

BPdM

普迪美状态监测

PDMS

普迪美服务

高线吐丝机诊断案例

北京普迪美科技有限公司

www.bpdm.com.cn

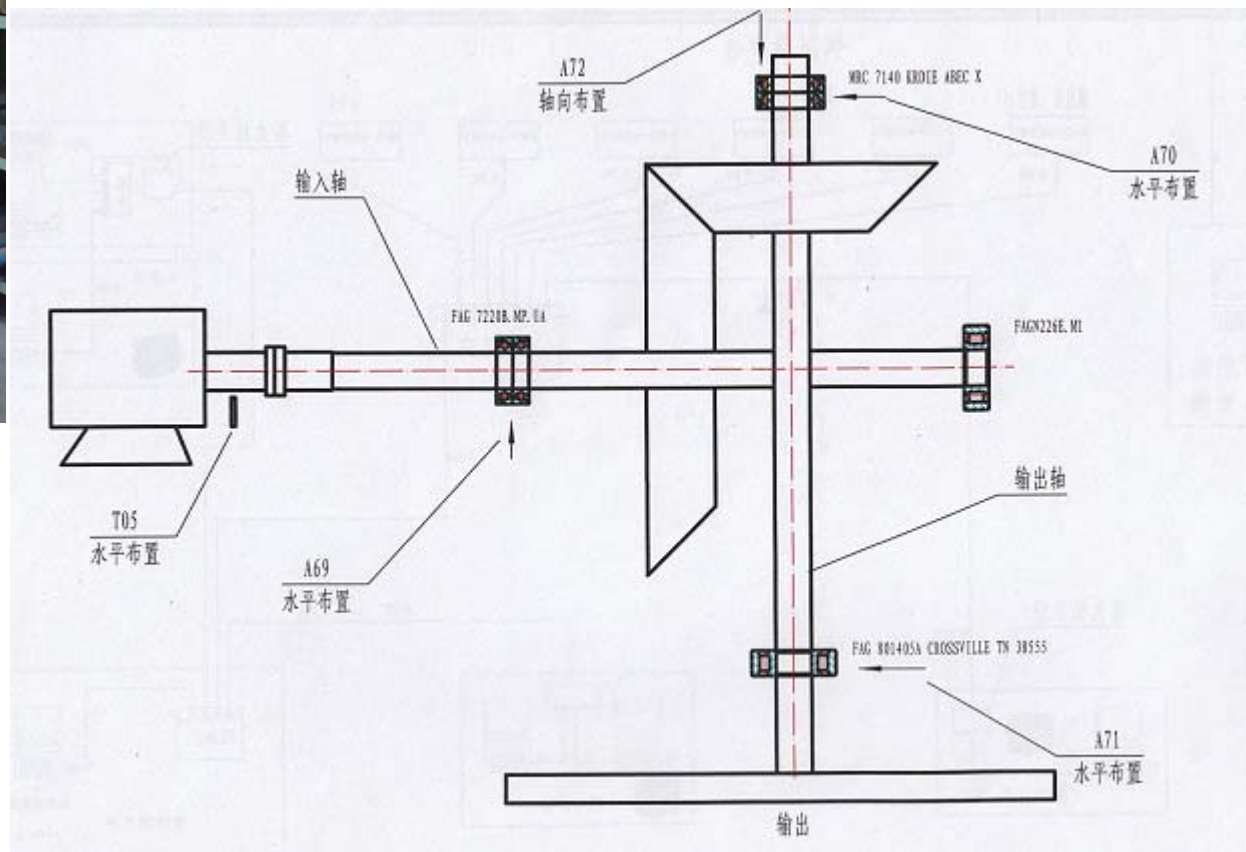


某钢铁公司高速线材生产线，实施80点振动，6个转速在线监测，及离线监测网络化系统

2008年12月下旬，吐丝机A70点振动报警，振动速度、加速度和解调值呈不同程度上升趋势。



吐丝机结构图和特点



振动发展趋势：有效

参数	规格 6.5	规格 8.0
速度	12月中旬从2mm/s以下上升到3mm/s以上	12月初从1mm/s以下上升到1.5mm/s以上
加速度	11月中旬从0.5g以下上升到接近1g	12月初从0.5g以下上升到接近1g
解调	11月初到现在从0.5g逐渐上升到3.5g	11月初到现在从0.5g逐渐上升到3.g以上

频谱分析：

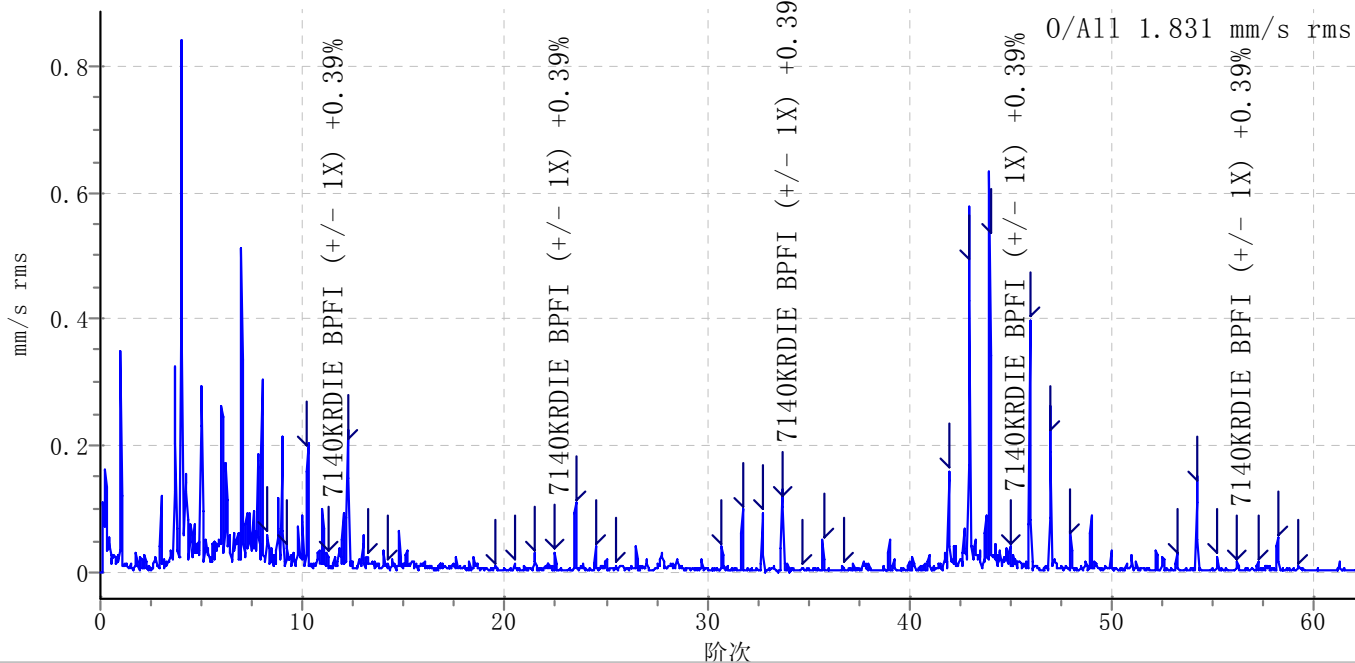
速度、加速度、和解调谱都表现为明显的7410KRDIE轴承BPMI及其+/-轴转速频率族。

2008年12月22日结论和建议：

7410KRDIE轴承内圈故障，尽快安排检修更换。

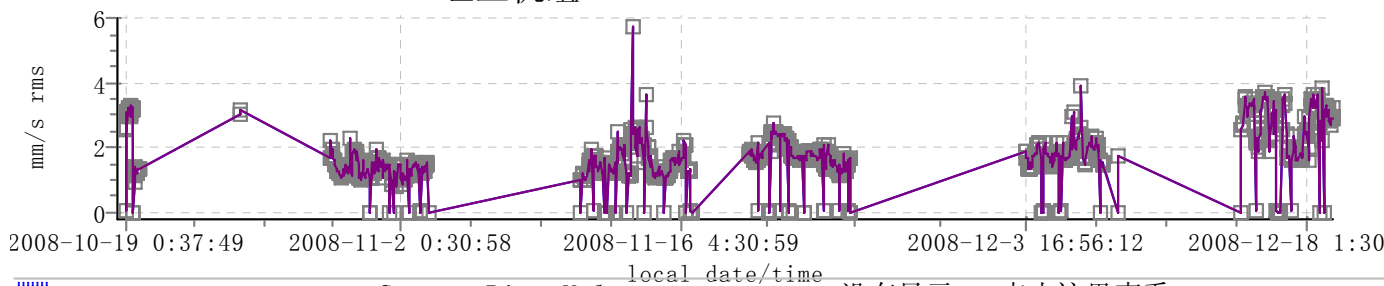
规格6.5数据库A70点分析

吐丝机组 - A70 - Horizontal - Vel Spec 1600 Hz
2008-12-19 19:30:55



2008-12-19 19:30:55 0/A11 1.831 mm/s rms 1544.996 RPM

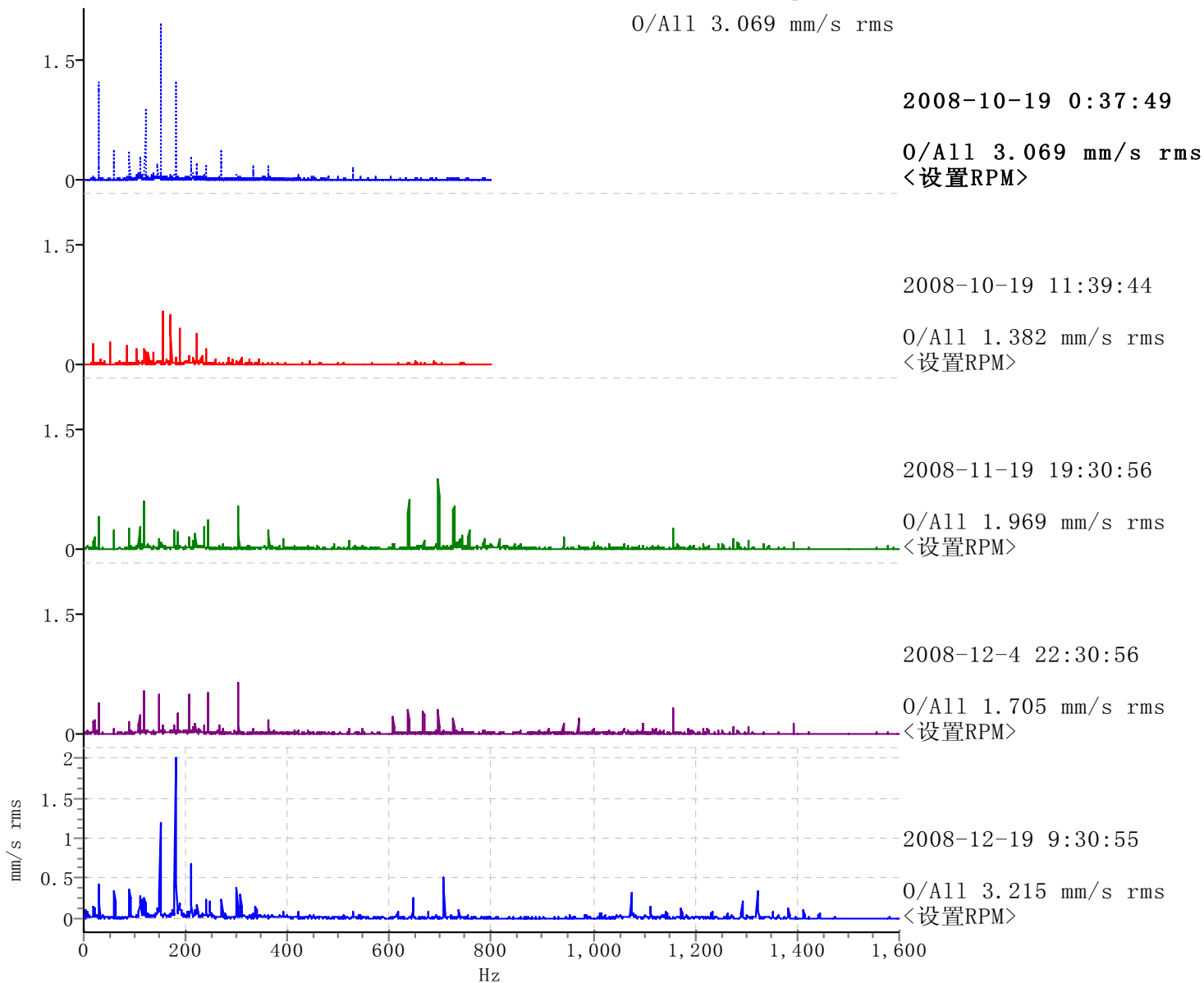
吐丝机组 - A70 - Horizontal



	Sensor Bias Voltage	没有显示 - 点击这里查看
	Vel Spec 1600 Hz Spec 峰 610 Hz - 740 Hz	没有显示 - 点击这里查看
	Vel Spec 1600 Hz Spec 峰 270 Hz - 370 Hz	没有显示 - 点击这里查看
	Vel Spec 1600 Hz Spec 能量 4 Hz - 1600 Hz	
	Vel Spec 1600 Hz Spectrum Overalls	

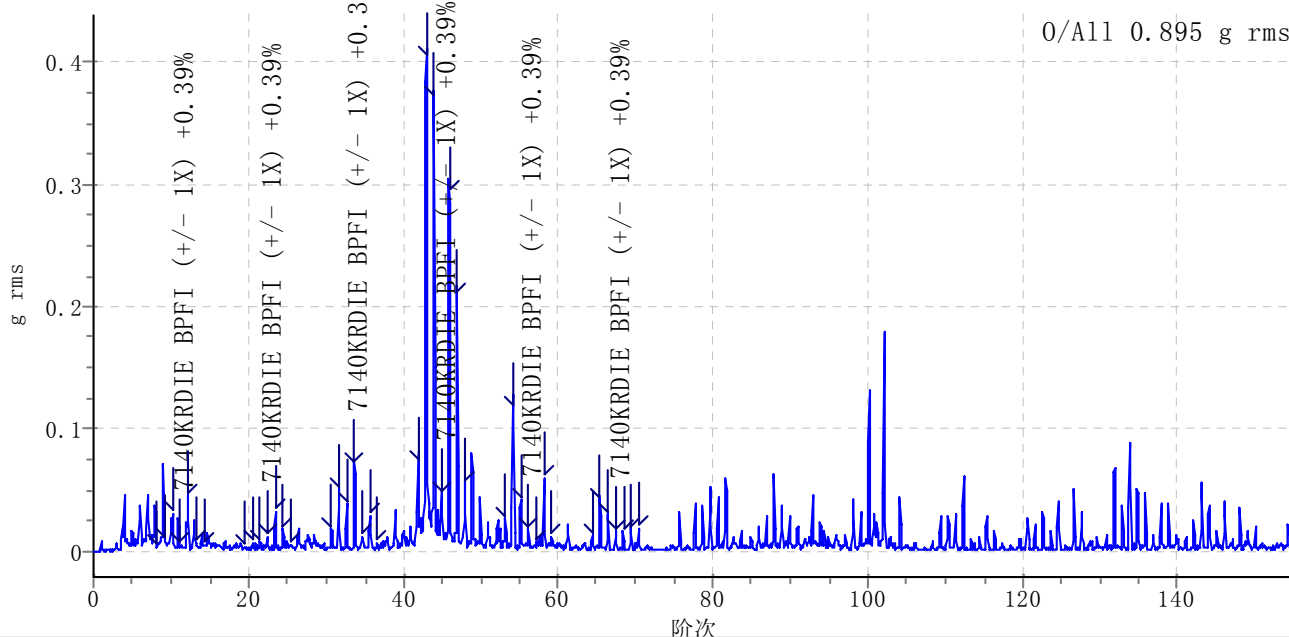
吐丝机组 - A70 - Horizontal - Vel Spec 1600 Hz

0/A11 3.069 mm/s rms



规格6.5数据库A70点分析

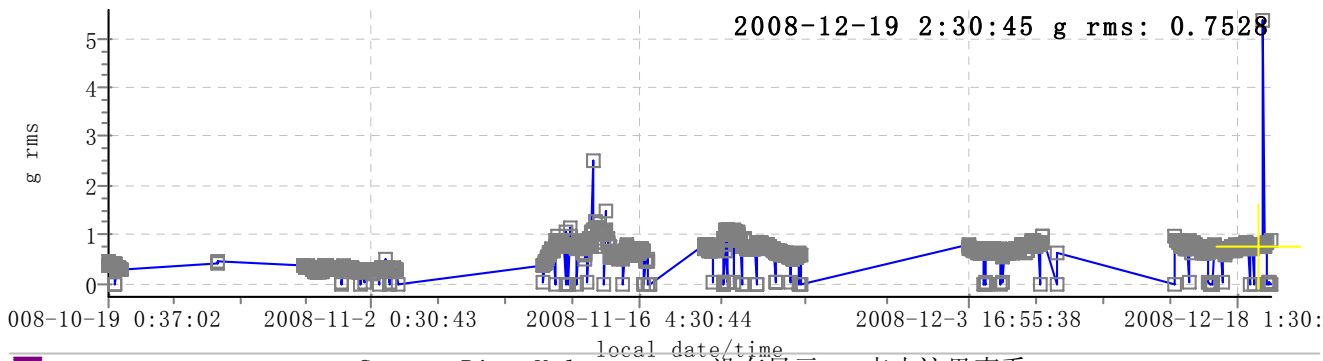
吐丝机组 - A70 - Horizontal - Acc Spec 4000 Hz
2008-12-19 19:30:45



2008-12-19 19:30:45 0/A11 0.895 g rms 1545.042 RPM

吐丝机组 - A70 - Horizontal

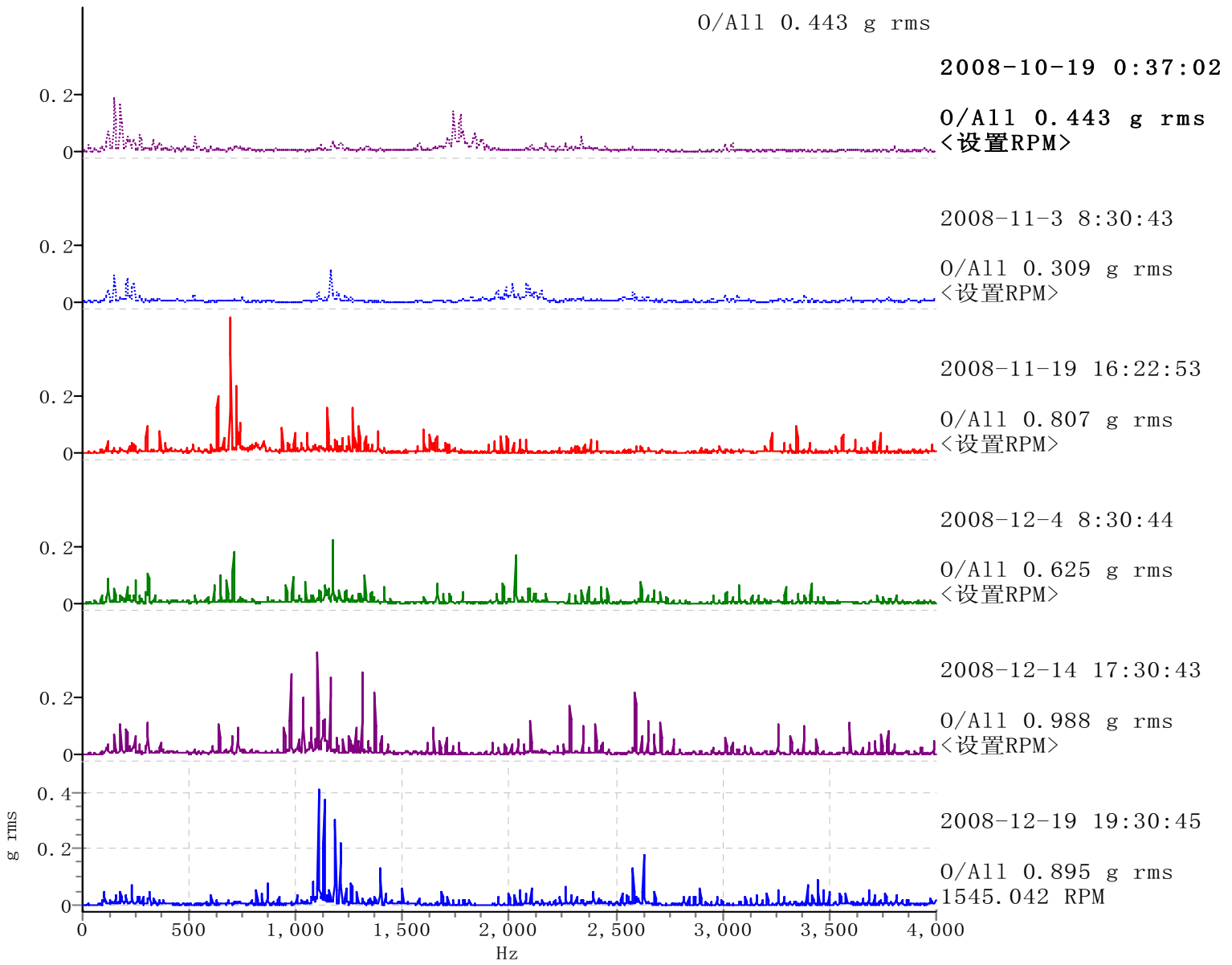
2008-12-19 2:30:45 g rms: 0.7528



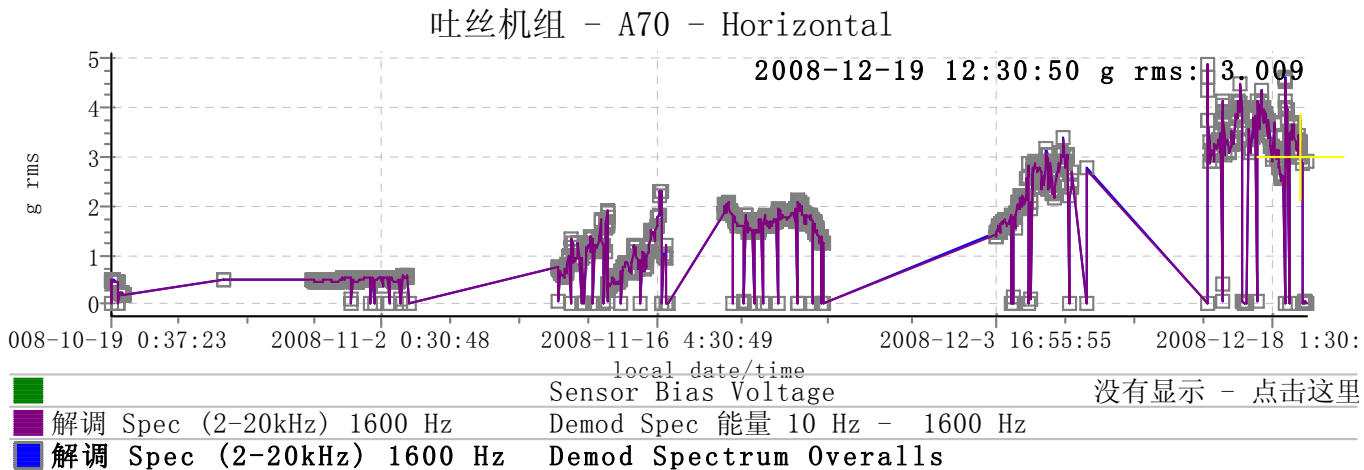
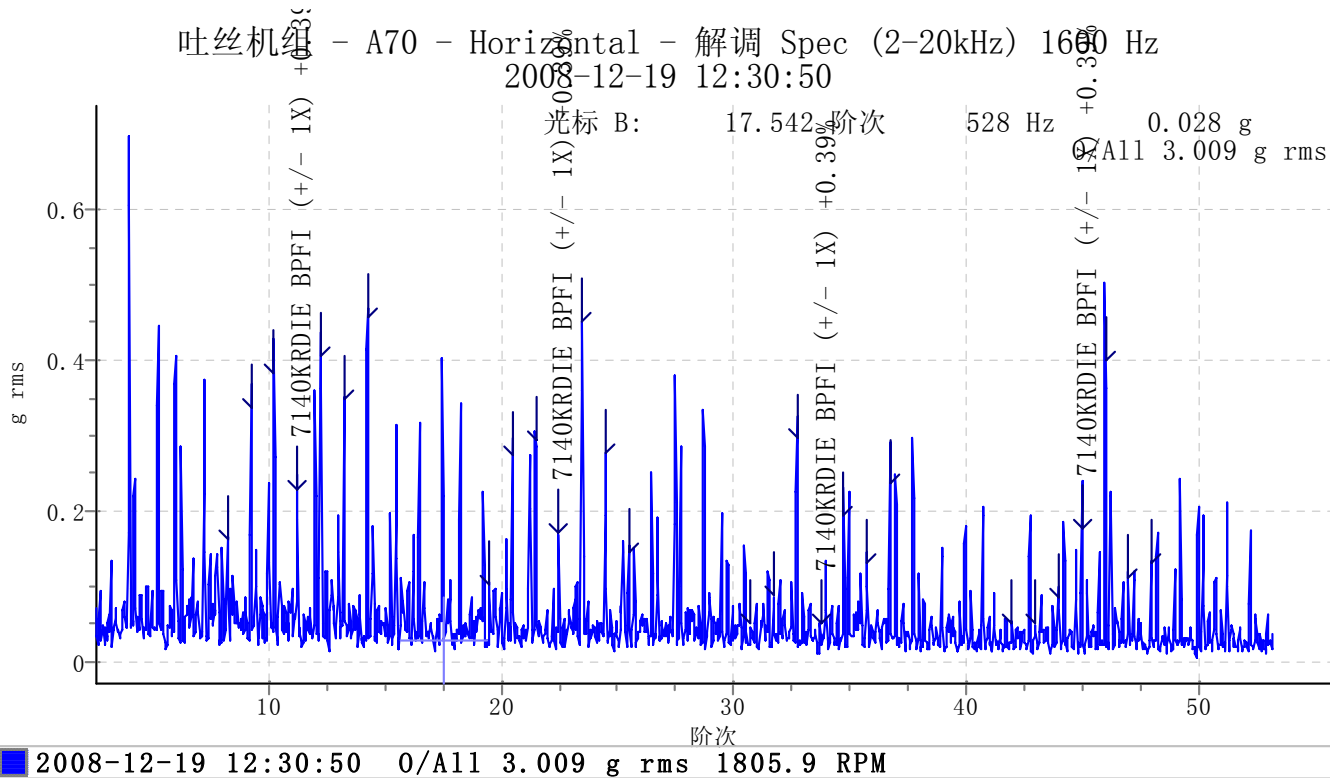
Sensor Bias Voltage 没有显示 - 点击这里查看

Acc Spec 4000 Hz Spectrum Overalls

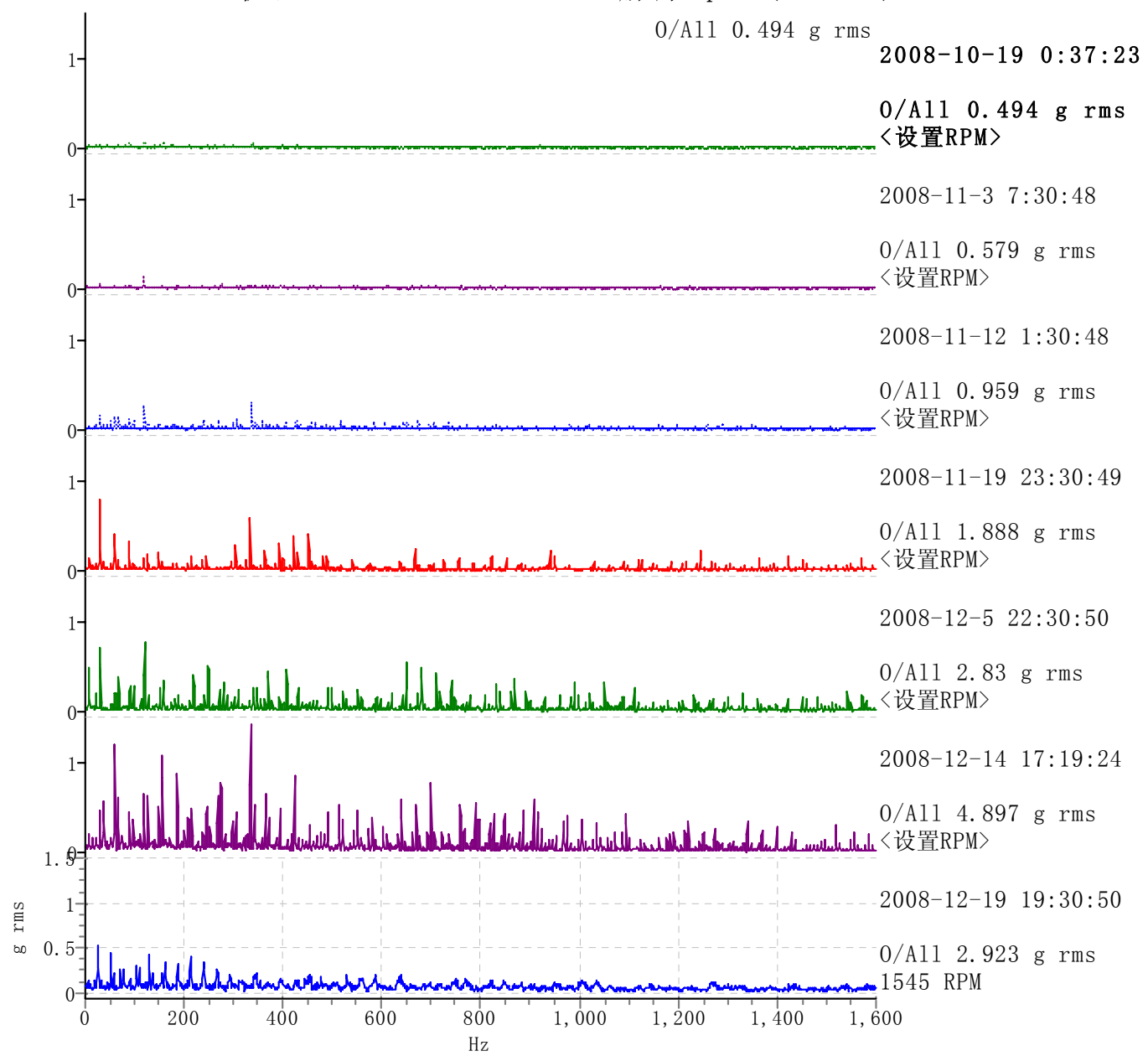
吐丝机组 - A70 - Horizontal - Acc Spec 4000 Hz



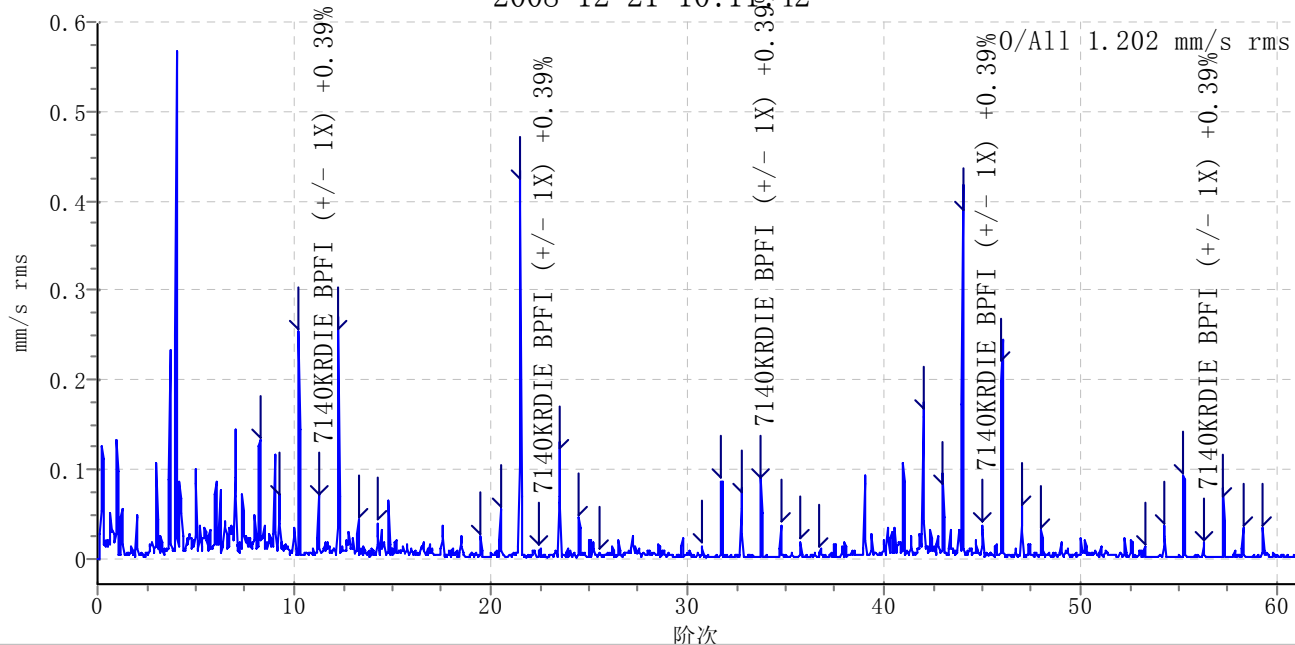
规格6.5数据库A70点分析



吐丝机组 - A70 - Horizontal - 解调 Spec (2-20kHz) 1600 Hz

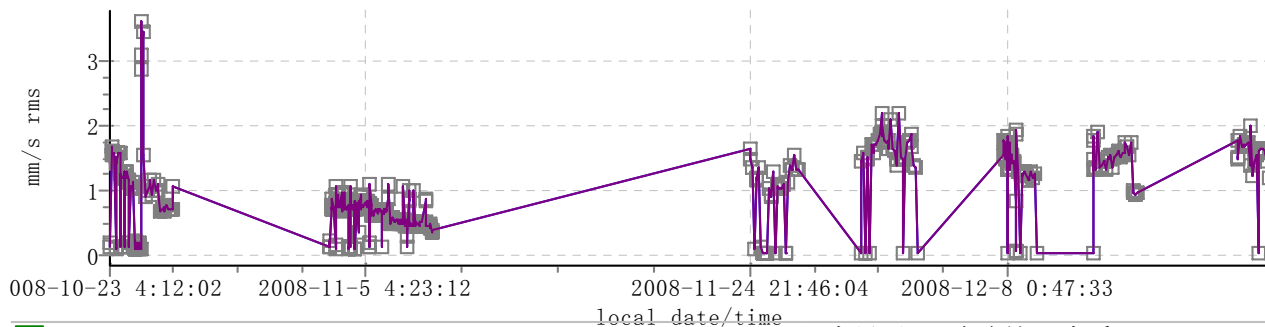


吐丝机组 - A70 - Horizontal - Vel Spec 1600 Hz
2008-12-21 10:11:42



2008-12-21 10:11:42 0/A11 1.202 mm/s rms 1575.715 RPM

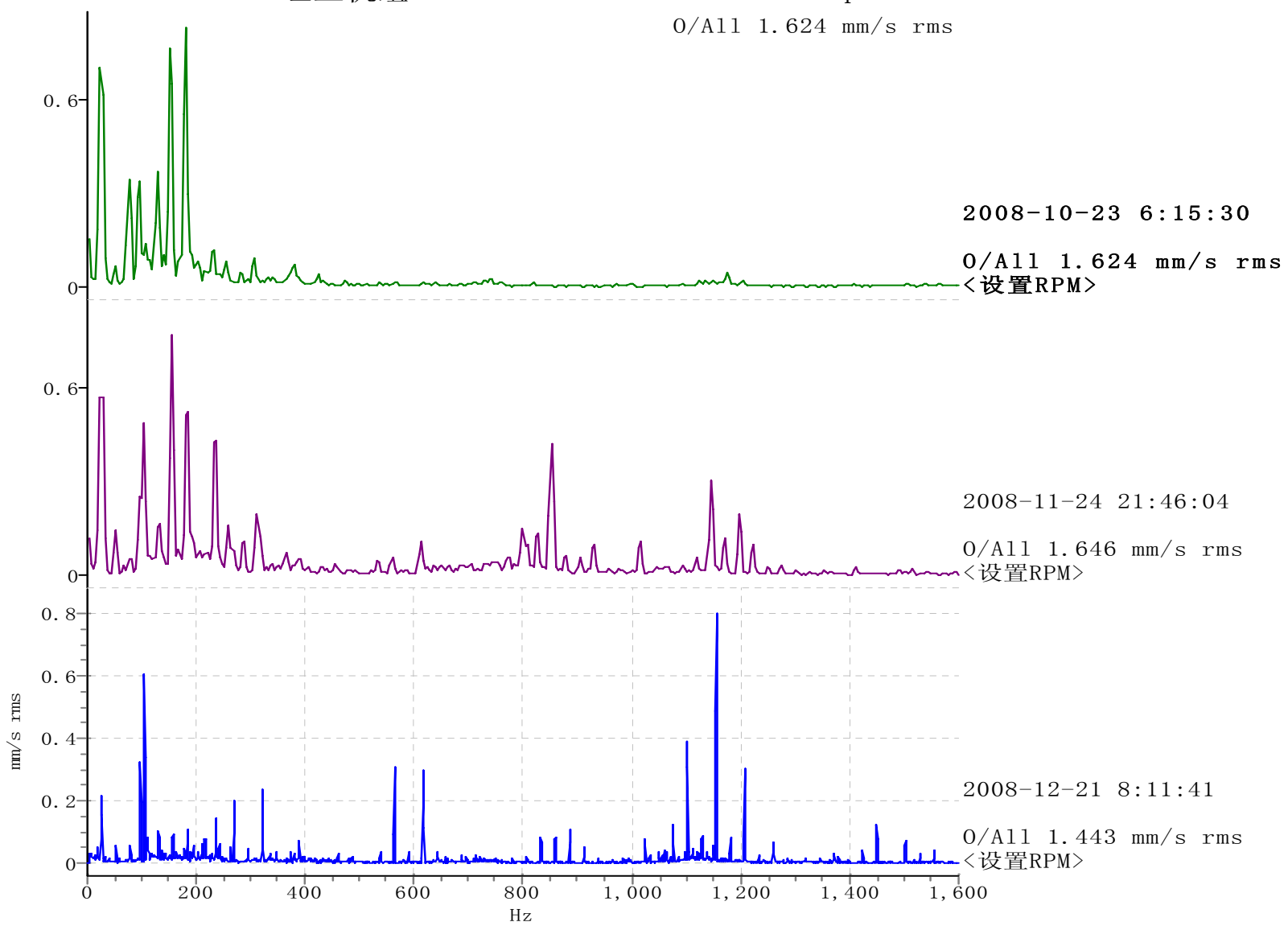
吐丝机组 - A70 - Horizontal



■	Sensor Bias Voltage	没有显示 - 点击这里查看
■	Vel Spec 1600 Hz	Spec 能量 4 Hz - 1600 Hz
■	Vel Spec 1600 Hz	Spectrum Overalls

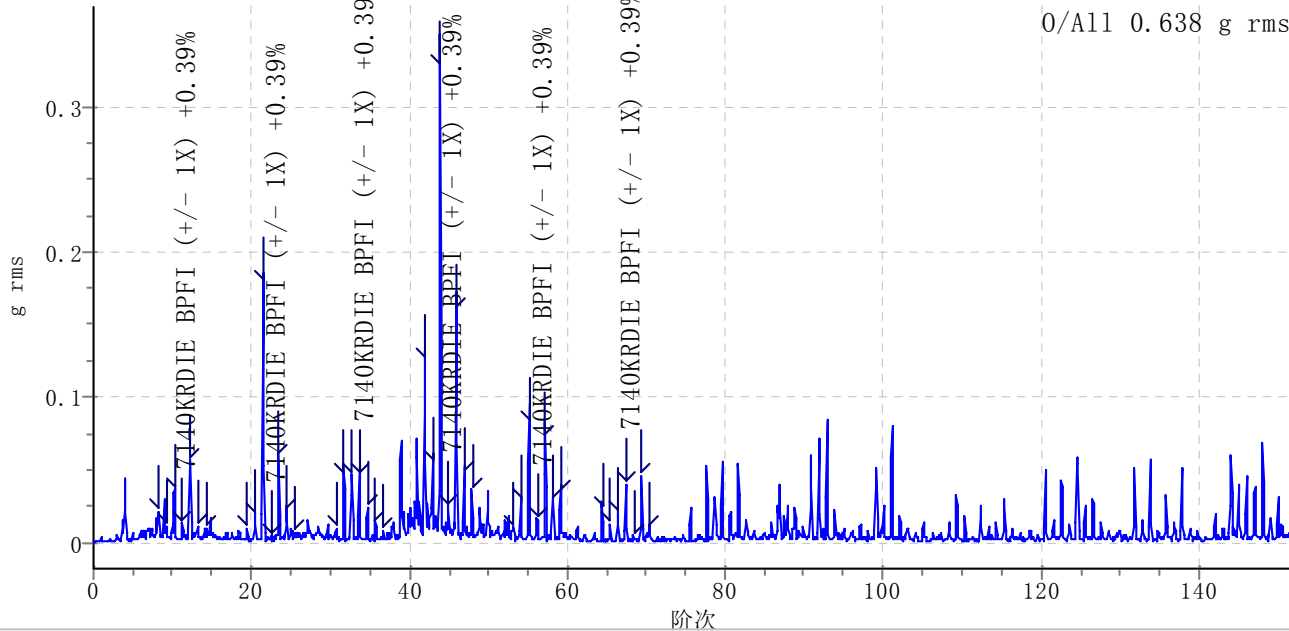
吐丝机组 - A70 - Horizontal - Vel Spec 1600 Hz

O/A11 1.624 mm/s rms



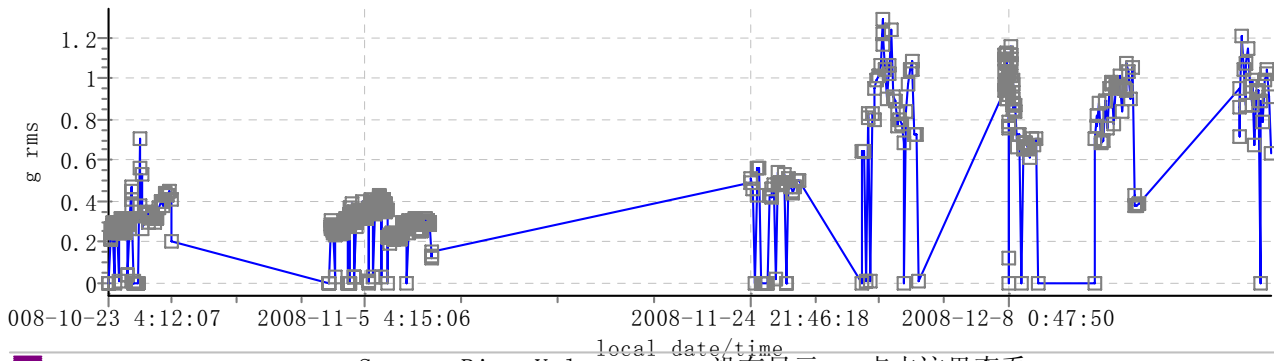
规格8.0数据库A70点分析

吐丝机组 - A70 - Horizontal - Acc Spec 4000 Hz
2008-12-21 10:11:50



2008-12-21 10:11:50 0/A11 0.638 g rms 1576.257 RPM

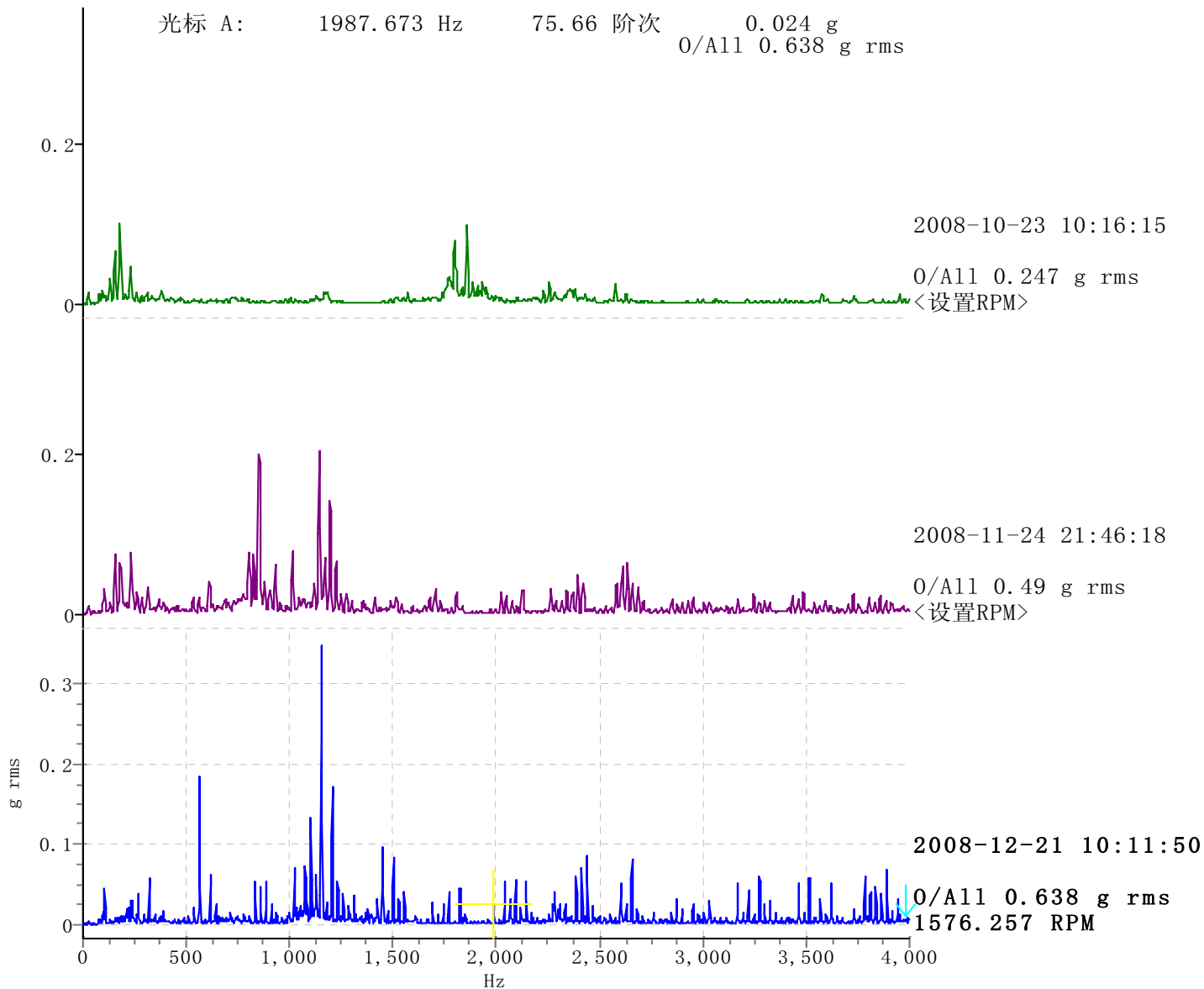
吐丝机组 - A70 - Horizontal



local date/time
 Sensor Bias Voltage 没有显示 - [点击这里查看](#)
 Acc Spec 4000 Hz Spectrum Overalls

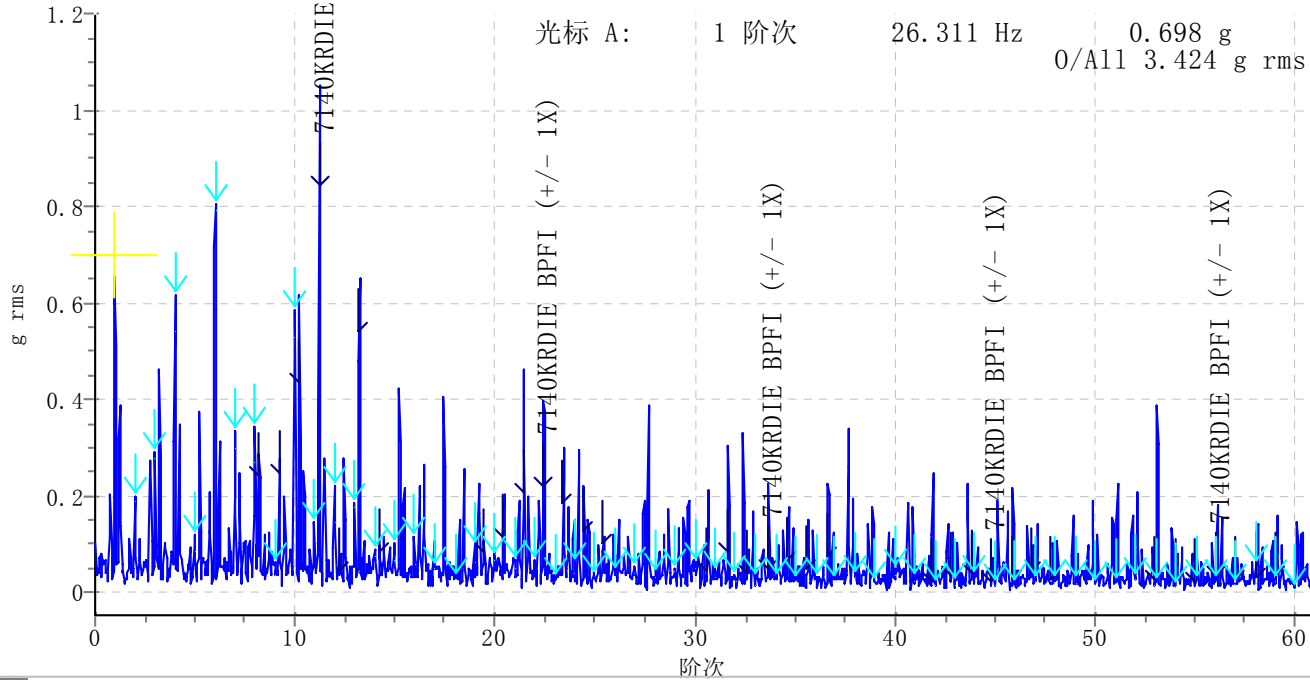
吐丝机组 - A70 - Horizontal - Acc Spec 4000 Hz

光标 A: 1987.673 Hz 75.66 阶次 0.024 g
0/A11 0.638 g rms



规格8.0数据库A70点分析

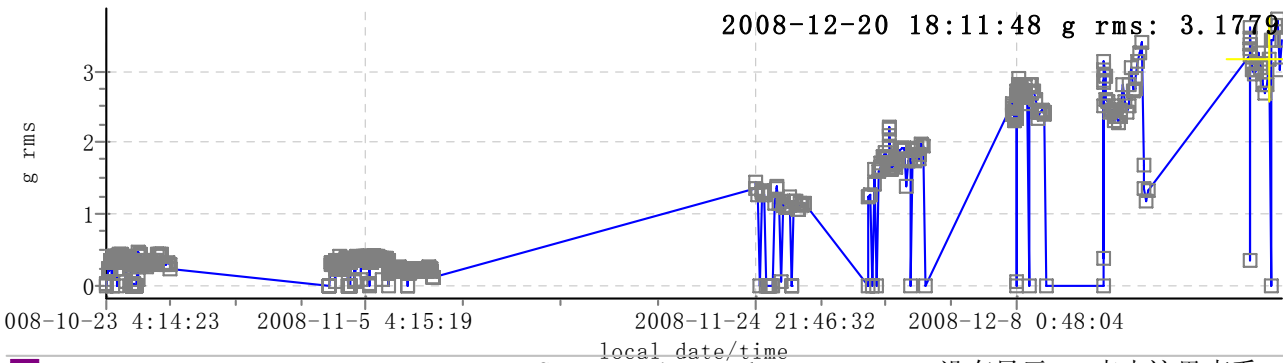
吐丝机组 A70 - Horizontal - 解调 Spec (2-20kHz) 1600 Hz
2008-12-21 10:11:56



2008-12-21 10:11:56 0/A11 3.424 g rms 1578.676 RPM

吐丝机组 - A70 - Horizontal

2008-12-20 18:11:48 g rms: 3.1779



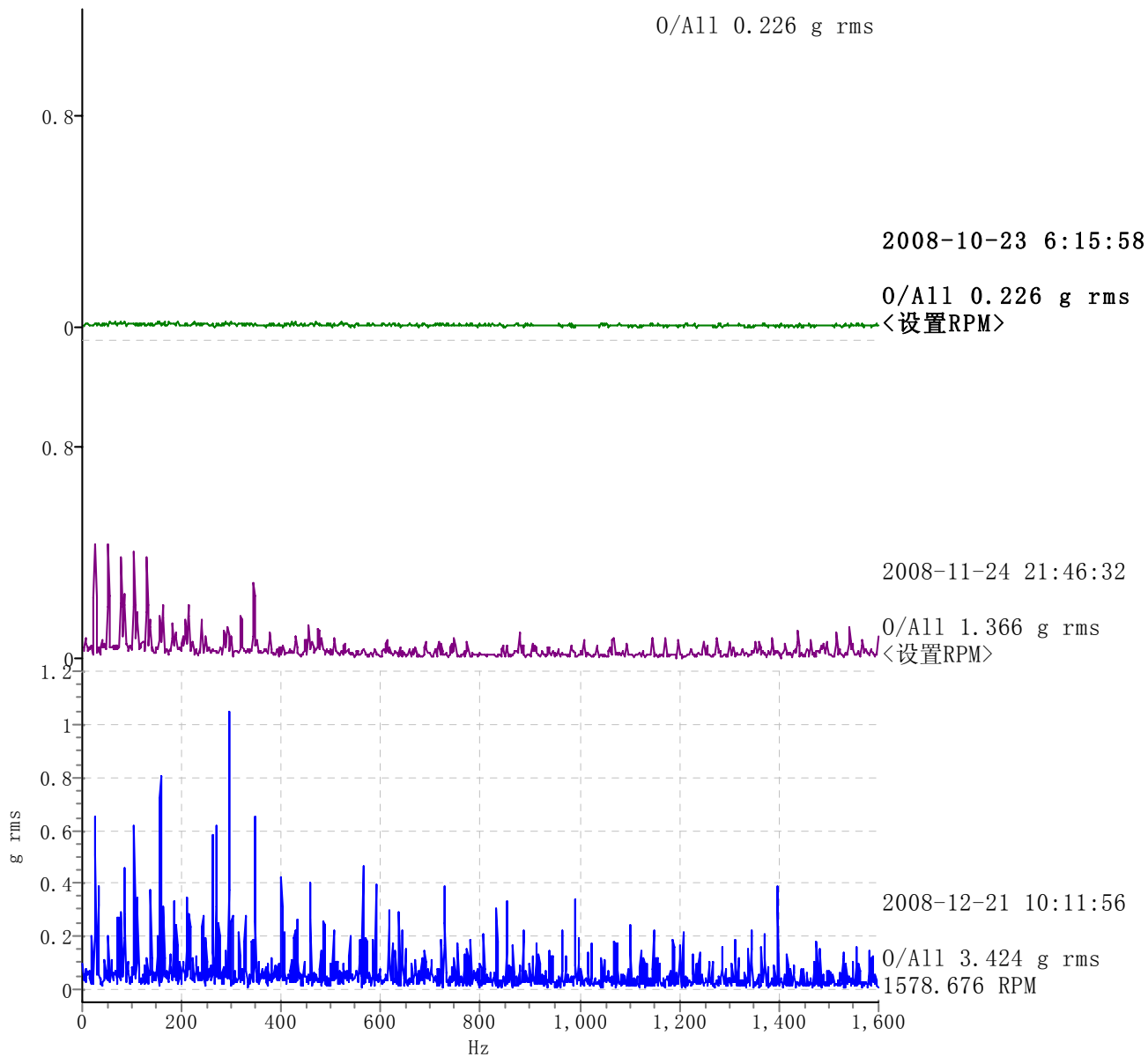
2008-10-23 4:14:23 2008-11-5 4:15:19 2008-11-24 21:46:32 2008-12-8 0:48:04

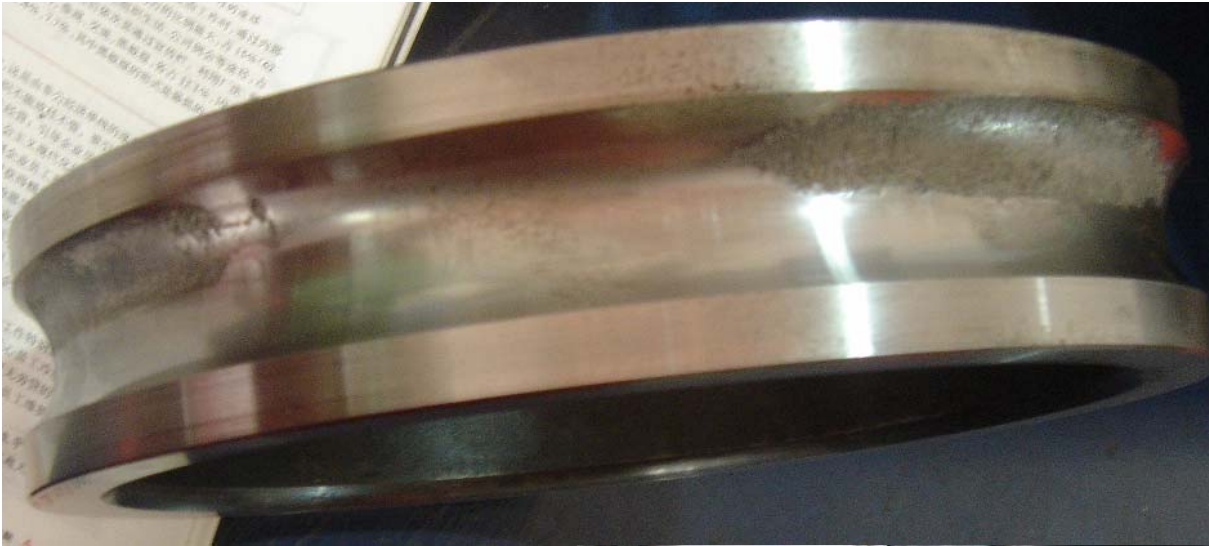
解调 Spec (2-20kHz) 1600 Hz Demod Spectrum Overalls

没有显示 - 点击这里查看

吐丝机组 - A70 - Horizontal - 解调 Spec (2-20kHz) 1600 Hz

0/All 0.226 g rms





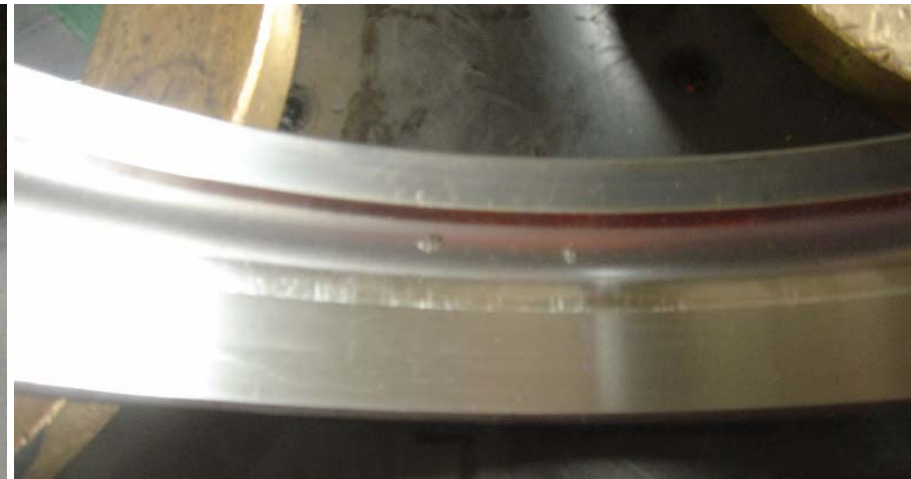
2个月后拆机检



2个月后拆机检



2个月后拆机检



待续：
检修前约两个月及检修后数
进一步分析
总结