

Knowledge Base Article

Product Group: Software **Product:** CMSW7400 - @ptitude Analyst Version: N/A

Abstract

It is possible to edit the defect frequencies for bearings listed in the bearing library. Therefore, this article explains how it may be possible for the bearing library in SKF @ptitude Analyst software to show the same fault frequencies for different types of bearings.

Overview

Bearing fault frequencies can be edited using the Frequency Sets Editor window.

When a bearing model number is selected, the user may press the **[Edit...]** button to edit its dimensions. [Figure 1]

| ieneral Bea | arings Other | | | | |
|----------------------------|---|------------|--|---|--|
| Manufacture | er | SKE | | | |
| Find bearing | v. | 6316 | | Find | |
| rind bearing | • | 0010 | | Find | |
| Bearings included in set: | | | Available bearing | Available bearings (Model #): | |
| | | | 6316.1 6316.1 6316.1.1 6316.2 | | |
| | | | 6316.3 | | |
| | Exclude >> |] | 6316.3 | < Include | |
| Fundamer | Exclude >> ntals of 6316 |] | 6316.3 | < Include | |
| Fundamer BPF0: | Exclude >> ntals of 6316 3.085551717 | 713 | BSF: | < Include 2.072805075752 | |
| Fundamer BPF0: BPF1: | Exclude >> ntals of 6316 3.085551717 4.914448282 | 713 286 | BSF: FTF: | < Include 2.072805075752 0.385693964641 | |

Figure 1. Frequency Sets Editor

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In the **Bearing Editor** window, the application will display default **Dimensions** values as shown in Figure 2.

| Number of balls = 7 | Pitch diameter = 0.625 | |
|-----------------------|------------------------|--|
| Ball diameter = 0.156 | Contact angle = 0 | |

| Bearing Editor | | | X |
|-----------------------|------------------------|-----------------|------------------------|
| ┌─ Identity ───── | | | |
| Bearing model #: | 6316 | | |
| Manufacturer: | SKF | | ~ |
| Description: | | | |
| Dimensions | | | |
| Number of balls: | 7 | Pitch diameter: | 0.625 |
| Ball diameter: | 0.156 | Contact angle: | 0 |
| | | | Calculate |
| | | | |
| i on recention really | | | |
| BPFO: | 3.0855517 | BSF: | 2.0728050 |
| BPFO: BPFI: | 3.0855517 4.9144482 | BSF: FTF: | 2.0728050 0.3856939 |



Now, the values that are initially displayed are only random "default" values that have absolutely nothing to do with the particular bearing.

If the **[Calculate]** button is pressed at this point, it will calculate the defect frequencies <u>based on these incorrect default values</u>. [Figure 3]



| Bearing Editor | | | |
|------------------|--------|-----------------|-----------|
| - Identity | | | |
| Bearing model #: | 6316 | | |
| Manufacturer: | SKF | | ~ |
| Description: | | | |
| Dimensions | | | |
| Number of balls: | 7 | Pitch diameter: | 0.625 |
| Ball diameter: | 0.156 | Contact angle: | 0 |
| | | <u> </u> | Calculate |
| Fundamentals | | | \leq |
| BPFO: | 2.6264 | BSF: | 1.8784051 |
| BPFI: | 4.3736 | FTF: | 0.3752 |
| | ОК | Cancel | Help |



If the defect frequencies shown in the library are incorrect or are all the same for different bearing models, then a user must have performed these steps, altering the defect frequencies based on incorrect Dimensions values.

An update to the latest version will NOT correct this particular issue. The best way to correct these is to manually edit them as explained above, using the correct bearing **Dimensions** or **Fundamental Frequencies**.

Either input the correct bearing **Dimensions** and then press the **[Calculate]** button, or else enter the correct **Fundamentals** and press the **[OK]** button to save the changes.

The <u>SKF Bearing Frequency Calculator</u> may be used to determine the correct bearing Dimensions and the Fundamental Defect Frequencies.

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>.

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