

## SEVEN BRO7HERS

BREWING CO.

Seven Bro7hers Brewing Co is a craft brewery formed by seven brothers from Salford, near Manchester. Although established in 2014, the brothers' passion for brewing beer stems back many years.

Today the company currently produces more than 6,000 litres of beer a day and has been using Calor LPG for four years.

The brewing process is a complex one and requires precise control when it comes to the temperatures needed to extract the very best from the ingredients used. Producing a wide range of beers, from IPA, stout, pilsner and lager, Seven Bro7hers Brewing Co required a reliable fuel supply that was able to keep up with the demands of its business, but also one which could offer the team full control in order to adapt to the precise stages of the brewing process.

**Customer:** Seven Bro7hers Brewing Co

**Application:** Calor LPG used through the

business' brewing processes

**Location:** Salford, Manchester

## **Project highlights:**

- Working with Calor since 2014, Seven Bro7hers Brewing Co uses Calor LPG to produce 6,000 litres of beer daily.
- With the brewing process requiring precise control when it comes to temperature, Seven Bro7hers Brewing Co needed a reliable fuel source.
- With plans to expand its operations, Seven Bro7hers Brewing Co is working alongside Calor to support the business' growth plans.



specify its LPG:

The building we're in at present isn't one that was designed specifically for brewing beer, but has been converted to do so. So, while this means we've been able to make modifications to support our business needs, the building itself doesn't have the services or infrastructure in place to support the supply of natural gas, which meant this wasn't an option for us. Needing a fuel supply versatile enough to cope with all aspects of brewing, we then began scoping out alternatives. It was here where we got in touch with Calor, who were able to support our business through the supply of LPG.



Seven Bro7hers Brewing Co was able to work alongside its dedicated field sales professional at Calor to ensure the business was able to access a fuel source which met the bespoke requirements of its business. As a result, Calor was able to install two LPG bulk tanks on site at Seven Bro7hers Brewing Co, which supplies the brewery with the 25,000 litres of LPG that it used in 2020. The solution is a 'fit-and-forget' for Seven Bro7hers Brewing Co, as it uses Calor's telemetry technology¹ to monitor the business' LPG usage and automatically schedules the next delivery when levels are low. This means the business can concentrate on other areas of production, knowing that it has a reliable fuel supply for its brewing process.

Dan McAvoy adds: "Since 2014, our business has expanded significantly, to a point where we are now brewing 6,000 litres a day. This growth has in turn meant we've also required more fuel. This has meant we've really needed to lean on the support provided by Calor, and they've really stepped up to the mark to ensure we have the supply we need when we need it. Thanks to the telemetry system, ordering deliveries has been automated and causes no disruption on site. In fact, the only way I know we've had a delivery is when the invoice arrives on my desk."



## A recipe for success

The LPG used by Seven Bro7hers Brewing Co is predominantly used for powering its steam boiler, which, at two metres tall and one metre in diameter, is the heartbeat of the business.

Dan McAvoy says: "The steam generated by our steam boiler is used at almost every stage of the brewing process. To put it simply if we don't have fuel, we don't have steam, and if we don't have steam, we can't make beer. So, we need an incredibly reliable fuel supply which we have with Calor's LPG."

The business currently uses three vessels; all of which require steam jackets, meaning it has seen an increase in demand for the LPG it requires over the last 12 months alone. These vessels include a hot liquor tank, which stores 3,000 litres of hot water, and a mash tun; where 25kg bags of malt are delivered by the tonne. Here, the heated hot water is then added to the mash tun to separate the grain to produce wort - the natural sugar used to make alcohol. After this process has taken place, the wort is transferred to a copper tank, where again steam is used to boil the wort to  $100^{\circ}$ C to remove any impurities. It is only then that the hops, flavourings and other ingredients needed to make the specific beer are added.

And the process goes full circle too, as once the brewing is complete, the hot liquid is then pushed through a heat exchanger, which transfers the heat to reduce the temperature of the beer to around

25°C. Here, the now heated mains water is pumped back into the hot liquor tank, recovering some of the heat back into the start of the process. This not only improves the efficiency of the brewing process itself, but it's also more sustainable too as subsequently the boiler isn't having to work as hard to reach the required temperature of 80°C, which means the business can be more efficient with its use of LPG.

Responsible for supporting Seven Bro7hers Brewing Co, Chris Teasdale is the business' Field Sales Professional at Calor. He adds: "The brewing process is really complex, and temperature control plays a huge part of this. Calor LPG was the ideal solution for Seven Bro7hers Brewing Co, as it not only offers the versatile power needed for steaming and boiling, but it's also an efficient and cost-effective solution too.

Bro7hers Brewing Co for a number of years now, we've seen the business go from strength-to-strength. By using Calor LPG, the business has also been able to take advantage of a fuel supply that can meet the changing demands of the business, via our telemetry service, which has automated the refuelling process, meaning Seven Bro7hers Brewing Co has been able to concentrate on what they do best – brewing beer.



## Sustainability comes full circle

When it comes to sustainability, Seven Bro7hers Brewing Co is continually investing in ways to make its processes as efficient as possible and has even partnered with Kellogg's. Having recently signed a 10-year contract with the cereal producer, Seven Bro7hers Brewing Co takes Kellogg's unwanted grain and uses it to make beer. This initiative alone has seen the business reduce its grain bill by a third, but more importantly it means that grain which would have otherwise gone to landfill is used in three of its beers.

Danny added: "As a business, sustainability is a huge part of what we do, and we're constantly looking at the ways we can use and reuse the elements from across the brewing process, so for example in the case of Kellogg's, once we've completed the brewing process, the leftover grain is then supplied to a nearby farm as food for livestock, it really is a fully sustainable cycle.

Mirroring Seven Bro7hers Brewing Co sustainable goals, Calor is aiming to offer all its customers 100% renewable energy solutions by  $2040^2$ , through such sustainable fuels as BioLPG. Chemically identical to LPG, it is made from a blend of waste, residues and sustainably sourced materials, allowing customers to reduce carbon emission by up to 15% compared to standard LPG $^3$ .

Looking ahead, the Seven Bro7hers Brewing Co is working alongside Calor to not only re-site one of its current LPG tanks, in order for the business to expand its current footprint, but also at how the businesses can work in partnership to further support Seven Bro7hers Brewing Co's ambitious growth plans.



- 1 A telemetry unit will need to be installed by Calor, for the purpose of enabling Calor to remotely measure the quantity of LPG contained within the bulk tank(s) and schedule deliveries accordingly. Subject to the telemetry unit being able to receive signal. Direct-debit payment plan required.
- 2 Alongside Calor's parent company, SHV Energy, Calor's ambition is for 100% of their energy products to be produced from renewable sources by 2040. SHV Energy brings BioLPG to Europe (SHV Energy, 2018). 3 www.calor.cc.uk/biolog



