

# The Research of Controller Preference Setting of Hobbing Machine - Taking FANUC as an Example

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## ABSTRACT

Gear is one of the widely-used transmission components. With the development of the technology, we value gear precision than before; therefore, the manufacturing method is very important. In manufacturing, hobbing machine, gear-shaping machine, and other machines are widely-used in the manufacture of various gears. Among them, hobbing machine is easy to set, efficient in production, and the quality of products is stable. After regrinding, the precision and quality of products are great, so the hobbing machine is widely-used. However, compare with other machines, hobbing machine is easy to shake when process due to the snatchy cutting in hobbing process. Therefore, in order to promote better stability when processing, the research focuses on the following: After the hobbing machine is assembled, in the preference setting process of FANUC controller and verification process of controller adjustment, we use Servo-Guide software to intercept Pass Error Messages from Motorserver Encoder to judge the speed gain of each axle and broadband adjustment. By doing this, we can control the effect of High Frequency Resonance.

Keywords : hobbing machine、 gear-shaping machine、 snatchy cutting、 speed gain

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