

BONDING APPARATUS

ABSTRACT

A bonding apparatus includes: an ultrasonic horn configured to vibrate longitudinally in resonance with the vibration of an ultrasonic vibrator; a capillary attached at an anti-node of the vibration of the ultrasonic horn; a flange provided at a node of the vibration of the ultrasonic horn; a bonding arm; a load sensor attached between the center of rotation of the bonding arm and a flange mounting surface; and a vibration load detection unit for extracting a signal obtained by causing a signal that is detected with the load sensor to pass a signal within a frequency range around the vibrational frequency of the ultrasonic vibrator through a band-pass filter, whereby the bonding apparatus can detect the vibration load at a tip end of the capillary in the direction along the central axis of the ultrasonic horn with a simple structure.