

GfM Gesellschaft für Maschinendiagnose mbH

Peakanalyzer status report

Customer: XXXXXX
Turbine operator: XXXXXX
Turbine supplier, type, ser. no.: XXXXX XXX, XXXXX, XX XXXXXXXXXXXXX
Gear unit supplier, type, ser. no.: Lohmann & Stolterfoth, GPV441S1 PG50, XXXXXX
Generator supplier, type, ser. no.: Leroy Somer, 3~FLSB500 LB4, XXXXXXXX XXXX
Kinematics data source: XXXXXX
Peakanalyzer no.: PA-Light, XXXXXXXX
Current configuration: XXXXXXXXXXXXXXXXXXXXXXXX
Report period: 01.03.09 - 31.05.09
Consultant GfM: Dipl.-Ing. Andreas Klein
Reference report GfM: DYYYYAbX-D1, Dipl.-Ing. Norman Schröter
GfM No.: DXXXXAb1
Number of pages: 2

Berlin, 25. July 2009

(Dr. Rainer Wirth, management)

(Dipl.-Ing. Andreas Klein)

You can find detailed advices for the state report on www.maschinendiagnose.com/statusbericht.

For the detected irregularities are made recommendations only on the basis of the vibration signal and if possible a failure probability is stated. For the exact quantification of irregularities have to be executed further test method.

Diagnosis result:

Nr.	found irregularities	trend	recommendation	$P_{\tau < 1a}$
rotor:				
11	rotor shaft			
12	rotor bearing			
gear shafts:				
21	planet carrier			
22	planets			
23	low speed shaft			
24	intermediate shaft			
25	high speed shaft			
tooth meshing of gear unit:				
31	planetary stage	advice for a revolving deviation of flank shapes	®	< 5 %
32	low speed stage	advice for a revolving deviation of flank shapes	®	< 5 %
33	high speed stage			
gear unit bearing:				
41	planet carrier			
42	planet			
43	low speed shaft			
44	intermediate shaft			
45	high speed shaft			
46	planet carrier			
generator:				
51	shaft			
52	DE bearing	outer race and cage of bearing 6330 (fig. 1, 2)	-	visual inspection, if possible
53	NDE bearing	outer race and cage of bearing 6330	®	< 5 %

trend - comparison to the last report, see reference report

- ↑ - intensity of irregularities increased
- - intensity of irregularities almost unchanged
- ↓ - intensity of irregularities decreased

n.m. - comparison not possible, because e.g. the measurement conditions were different

$P_{\tau < 1a}$ - estimated probability, that the by the vibration diagnosis assumed irregularity will lead to a failure within the next 12 months

- < 5 % - a minimal irregularity is detectable, no need for action
- 20 % - one of five of such irregularities will lead to a failure within one year
- 50 % - one of two of such irregularities will lead to a failure within one year

Spectra relevant for explaining:

- none

Changes of the configuration:

- none

More information:

- none