SMM
Software for Machine Monitoring

SMMturbo [Plant TECHNICAD]
File View Options Window Help
Machine1   startup 1514RPM   AXIAL_DSP.   ...   ON-LINE

Application

The **SMMturbo** software is designed to provide monitoring and diagnosing of rotating machinery equiped with TNC2000 system.
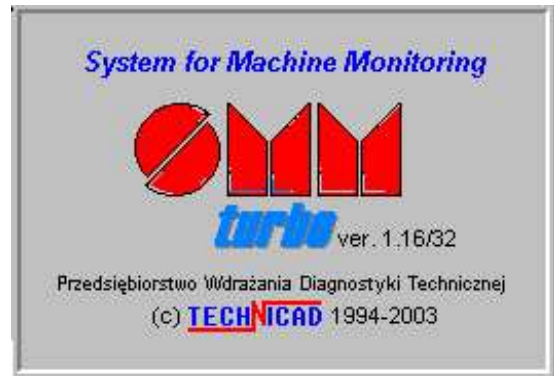
This software provides cyclic data analysing and remote observation of dynamic and static signals from vibration and process monitors of TNC2000 system (via JAD - Data Acquisition Unit) installed on the monitored machine. In case of exceeding the limit value of measured parameters SMMturbo program informs the operator and records the event.

Complete monitoring and diagnostic system contains one Data Acquisition Unit per machine and personal computer for diagnostician with SMMturbo software connected by the local area network. However one PC with SMM software has access to more than one Data Acquisition Unit.

Description

The SMM software provides realization of following tasks:
- ➤ monitoring of selected machine in on-line mode, the data can be presented as a:
  - synoptic screen of machine with sensors localization,
  - bar graph screen with local levels of alerts and alarm for dynamic and static signals
  - short term trends (up to 10 minutes) of selected parameters derived from dynamic and static channels with RPM information
- ➤ graphical presentation of on-line and off-line data from selected machine / dynamic channel in form of:
  - time wave form,
  - amplitude spectrum,
  - trajectory,
  - vector of 1x and (or) 2x
- ➤ historical data browsing and analyzing as a long term trends, for each dynamic and static channel from chosen machine, the user have an access to the following signal parameters:
  - Peak+ - maximum instantaneous signal value
  - Aver - averaged signal value
  - Peak- - minimum instantaneous signal value

- Peakabs – peak absolute (greatest instantaneous value) of the signal
- rms signal value
- A1x - first harmonic amplitude
- f1x - first harmonic phase angle
- A2x - second harmonic amplitude
- f2x - second harmonic phase angle
- ➤ preparing of reports based on selected record from data base
- ➤ comparison of two historical records from database
- ➤ data printout in graphic format
- ➤ data export in PAR analyzer or Text format

Performances

ENVIRONMENTAL

Operating System: Win98, Win2000, WinNT, WinXP

Hardware: Pentium II or higher, 32MB RAM, 50MB free HDD space, 19" color display, CDRW drive, color printer, LAN connection

SMM software package consists of:

- ➤ SMMobiekt - software for data acquisition unit
- ➤ SMMkonfig - software for system configuration
- ➤ SMMturbo - main program for diagnostician
- ➤ SMMoperator - version of SMM for machine operator

Samples of screen shots and selected windows of the SMM software are presented bellow: