

## **BENEFITS OF CHOOSING BENCE**

# Hybrid

- Fuel saving costs are currently approximately £1.80 per litre, standard generator uses approx. 1,000 litres every two to three weeks = up to £46,000 per annum. The savings provided by using the hybrid system would be circa £18,000 per annum depending on usage of the smaller backup generator.
- Flexibility with mains plug ins as with the Hybrid system, only a 16amp plug is required, meaning it can be plugged in anywhere without specialist high voltage supply. Currently all mobile units require 63amp single or three-phase supply, but the hybrid system removes this requirement.
- Reduce service costs. As the generator requires servicing every 250 hours, the reduced run time achieved with the hybrid system means that less additional call out services would be required if running on generator only. Currently each generator service is approximately £650.00 per visit and is required every three weeks if running solely on generator. The annual additional cost would be £11,050.00. We estimate the hybrid system would halve these costs due to the reduced run time.
- Reduced emissions
- Reduced noise pollution The challenges of using generator all day is that the noise (although minimal) can sometimes cause issues in the mobile environment. By using the hybrid system, the batteries could be used during screening time, with these being topped up overnight/during breaks/as and when required by the onboard generator or local 16amp supply.
- Using modern technology helping to stabilise the power. The predominant power supply for the trailer will be the bespoke battery bank which provides stable and unfluctuating current which sometimes occurs with generator power. The battery system acts as an inline UPS providing stability to the power and protection to the equipment which will help to reduce potential downtime due to power spikes. This smart system is also able to monitor incoming power and provide alerts to any issue while still allowing screening to continue. We understand the pressures the screening services are under to meet round times and with this type of technology we aim to reduce downtime significantly.

# **Telematics/Remote monitoring**

Power incl. mains, battery and generator – some of the remote sites used for screening can have different standards of electrical installation. The Bence telematics system is able to monitor the stability of the voltage and record any power surges occurring from the local power supply. This protects the Trust in case of any damage due to unstable power on the sites. We also include phase rotation protection, as many of the sites are not NHS registered the electrical installations may be of an older generation and the



trailer can protect itself from incorrect power supplies by blocking any issues found with the incoming supply. The generator auto-start will activate in the event of a power outage, meaning that manual changeover is not required and so provides protection to the system out of hours/when the unit is vacant. The generator start is also monitored so the service team could be deployed if necessary to check the power loss.

If the integrated hybrid system is taken, both when the unit is in operation and when left unattended, the battery levels will be monitored and can alert your service provider if they drop below the expected levels. The system has a generator auto-start facility so if the batteries require topping up at any point, the generator will auto start to protect the battery levels.

Temperature – with the sensitivity of the modern digital mammography equipment, it is critical that the trailer temperature is monitored and controlled. Each of the interior rooms has a temperature sensor which records the temperature on a daily basis. These sensors are set with the expected equipment parameters and will alert the staff and your service partners should this fall out of scope. This temperature recording also provides the Trust an element of accountability should the equipment manufacturers state that the equipment has been outside of an expected temperature range. The Trust will have full records showing the ranges of temperatures during any period.

During the colder months, should the temperature fall below 15°C, the remote monitoring system will send a signal to the auxiliary heating system to activate to protect the sensitive mammography equipment. Once within temperature range, this will automatically switch off. In addition, this will be recorded to allow further investigation as to why this occurred.

- Security Bence include as standard a security system with PIR sensors along with window, door and locker door alerts. The aim of the system is to protect the trailer when left unattended, the remote system can be configured to provide an alert (either SMS or email) to a nominated member of staff or local security or site representative. There is also the option of having the latest CCTV solution from Bence which can include remote access to review live camera footage. If required, they can contact their service partner, Bence, to disarm the alert in case of accidental activation.
- Water Tanks Many of the remote locations may not have water available from a mains supply. With this in mind, Bence can provide a variety of water tank sizes to suit your daily use. The remote monitoring system allows both the Trust and Bence to monitor water levels to allow refilling/emptying to happen in a timely manner. Bence can offer the refilling service, along with waste water collection and this could potentially be done remotely without input from Trust staff if agreed in advance.
- Fuel with the challenges of getting fuel delivered to remote locations, Bence design their fuel tanks to meet minimum fuel drops for the majority of UK fuel delivery companies. The fuel tanks as standard are around 1,100 litres, which provides sufficient fuel for a minimum of 2 to 3 weeks depending on usage. The fuel tanks are fitted with



level sensors which will alert the staff and Bence if the fuel levels are running low. The alert can also be used in a different way as we are able to set certain fuel levels to activate automated refuelling from Bence or a Trust fuel partner. This helps to reduce any opportunity for the generator running out of fuel and impacting on your screening time.

Out of hours support – one of the key parts of the Bence offer is our 24/7 service and support. The Bence service team have been working in the mobile medical market for over 20 years and currently provide support to over 200 mobile medical vehicles across the UK and Ireland. This service was designed to offer day to day support as well as out of hours protection. The development of the remote monitoring system was incorporated to alert the service team out of hours so they are able to attend and have the system up and running ready for each day's screening. This support requires no action from any Trust representative and as part of our SLA we will attend site within 4-6 hours (depending on location) if this cannot be rectified remotely.

We are able to, in many cases, access the trailer remotely and this can on some occasions rectify the issue without engineer onsite presence. We are able to look at alerts and check temperatures.

The remote access also allows a greater level of problem diagnoses before attendance, making sure the engineer is able to attend with the necessary parts/tools where possible to complete a fix during his first visit. This again helps to reduce down time and service costs by reducing the number of visits required.

### Transport

- Experience Bence have over 20 years of specialist vehicle transportation experience across UK, Ireland and Europe. The drivers go through rigorous training to understanding the sensitive nature of the products they are delivering. This includes training on the variety of trailers we deliver from small mobile clinics through to large 44Tonne operating theatres. The drivers are provided with the latest tractors units, reducing emissions caused by each move. The drivers understand the sensitive nature of the equipment and how they are required to be set up to provide a stable working environment.
- Insurance many transportation companies do not understand the true value of the medical trailers they are towing. They use standard insurance policies around the Road Haulage Association's (RHA) cost per tonne at £xxxx. This leaves the Trust uninsured and liable to cover the variation between the insured value and the actual product value. This could be as much as £80,000 to £100,000, depending on the cost of the medical equipment installed. Bence have a bespoke insurance policy for moving specialist medical equipment which provides our customers' protection for the full trailer and its equipment value.
- Repair capability although wherever possible we try to never damage customers' property, unfortunately accidents do happen. Bence have the ability to repair trailers



quickly, reducing any chance of downtime due to transportation damage. Bence would be able to carry out this repair without needing consultation time with independent insurance assessors as this could be carried out at the Bence factory almost immediately where possible.

## Training

- Why we do this Bence provide training for all new trailers around the time of delivery. The training benefits both the Trust and Bence as we are able to share our wealth of experience with the Trust team, allowing them to fully understand the capability of the trailer and feel comfortable with all aspects. By providing a detailed level of training, the staff are able to communicate with the Bence service team providing information to aid diagnosis of faults. This helps to reduce unnecessary service visits and down time, as well as providing staff with a level of confidence in this new working environment. The training covers all key aspects of the new vehicle and we can provide a training syllabus detailing all parts if required. In addition, a manual is provided both in hard and soft copies. These would be utilised during the training sessions for reference.
- How much does it cost training is provided FOC as part of the purchase price as we feel it is a joint venture when buying a Bence trailer and we will work together throughout the service and support period to want to make sure the staff are happy and understand the product we have given you. The training is designed to help reduce issues and potential misuse which affects both Bence and the Trust and helps to create a better working relationship. Bence estimate the cost savings on this to be approximately £685.00.
- How long does it take the training, depending on numbers, is around 4 6 hours as an initial provision. This can be done as either a "train the trainer" or we can offer a training session for up to 12 people at any one time. We understand that this can be challenging to get your staff together in one place in a busy department so this is the reason for offering the "train the trainer" option.
- Where does this take place the training is done on trailer delivery to your local region and we hope to be able to carry the training out on the same day as delivery to make sure that staff are fully aware of how the trailer operates before use. By carrying this out on the delivery date, this allows the opportunity for any staff who need to understand how the setting up and connection of utilities is done.
- New staff Bence understand that staff change and move on and so we can offer as part of our service provision additional training days when we are carrying out on site services. This doe require the Trust to take up the Bence service contract to allow servicing to happen during the working day but in exchange free of charge training can be offered during these service periods. This would be a cost saving of approximately £685.00 per session.



## DEOS

- Secure Image transfer Bence have partnered with DEOS with input from various Trusts across the UK to create a 4G encrypted image transfer solution. The latest DEOS systems provide live work lists access, live access to NBSS and image transfer back to the Trust PACS. It also provides a resilient way to that images are into PACS on a daily basis with an encrypted link to PACS showing that images have arrived, including the time and date stamped
- Reduced costs- no need for staff to leave the trailer to travel to the Trust premises with printed documentation on a daily basis meaning more time for screening, less fuel, less paperwork. There is also the opportunity for less staff costs with the ability to access patient lists and update appointment times as necessary.