Dynapac delivers a vital new tool for biker safety at the TT races

Dynapac PL 350T cold planer speeds up critical demarcation work required for the Isle of Man's TT motorcycle races.

A new Dynapac PL 350T cold planer was recently delivered to remove the road markings in the Isle of Man in readiness for the famous TT motorcycle races. Featuring a larger drum, diameter with a standard bit system, the Dynapac bits lasted up to four times longer than competitive drums in the past requiring mini-bits.

As the home of the world famous TT motorcycle races, the Isle of Man has more than its fair share of road markings.

For two weeks every year in June, the eyes of the world turn to the island – with a population of 80,000 and in the very middle of the Irish Sea between the UK mainland and Ireland – as the finest road racers on the planet pit their skills against the 37 miles of public roads that form the legendary TT mountain circuit.

The TT fortnight, which attracts around 40,000 visitors each year, takes months of meticulous planning, and not least by the island's Department of Transport, both in securing the route for bikes, which thunder through the tiny villages at speeds of 190mph, and in ensuring the safety of both riders and spectators.

House-fronts, walls, lamp-posts and safety barriers are all protected with air fencing and roundabouts are removed. Inevitably, ever-more stringent health and safety measures are introduced to the event, requiring a continuous evolution of the circuit.

The route for the riders must be crystal clear at all times, because at the speed they're going, there's no time for any indecision. So when the markings need to be removed, it's essential that a completely smooth surface remains, posing no danger to the bikers.

The three-wheeled planer can be easily manoeuvred and is very flexible. For flash cutting along walls or curbs, the right-supporting wheel can easily be folded in, and the machine is even suitable for use inside buildings.

The Isle of Man machine is equipped with a special micro milling drum which contains 117 bits, compared to the standard 38, spaced at intervals of 3mm as opposed to the conventional 12mm.

“For demarcation work a micro milling drum is essential,” explained Dynapac technician Marco Dahms, who visited the island to provide training in using the machine for the Department of Transport’s maintenance team. “The main aim is to completely avoid damaging the asphalt or concrete pavement.”

In addition, to avoid a sharp edge at the sides of the demarcation area, the drum is slightly offset by 1 or 2 mm at the edges – although very flat across its 30 cm surface. This is essential in avoiding any danger to the high-speed bikes.

“Another important feature, and a real benefit on the PL 350 T, is that because of the larger drum diameter, standard bit holder blocks can be used,” Mr Dahms added. “Other drums with smaller diameters cannot accommodate the standard bit system, which means the Dynapac bits last approximately four times longer than competing drums which always have to use the mini-bits.”

The Dynapac’s additional 600 kg of ballast on top of the cutter housing ensures the minimum vibration during milling operations and a much smother and uniform result.

“We have been using standard blasting equipment to remove road markings up to now, but this was a highly manual operation, and at best we were able to remove a stretch of just a few metres in a single day,” said Department of Transport Engineering Works assistant engineer Kerrin Wells. “We were very impressed with the initial trials of the machine, and look forward to greatly improving the standard of lining removal and renewal. We plan to use the machine on a stretch of the TT course immediately after this year’s event is over.”

The PL 350T cold planer is powered by a Cummins 45 kW diesel engine, together with a 117 litre fuel tank and a 285 litre water tank and provides a cutting radius of 100 mm.

Dynapac is part of the Atlas Copco Group within the Atlas Copco Road Construction Equipment division. We are experts on asphalt, soil and concrete applications, committed to customer performance worldwide. Products and solutions are marketed under the Dynapac brand and complementary brands. Headquartered in Stockholm, Sweden, the division has production facilities in Europe, USA, South America and Asia. For more information, visit www.dynapac.com