

ROHM AND HAAS (UK) LIMITED



TYNESIDE WORKS, JARROW, TYNE & WEAR NE32 3DJ.
TELEPHONE 0191-489 8181 FACSIMILE 0191-489 8520

Our Reference: PPW/JM

12th June, 1998

S. Ferry,
Efftek,
Business & Innovation Centre,
Wearfield,
Sunderland,
Tyne and Wear,
SR5 2TA.

Dear Mr. Ferry,

I would like to thank you for the last 12 months of service you have given us here at Rohm and Haas, Jarrow.

Initially we had a problem with high levels of rotating equipment failure. These caused unplanned production delays due to lack of equipment availability. We knew we needed to implement a predictive maintenance strategy for all our critical pieces of rotating equipment. After interviewing a series of suppliers we chose Efftek.

Since then you have implemented a vibration analysis, predictive maintenance programme here at Jarrow. The programme became well established in a very short period of time and after 12 months I believe we have seen a real improvement. To support this we can look at one of our plants that we took data points 12 months apart. Efftek undertook their 1st survey of this plant in 1997 prior to a plant shutdown and found 37% of machines requiring attention. In 1998 this figure had dropped to 1%.

Based on the proactive relationship we have developed with Efftek over the last 12 months I would have no hesitation in recommending Efftek to any other professionals.

Yours sincerely,
for ROHM AND HAAS (UK) LIMITED

P.P. Wrigley
B.Eng. C. Eng. M.I.Mech.E.
Site Engineering Manager

Steve Ferry

From: Stewart, Iain[SMTP:istewart@uk.terrainindustries.com]
Sent: 25 November 1999 15:16
To: 'Steve Ferry'
Subject: Testimonial

Dear Steve

You asked me to comment on the level of service you provide to Terra Nitrogen. I am happy to make the following statements.

The vibration analysis work that you do for Terra is excellent quality and is clear in its presentation. For years we used to monitor machines but not really have the first idea what we were looking at. The way your system presents the most recent reading and some historical reading allows me to put the most recent reading into context.

Your conduct on plant is a real strength. You are able to get along with the process team whilst at the same time get them to operate to your benefit and get key information from them.

The monthly reports on email are a huge step forward. This allows me to take action immediately rather than wait a week while the report is posted and sent to Eutech then checked and commented upon before I finally get my hands on it. What seems to be forgotten with vibration analysis is that just doing the analysis is not enough it is only half the story. Action needs to be taken in a timely fashion on the information in the report and only then is it worth doing the analysis as we may be able to prevent the more serious failures. The email reports are clear, easy to open on the screen and easy to file for future reference. I only wish that we had decided to go for it last year when you and I first discussed the idea!

You have had several successes at identifying imminent failures. The most memorable being the Cooper bearing on the fluid bed drier fan over on the fertiliser plant at Portrack. It is estimated that had the bearing failed, the lost production and repair costs would have been in excess of £360k. The fact that you were able to identify from the vibration readings that it was the inner race that was damaged was even more impressive - but we changed the complete bearing anyway! Well done!

Therefore, all in all, I value the service you provide on a regular basis and I'm glad we have the ability to call on you on an ad-hoc basis when we have got something a bit more special.

An excellent service at a sensible price. Long may it continue.

Iain Stewart
Engineering Manager
Nitrates and Fertilisers
Billingham



PW/JH

11th December 2000

Mr. S. Ferry
Efftek
Business & Innovation Centre
Wearfield
Sunderland
Tyne and Wear.
SR5 2TA

Dear Mr. Ferry,

Re: Efftek's Vibration Analysis Services to Rohm and Haas (UK) Limited 1997 - 2000

Rohm and Haas is a specialty chemical company with a \$6.5bn turnover operating with 23,000 employees in 25 countries.

Here at the Jarrow site we decided to implement a sitewide vibration analysis service due to high levels of rotating equipment failure. These caused unplanned production delays due to lack of equipment availability. After interviewing a series of suppliers we chose Efftek because of their proven expertise, independence from any hardware/software supplier and their willingness to tailor the implementation to suit our exact needs.

We started to use Efftek in April 1997 to carry out monthly condition monitoring visits. The programme became well established in a very short period of time and after 12 months we saw a real improvement. To support this we looked at one plant where we took data 12 months apart. Efftek undertook their first survey of this plant in April 1997 prior to a plant shutdown and found 37% of machines required attention. In April 1998 this figure had dropped to 1%.

We have had many successes in predicting bearing defects. In one of the largest, Efftek predicted a breakdown in our 250kW Chiller, and saved us an estimated £54k in lost production, hire costs and maintenance repair costs.

In April 1998, we appointed a condition monitoring technician from within our maintenance department. This was always our plan and Efftek were able to provide training on our site and at other client locations as well as identify suitable software courses.

Over a period of 12 months, Efftek ensured our technician was fully trained and were able to hand over the CM programme to Rohm and Haas. We still use Efftek for monthly support visits to ensure our technician continues to develop and to independently verify our vibration analysis. Efftek are able to supply us with remote monitoring sensors and are always available for advice on specialist applications.

The CM programme at Jarrow has been so successful that we have been able to improve our levels of planned work and discontinue the maintenance nightshift (January 2000) saving £105k p.a.

Based on the proactive relationship we have developed with Efftek over the last 3 years I would have no hesitation in recommending Efftek to any other professionals.

Yours sincerely,
For ROHM AND HAAS (UK) LIMITED



P Wray
BA, C Eng, M I Mech E
Maintenance Manager

COATING RESINS DEPARTMENT



REGISTERED TO BS 5750 PART 2 1987

To Whom it may concern,

13/02/03

We have used Efftek to carry out vibration analysis on this site since September 2000, and my only regret is that we did not use them before.

This is a 50 acre chemical site and carries hundreds of process pumps and various manufacturing plant of all descriptions.

Since using them we have found them to be very efficient and professional and due to their help in locating possible faults and weaknesses have managed to save many thousands of pounds.

Due to the manufacturing process systems we run on this site any breakdown experienced can cost upwards of £100,000.

I am glad to say that due to Efftek's help we are now able to plan shutdown work to alleviate some of the problems that we were experiencing during manufacture.

As the Maintenance Supervisor on site I have a duty to the management team here to inform them of any impending faults or breakdowns that we may experience.

Thankfully the way the reports are passed to myself from Efftek enable me to do this with minimal explanation.

On a personnel level I am sure that the use of Efftek's experience can only be of a benefit to any company.

Brian Beck (Maintenance Supervisor)

Cray Valley Ltd
Waterloo Works, Machen, Newport Gwent NP1 8YN
Telephone: 0633 440356. Fax: 0633 440006
Registered Office as above. Registration No: 342856





S.Ferry
Efftek
St. James House
Temple Sowerby
Cumbria
CA10 1RS

10/31/2006

Reference Predictive Maintenance/Vibration Monitoring Services to Syngenta

Dear Mr Ferry

Syngenta is a world-leading agribusiness committed to sustainable agriculture through innovative research and technology. The company is a leader in crop protection, and ranks third in the high-value commercial seeds market. Sales in 2005 were approximately \$8.1 billion. Syngenta employs more than 19,000 people in over 90 countries.

Here at the Huddersfield Manufacturing site we have a wide Variety of chemical manufacturing plants with a multitude of different types of rotating equipment. A decision was made approximately 3 years ago to implement a site wide vibration monitoring analysis service on all critical/production limiting equipment, to minimise unplanned production delays. The individual site plants already had experience of several different condition monitoring suppliers but Efftek were chosen to carry out the work in alliance with our pump repair/supply contractor.

The vibration analysis work that you have carried out for the Huddersfield Manufacturing Centre is of excellent quality and is clear in its presentation. Your conduct on plant has been exemplary with your ability to organise visits independently with the various plants and your communication with the chemical plant technicians been a real strength.

An excellent example of the success of this style of predictive maintenance is on one of our older assets where sales of the plants product took a massive rise unexpectedly and engineering availability suddenly became key issues with targets of 95%+ required. Using newly introduced Overall Equipment Effectiveness measurement techniques to monitor pump and agitator drive system performances we could prove and visually display the effects of the vibration analysis work introduced at this time . To a point today where we have had no breakdown failures of this type of equipment that has effected production over the last 12 months and all work can be planned in advance

I would have no hesitation in recommending Efftek to any other professionals

Yours Sincerely,

Ian. Tyreman B Eng (Hons) L inst MC
Reliability Engineer

