

## Knowledge Base Article

**Product Group:** Multilog On-line Systems **Product:** IMx **Version:** N/A

## Abstract

This article explains how to configure a SKF Multilog IMx On-line System and its POINTs to collect data within a selected speed range.

## Overview

In order to control the collection of vibration data based on the speed of the machine using an IMx, a tach input must be present in the same IMx as the vibration POINT to be controlled. Follow the steps below to accomplish this.

1. Set up the Digital Channel to correctly read the input by assigning the **Pulse per Revolution** [Figure 1] to the Digital Channel.



**Remember**, Pulse/Rev divides the Raw Speed (Tach) input

Configure	IMx Channel						
Analog	Digital						
Digital ch	annels:						
Numbe	r Name	Enabled	Pulse/Rev				
1	TACH INPUT 1	Yes	1				
2	Channel 2	Yes	1				
3	Channel 3	Yes	1				
4	Channel 4	Yes	1				
5	Channel 5	Yes	1				
6	Channel 6	Yes	1				
7	Channel 7	Yes	1				
8 🗋	Channel 8	Yes	1				
Properti	es						
Channe	al name:	TACH INPUT 1					
Channe	a name.	TAGITINI OT T					
Ch	annel enabled						
Pulse p	er revolution:	1					
		Cop	y Pa	iste	ОК	Cancel	Help

Figure 1. Assigning Pulse/Rev to digital channel



2. Next, build a Speed POINT in the hierarchy. [Figure 2]

Jverali j op	eed Alarm   Messag	es Notes	Images	Threshold
General S	etup   IMx Setup	Schedule	Filter Keys	Setup Log
Identity				
Name:	Speed Point			
Description:				
🗸 Enable data c	ollection			
DAD type:	IMX			
Application:	Vibration			
Sensor type:	Tach			
Units:	RPM			
ocation: [				



Figure 2. New Speed POINT

3. In the **Setup** tab, select the Digital Channel that the POINT is to read. [Figure 3]

Full scale: 50 Control POINT: No
Figure



 With the speed input into the IMx, a POINT may now be used to gate the collection of data. Choose the POINT to gate and open its **Properties**. [Figure 4]

_ Identity	
Name:	Vibration POINT
Description:	
Enable data coll	ection
DAD type:	IMX
Application:	Vibration
Sensor type:	Accelerometer
Units:	in/s
Location:	



Figure 4. Gating POINT

- 5. Click on the **Threshold** tab.
- 6. Click the **Select...** button under Speed Gating. [Figure 5]

General Set Speed Alarm M	up   IMx Setup   ssages   Notes   F	Schedule   Filte Frequencies   Image	r Keys   Setup Log s   Band   Envelop	;   Overal e Threshol
-Speed gating -				
Speed referen	ce:		5	elect
Speed ratio:	1			
Enable act	/e range			
Min: 100	) Max: 3600	) Delta: 20	Units:	RPM
Bracass acting			L	
Process gaung	nce:			elect
Enable act				cicciii
Min	Maw Door	Daltar	Unitar	
Pin: 100	) Max: 300(	) Delta: 0	Units:	
Solf opting				



7. Now, select the **Select speed reference POINT** option, and then select the Speed POINT from the hierarchy list. [Figure 6]. Click **OK** to save.

POINT Properties
General Setup IMx Setup Schedule Filter Keys Setup Log Overall Speed Alam Messages Notes Frequencies Images Band Envelope Threshold
S Speed Point Selection
Select speed reference POINT  My Hierarchies  Demo Database  Demo Database Demo Database  Demo Database  Demo
OK Cancel Help
OK Cancel Help



8. Set the **Speed ratio** so that the speed will reflect the actual speed of the POINT being monitored (Speed ratio is a Multiplication factor of the Speed channel). Next, check the option **Enable active range**. Finally, set up the limits for data collection. [Figure 7]



)INT Prope	rties						
General	Setup	IMx Se	tup Scl	hedule	Filter Keys	Setup L	.og Overall
Speed Alarm	Messag	ges   Not	es   Freque	encies   Im	ages   Ban	id   Envelo	ope Threshol
Speed gatir	ng						
Speed ref	erence:	\Demo	Database \S	peed Trigge	er (Machine 1	Spee	Select
Speed rat	tio:	1					
Enable	active r	ange		]			
		unge		1			
Min:	1000	Max:	3600	Delta:	20	Units:	RPM
Process ga	ting						
Process r	eference	:					Select
- Enable	active r						
		ange		1			
	1000	M maren	2000	Delta	0	Inite	

9. Click **OK** when done. The software is now configured to collect data within a selected speed range using an IMx.

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For further assistance, please contact the Technical Support Group by phone at 1-800-523-7514 option 8, or by email at <u>TSG-Americas@skf.com</u>.