

THE IVATT INFORMER

Recording progress with LMS 10000

As our regular working days come to a close until the New Year, I would like to wish all of you a Merry Xmas and a Happy New Year. Thanks to those of you that have come along and worked on the workshop itself, and on the many parts that we have collected over the year. It's really good to see the progress we have made over the past 12 months, and I'm looking forward to the plans we have for next year.

Thanks, Tony

In a separate email you will find our request for additional volunteers with financial and fundraising experience.

74 years ago this month 10000 appeared from Derby Works. By its 75th anniversary we will have built on the great work done despite the challenges of the pandemic, and should have some good progress to show visitors.

2022 promises to be another bumper year for the Society with a lot of opportunities to move forward and progress construction of the locomotive. Even though regular working days at Centenary Works have finished for a couple of weeks over Christmas and New Year, work continues, and we have already been there twice this week to drop off more vital and useful items that we have obtained. More news will follow in due time!

Our video review of 2021 can be found on Youtube: https://youtu.be/lxW__F7IM-8



DATES FOR YOUR CALENDAR

April 22 - 24: Centenary Works Open Days - EVR Diesel Gala featuring Deltic 55019

August 5-7: Centenary Works Open Days - EVR Diesel Gala

October 8th - Annual General Meeting - Online and at the Wirksworth Memorial Hall



On the 3rd, Mick wrote:

Spent a few very cold hours in the works yesterday but fortunately the snow had all gone. Got on with the Exhauster doing a detailed survey of the rotor measuring the bearing journals and all the vanes and assessing the wear already sustained by them, and although they are within the wear limitation tolerance their running time is an unknown so replacements will have to be sourced. I have found a company that manufactures new vanes in modern materials so I'll contact them in due course. My intention yesterday was to do a dry build of the vacuum unit to check the rotor to casing clearances but the components were so cold my hands went numb just doing the rotor measurements so I got on with doing a bit of cleaning and degreasing. Eventually got too cold despite having the space heater on, so had an early finish and went home early afternoon. We'll see what next week brings.



The exhausters have a single shaft running all the way through, with the motor armature on one end and the vanes that create the vacuum on the other. The grooves in the picture above hold the vanes. These will all be replaced before reassembly.

On the 10th Bernard sorted out a lot of scrap pipework, separating the brass from the copper before it goes for scrap, as seen below. Bob cleaned some more of the cab heater box bits, while Tony did some maintenance on the rear guttering and rewrapped the bogies so that we won't get such deep pools of water gathering in the tarpaulins.



On the 8th Mick reported:

A few more very cold (6 degrees) hours in the works yesterday doing a dry build on the first exhauster. It was hard going fitting the bearings to the shaft with everything being so cold, I warmed the bearings up a little and it made them easier to fit but they'd still tightened up before being fully home, but the bearing rollers were located in the races sufficiently for me to assemble the vacuum unit and take some feeler and DTI readings of the rotor running clearances.

Using 12" feelers I was able to feed a 0.002" blade into the rotor - casing gap then slowly turn the shaft to draw the feeler blade in to measure the running clearance, as the 0.002" feeler was only drawn in about half an inch this would indicate that there is a clearance of 0.0015" at BDC between casing and rotor. The mag base and DTI measured the running clearance of the rotor within the sealed vacuum casing.

At this temperature the clearances were in spec at 0.0015" for the rotor to casing clearance and 0.012" of end float. In a running condition the rotor is fixed laterally by the ball bearing so it does not float at all, but we now know what the running clearances are. Provided that the coefficient of expansion of the steel rotor and cast steel casing are the same then the recorded clearances are fine and should produce a good vacuum unit once it's rebuilt with new vanes, bearings and seals. Thank you Tony for assisting me with the build.





On the 15th Mick updated:

We worked a few hours in the works yesterday and started degreasing and cleaning up the exhauster components ready for painting, but as Christmas is looming spending time away from home at the works although in good company might not go down too well. So with Tony's permission I've taken some of the cast components home to clean and paint in slow time over the Christmas break, a couple of hours here and there in my garage (get my drift fellers) to get me away from the box (TV to our younger members), food and drink will do me more good than harm.

I had a walk to look at the 58 with Tony and Alan and it makes my work on the exhausters pale into insignificance, can't wait to get started on it though, a great sobering up challenge in the New Year.

Happy Christmas and a great New Year to you all, here's to continuing success with our project - cheers!



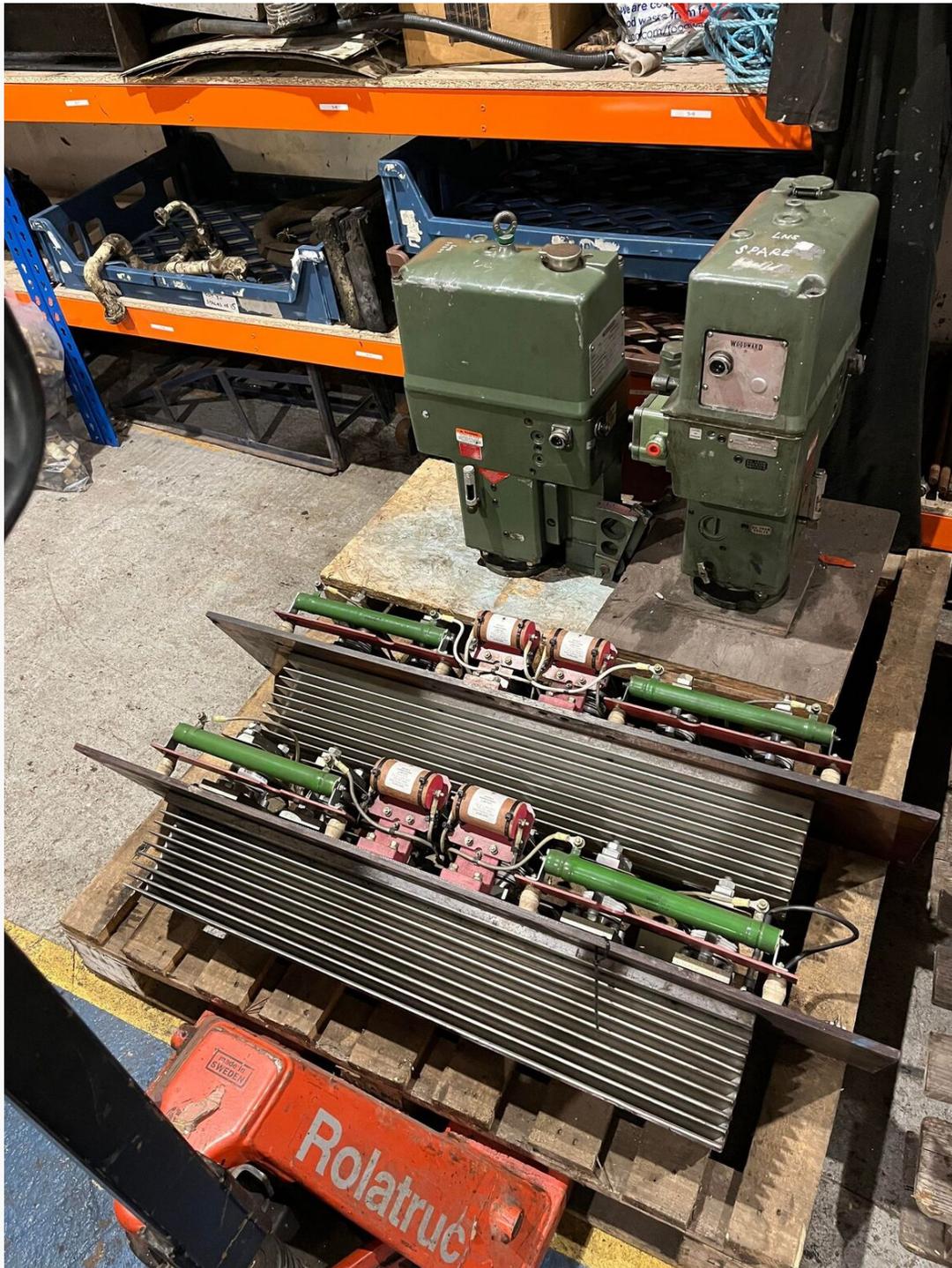


On the 15th Paul has this to say:

The new beam for the works lifting frame is all drilled ready for fitment...

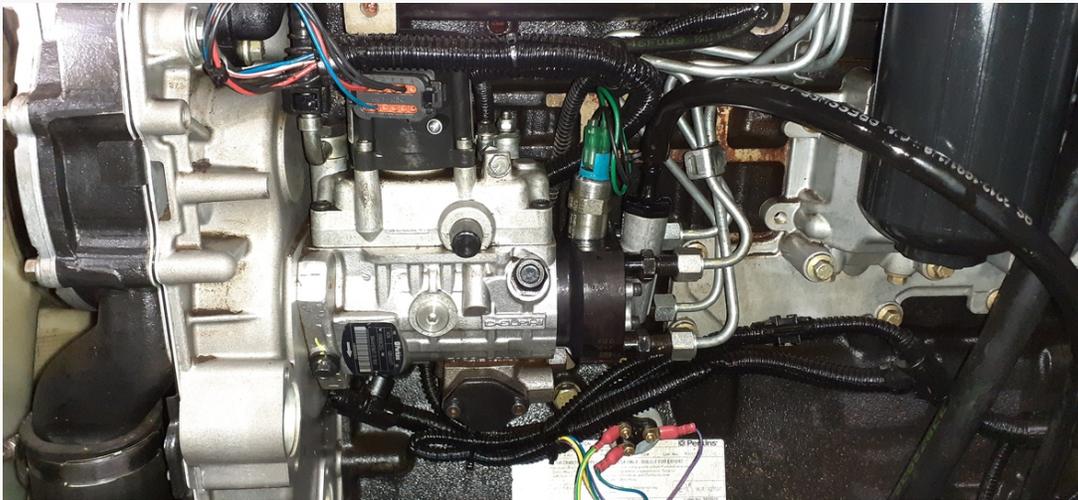


.... an overhauled rectifier and start contactors have been obtained and collected. The governor has been set up correctly for our engine and is back at the works, along with a spare.....



Aside from that Phil, Tony and I threw the full nine yards at the generator today, [it was donated specifically to be sold to raise funds]. We had to decide whether to sell it on as it was, or try to get it working and effectively double its value. Although it isn't quite working yet, it isn't far off. We have eradicated lots of possibilities, but the tank is still full of dirt after flood damage. Phil's mate works on these all the time as a job and he is going to come on Wednesday after Christmas to give us some support.. So the tank is empty, and it has been jacked it up on one side to allow the effluent to go to where I can get at it. Another washout is required.

The generator is seen, below, when delivered in August along with the two ex Deltic steam heating boilers.



Other news.....

We have been in touch with our friends at Werkgroep 1501 about a large quantity of EM2 bogie spares they have available. They are having some issues with their accommodation at the moment, so access to the spares is difficult, but they are safe and dry, and we are confident we will be able out arrange the purchase of some or all of these items in due course.

A 'last look' at 58022 in the snowy siding on the 5th. Photo by James Hartley.



©2021 Ivatt Diesel Recreation Society | 46 Biddick Village Centre, Washington, NE38 7NP

[Web Version](#)

[Forward](#)

[Unsubscribe](#)

Powered by
[GoDaddy Email Marketing](#)®