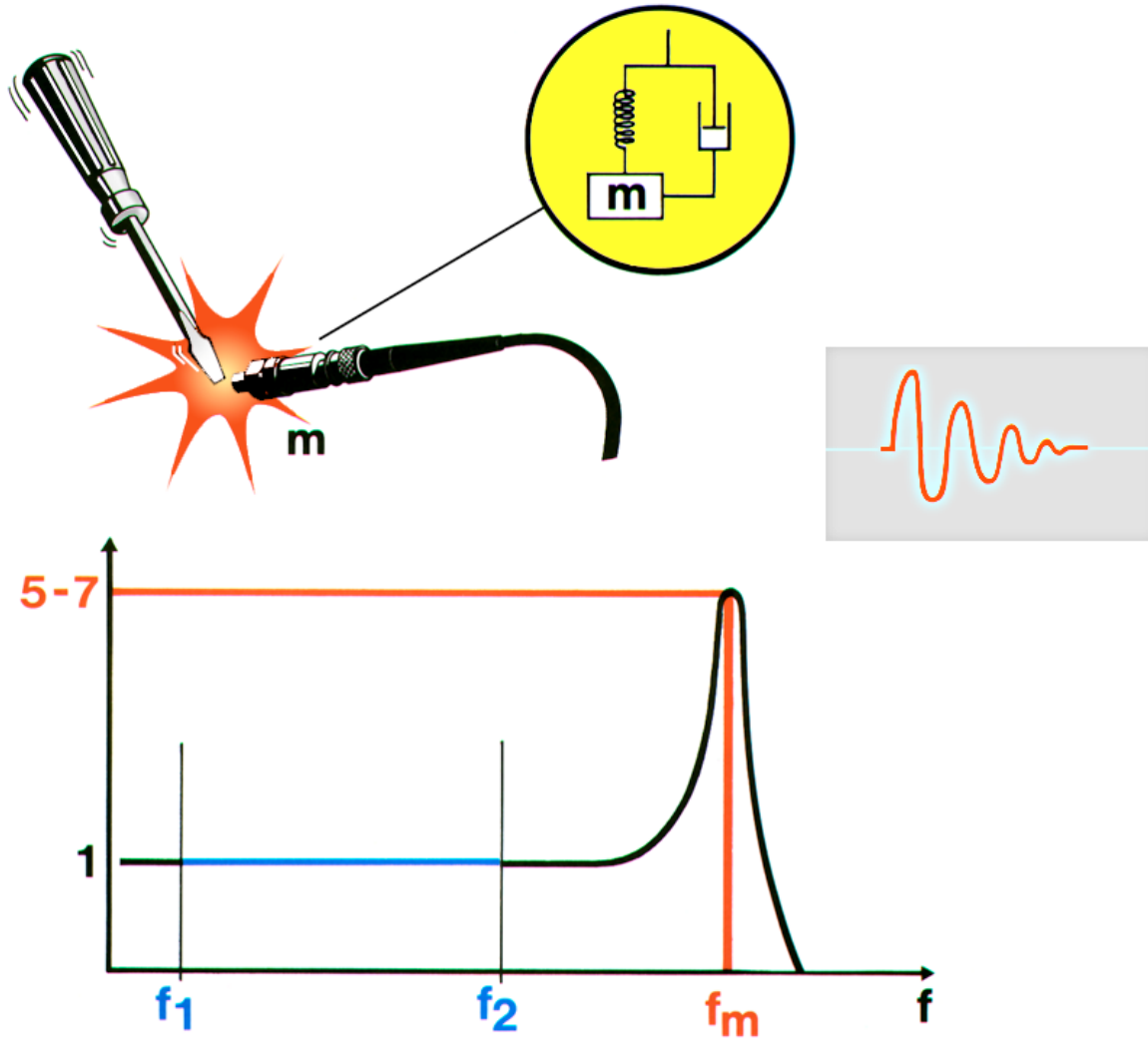
Shock pulse



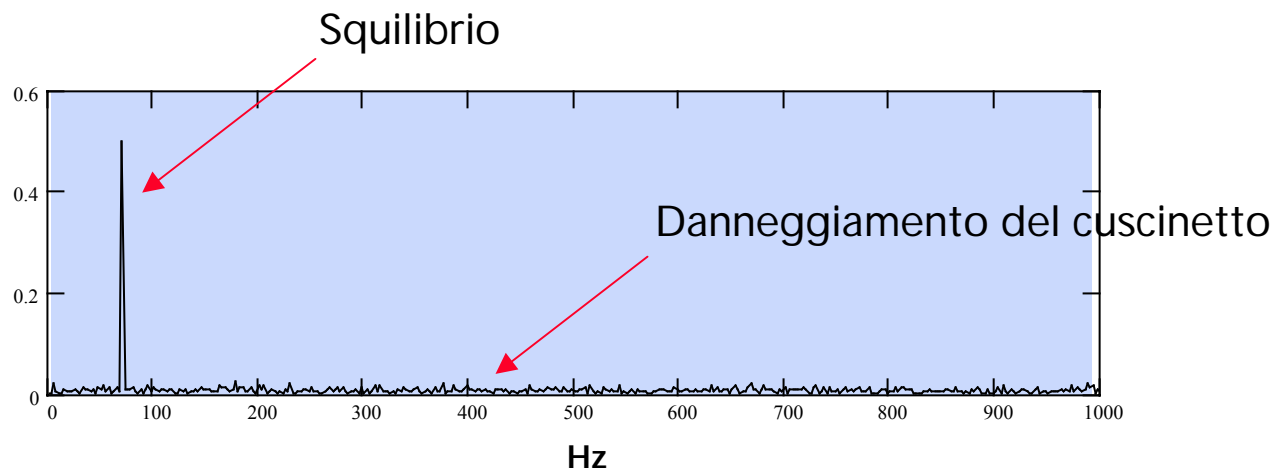
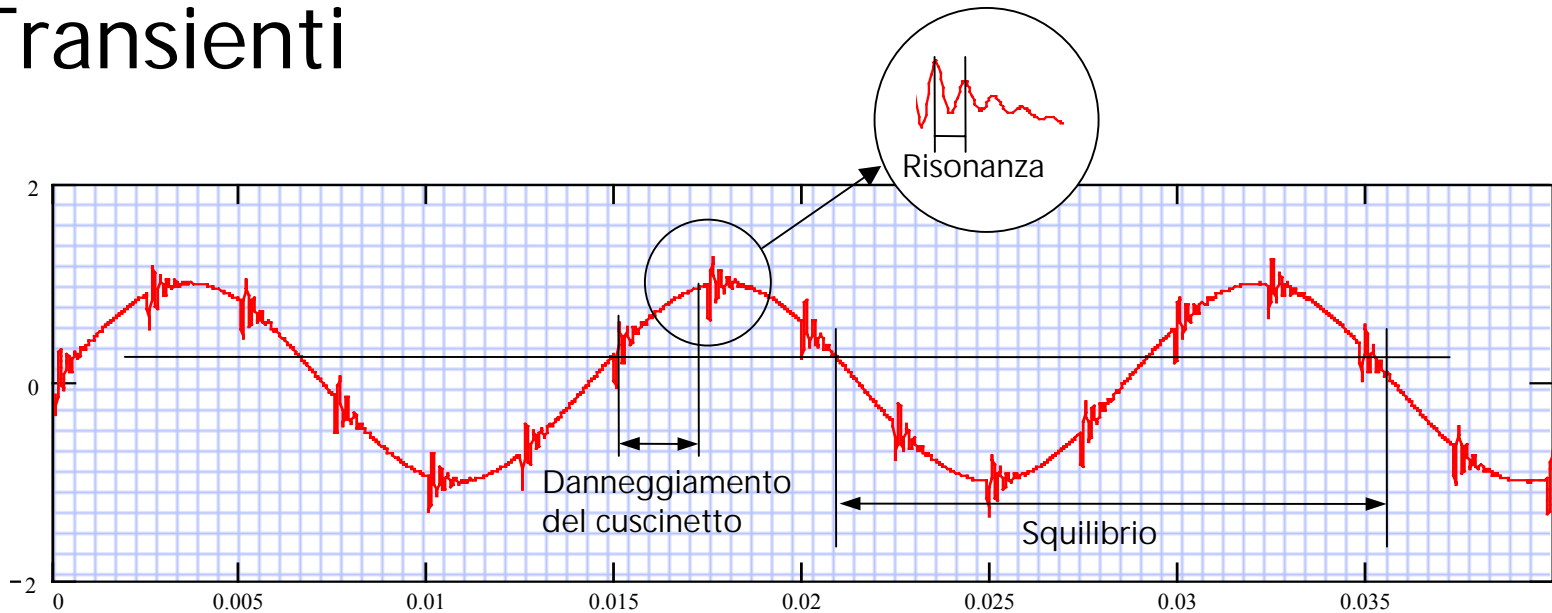
Frequenza di risonanza



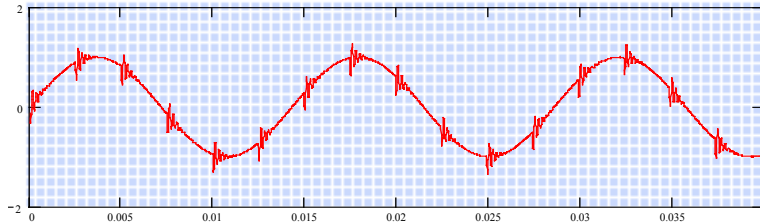
La funzione del trasduttore di shock



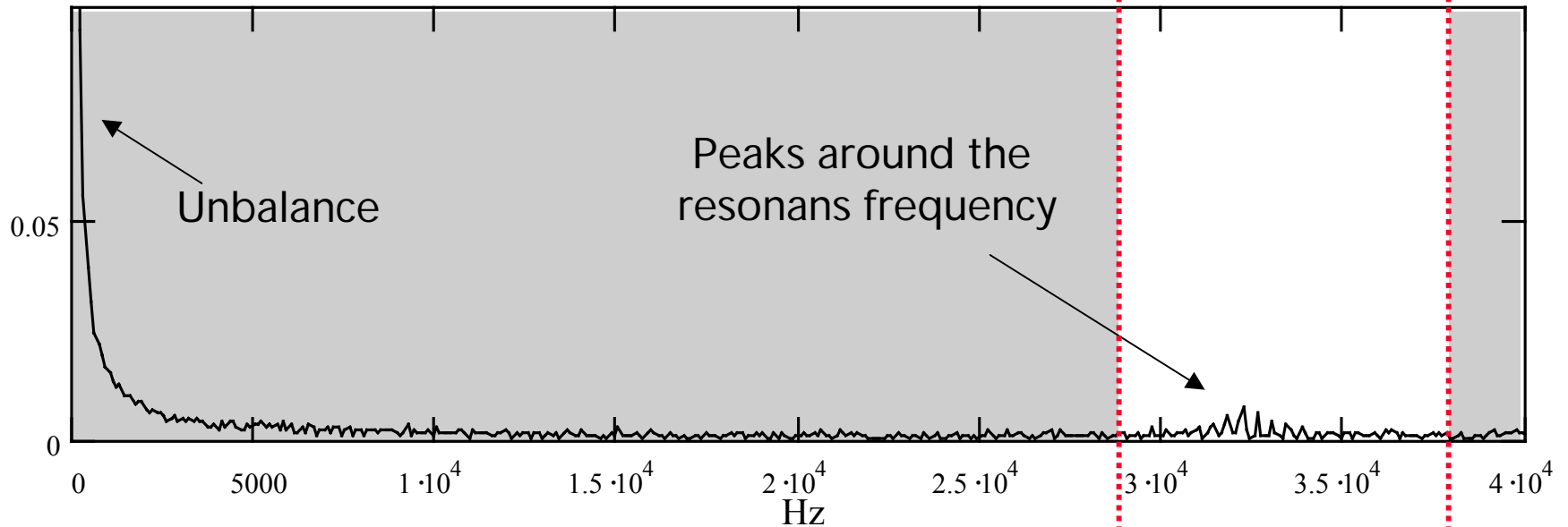
Transienti

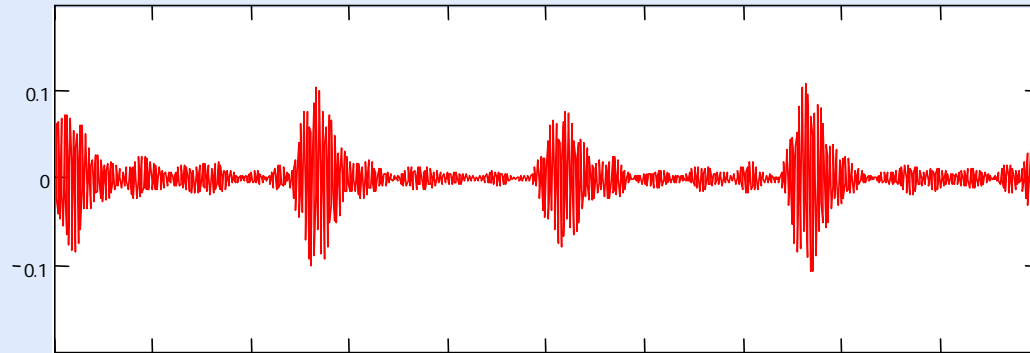


Inviluppo alla frequenza di risonanza

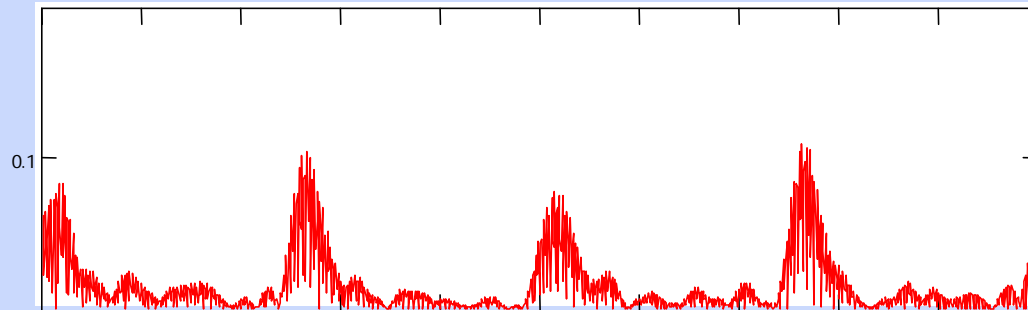


Filtro

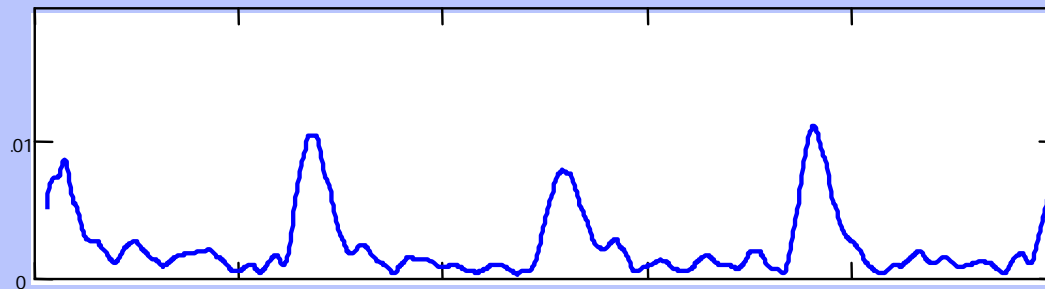




Segnale dopo il
filtro passa banda

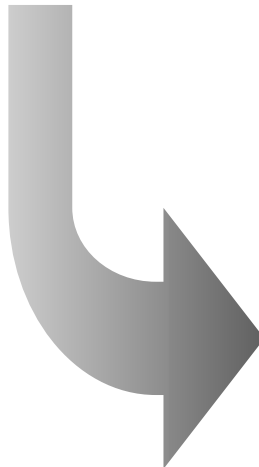
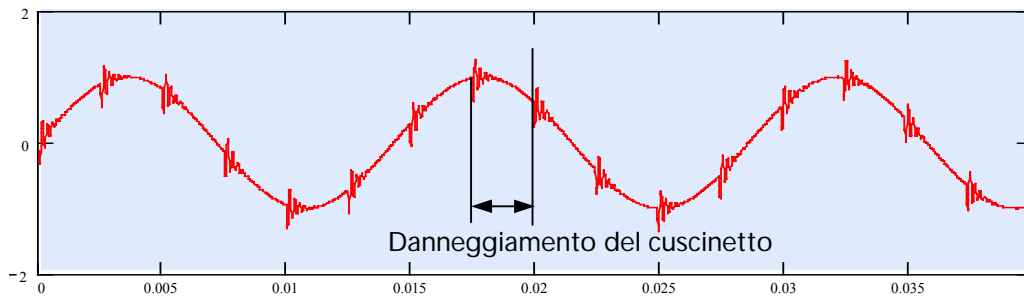


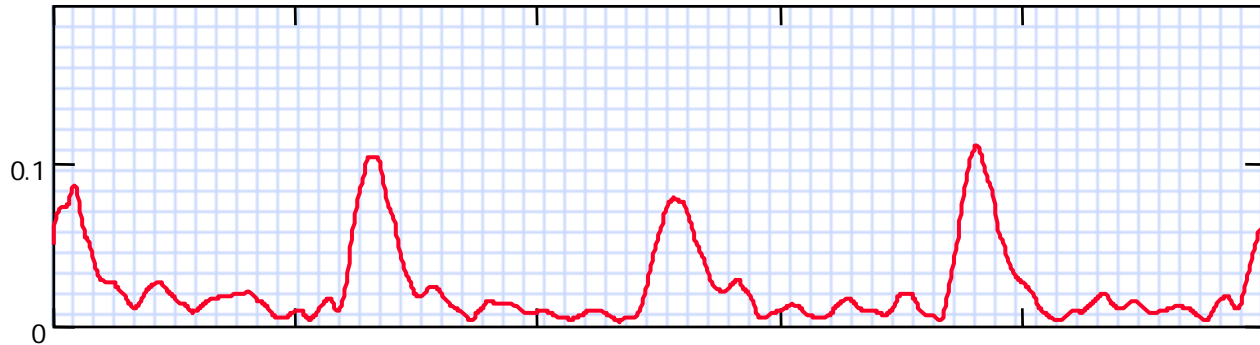
Dopo la rettifica



Dopo l'involuppo

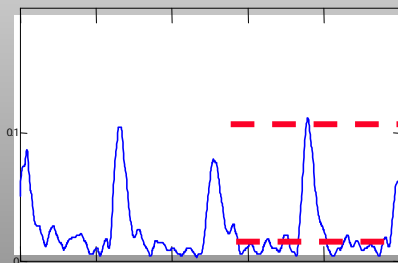
Peak detection





I. Dominio del tempo (SPM)

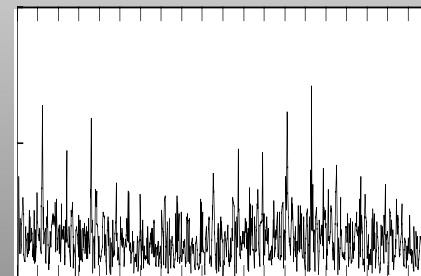
Forma d'onda



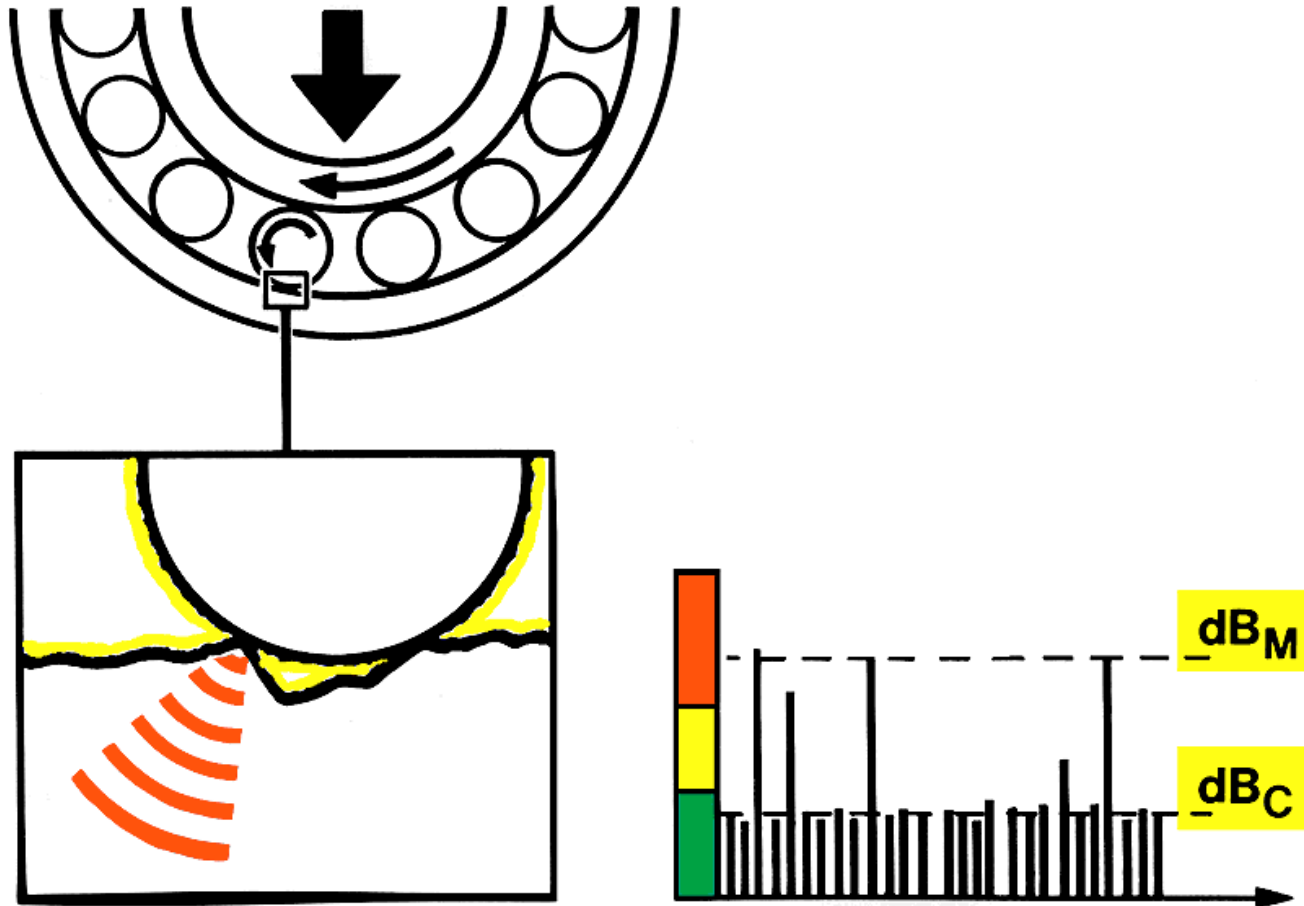
dBm

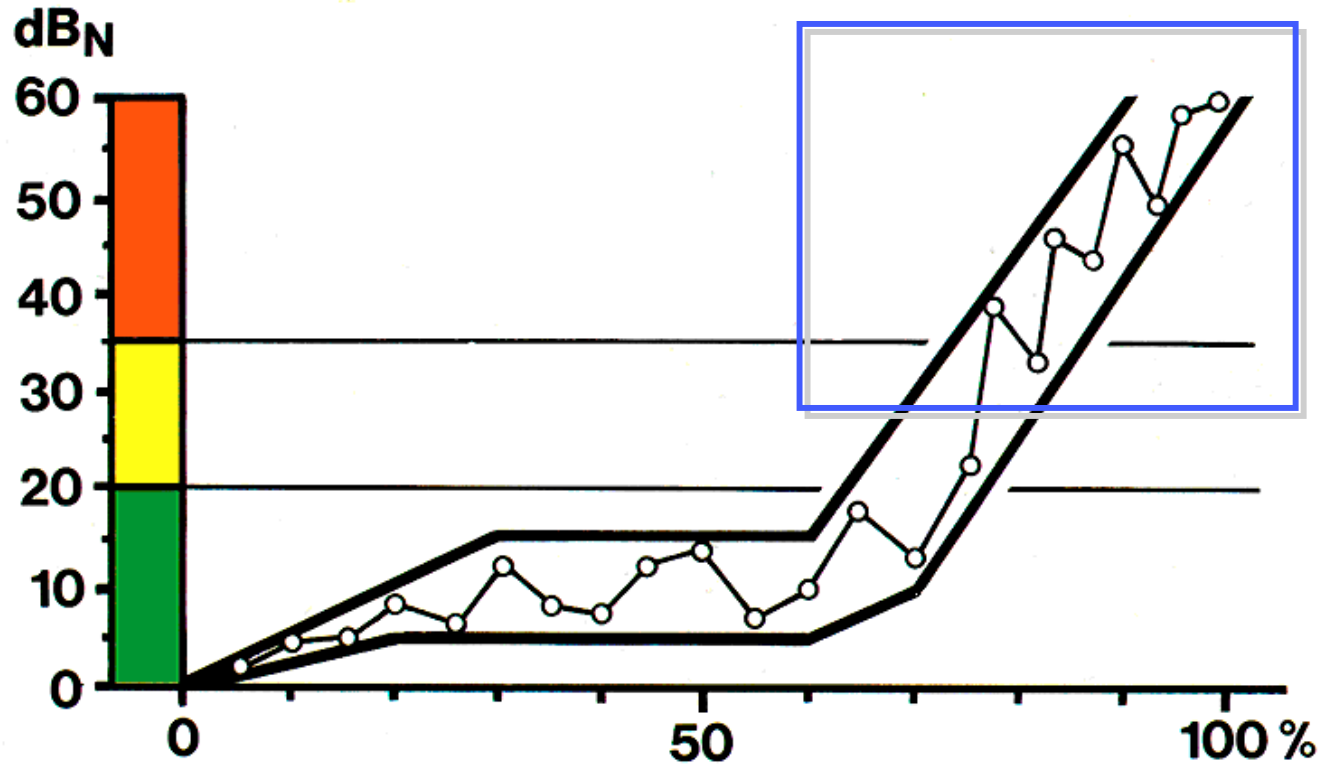
dBc

II. Dominio delle frequenze

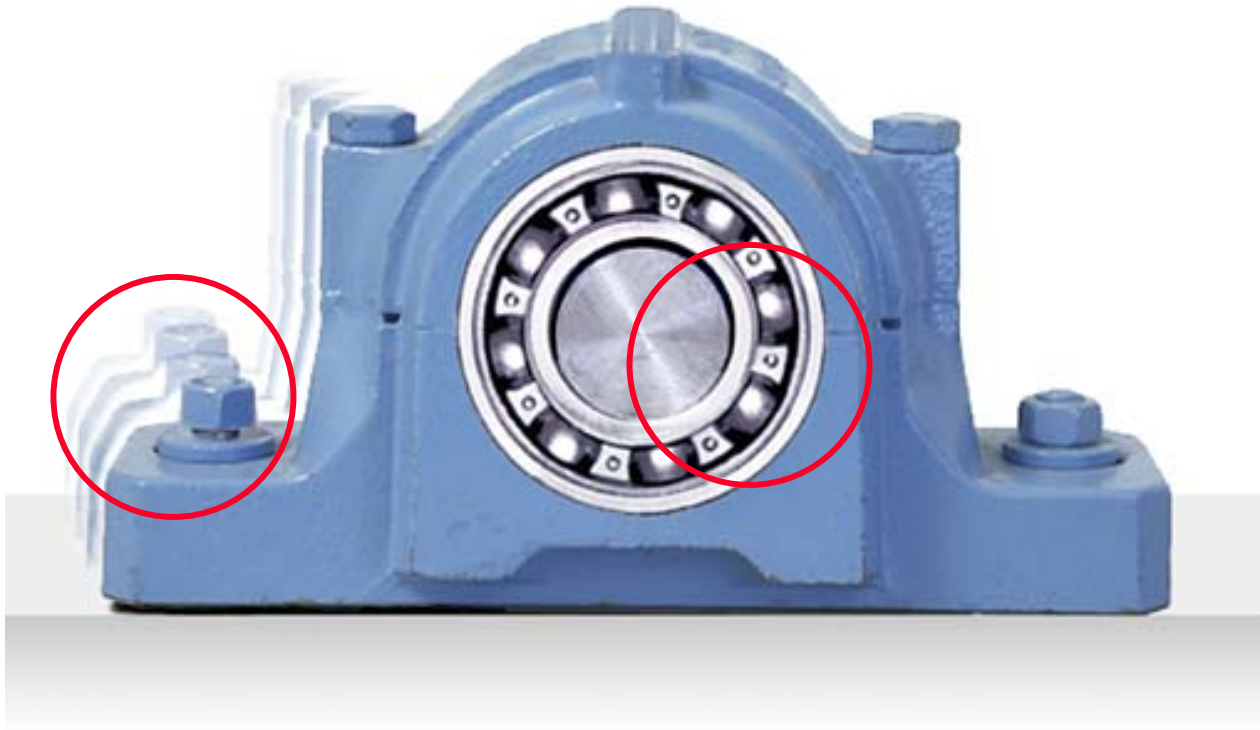


Hz





Disturbo o segnale dei cuscinetti?



SPM Academy

*E' vietata la riproduzione parziale o totale
del presente documento senza espressa
autorizzazione di SPM Instrument Srl*