

# Massenza drilling rig for Igne's geothermal project

Italian drilling rig manufacturer Massenza has recently been involved in an exciting geothermal project in the UK as the rig supplier to drilling contractor Igne, as Massenza's CEO Matteo Massenza explains

**A**t Massenza we are doing our best to encourage change for the better. We are very focused and aware of the importance the geothermal sector can have in terms of lessening the impact heating and cooling has on the environment, but also the benefits in terms of cost savings to the end user. It is a growing area of the drilling industry and we are very much at the forefront of its continued development.

Massenza can offer a wide range of drilling rigs for geothermal use, from small 2t compact units, to powerful 60t machines, either on tracks or truck-mounted, which can reach depths of up to 1600m. It is our aim to play our part in providing the largest possible accessibility to the Earth's geothermal energy to provide sustainable heating and cooling.

## SPECIAL PROJECT

A very special geothermal project that Massenza Drilling Rigs have been involved with is being carried out by a UK customer, Igne, on behalf of SSE Energy Solutions at the University of Warwick. The works, using a Massenza Mi40 tracked drilling rig, entails conducting test drilling to 350m at two different locations within the university's campus. Rigorous geophysical testing and test pumping will ascertain the feasibility of implementing a scheme to harness ground source heat pumps to deliver sustainable heating to the university.

Igne has extensive experience and expertise in carrying out geothermal energy projects such as this, even in the most challenging geological conditions.

## BESPOKE BUILD

The Massenza Mi40 machine used for this project was bespoke to Igne requirements and the specification was finalised during a visit by Igne team members to the Massenza factory, in Fidenza, Italy, and was the centre piece on display at Massenza's stand at the international trade fair, Geofluid 2023, in Piacenza, Italy, before being delivered to Igne in October 2023.

This following is a summary of this machine's unique specifications

- Crawler mounted
- FPT/IVECO brand model engine C87 305kW (409hp) at 2100rpm – Stage-V
- Mast capacity max 40t – stroke 8.40m
- More than 13m from the top clamp up to the bottom of the travelling block
- Pull-up max 380kN – Pull-down max 206kN
- Massenza rotary head: Pull back capacity 50t – Max torque 23,500Nm
- Massenza double hydraulic clamp: Max passage diameter 520mm (20.5in) – for any drill pipes and casings up to 508mm (20in)
- Massenza mud pump 7-1/2 x 8in: Capacity max 2240 l/min (592 US gal/min) – Pressure max 20 Bar (290psi)
- Automatic rods charger for 6m rods
- Extra accessories: washing system, generator-welder, hydraulic power take-off

Massenza has supplied drilling rigs into the UK for almost 20 years working alongside our dealer, Rockbit UK, throughout this time. Having a reliable and dedicated partner within a sales territory is so important for maintaining good

customer service and satisfaction by providing timely site support, spare parts and technical help and advice. We have many dealers around the world, ready to support you in your Massenza rig purchase.

## CUSTOMISED RIGS

Our strength is our ability to customise a drill rig for every need and site. Even the colour, as Igne did in this instance, to match its new company colours of green and gold. Furthermore, designing key parts of the rig in-house, such as the rotary head, mud pump and double clamp, allows us to guarantee high-quality standards, speed of service and, above all, Massenza's reliability and experience.

This project signifies a very important step in the global transition towards cleaner energy sources and with our rig in the forefront, we cannot wait for the next one. ♥

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*Italian manufacturer Massenza supplied a bespoke-specification Mi40 rig to Igne for a geothermal project in the UK*