



WEIGHING in at 40 tonnes each, these two fabrications manufactured by AK Heavy Engineering in Sheffield, will be playing a crucial, if unseen role, at the new Wembley Stadium now under construction in north London and due to open in two years' time. They are the bearing blocks on which the most striking visual feature of the new stadium, a massive 133-metre high steel arch, will stand.

The structure will span the whole stadium and support the north roof and 60% of the weight of the south roof, which will be retractable to allow sunlight and fresh air to reach the grass. At 315-metres long, it will be the longest single roof structure in the world.

The bearing blocks, designed by consulting engineers, Bennett Associates in Rotherham, are now being installed on site and have been designed to carry loads of 3,000 tonnes each when the arch is in place. They also have to rotate so that the arch, which will be fabricated and attached to the blocks on the ground, can be pivoted into its final vertical position. Once the roof is in position, the blocks will be welded to form a permanent rigid structure.

The steel fabrications are 3.5-metres high and incorporate 250mm-thick base plates and a number of fins and vertical plates up to 340 mm thick.

The pins on which the arch rotates are 400 mm in diameter and 1,400 mm long.