ABSTRACT

JIG FOR USE IN DETECTING ACCELERATION IN SHIELD BORING MACHINE

Provided is a jig for use in detecting acceleration, including a joining base portion (45) and a standing portion for mounting (46) housing an acceleration sensor (14) in the internal leading end portion thereof. At the attachment position of an acceleration detection bit (41, 42) in a front plate (43a) of a cutter spoke (43), the acceleration sensor (14) is fixed to the internal leading end portion of the standing portion (46) in a state where the orientation of the acceleration sensor (14) with respect to a bolt insertion hole (45a) of the joining base portion (45) is adjusted by a hexahedral shape of the acceleration sensor (14) and a quadrangular hollow cross-sectional shape of a sensor mounting portion (46g) such that the first direction for obtaining cutting vibration data by the acceleration sensor (14) is aligned with the circumferential direction when the acceleration detection bits (41, 42) rotationally move in conjunction with rotation of a cutterhead (13).

Figure 4.