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(57) Abstract :
The present invention relates to a portable device (100) for automated shaft alignment in rotating machinery. The device comprises a sensor module (110) with MEMS and laser sensors, an embedded processing unit (120) executing alignment algorithms, and a display interface (130) for real-time guidance. A wireless communication module (140) enables data transfer to external monitoring systems (150). Mounted via magnetic brackets (170), the device provides accurate, efficient, and portable alignment for motors, pumps, and turbines, reducing downtime and enhancing predictive maintenance capability.

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