

Production Technology Development Department

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The major technical achievements of the Production Technology Development Department in 1997 are outlined below.

The Department has worked to develop "value-creating products" with the following three core policies:

1. Shorter development period
2. Cutting-edge development themes
3. Active participation of the Department

The Department's role is to develop key production technologies, such as:

1. Technology to protect the earth's environment
2. Technology to enable compactness and light-weight
3. Technology for withstanding the environment
4. Technology for developing new production systems
5. Technology for utilizing new materials

At present, we are focusing on developing key production technologies and production system construction technologies for our strategic products.

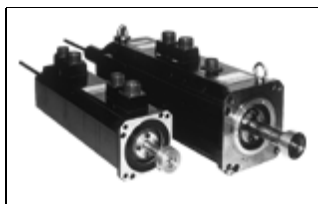
We introduce here two new key production technology developments. One is two types of composite actuator and a new inner wire winding machine containing a new composite actuator. The other is a new wire winding machine that winds ultra thick wire (magnet wire) while shaping it to match the shape of the divided core.

Development of composite actuator

We have improved our existing stator-inner wire winding machines as follows:

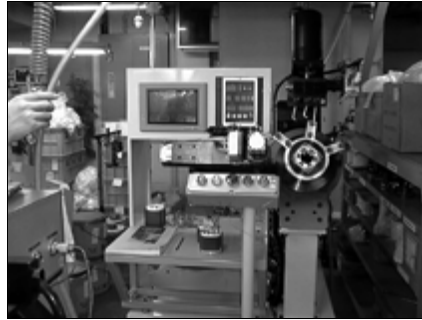
1. Improved alignment degree of wire winding
2. Improved space factor of the wound wire
3. Improved changeover characteristics

To achieve this, we developed a composite actuator that can freely control linear and circular movements. This actuator is applicable not only to our company's own equipment, but to the equipment of other companies in all fields around the world. This product is likely to stimulate market demand in the future.



Development of new type wire winding machines

Development of the ultimate wire winding technology is a major goal of the Department. We have succeeded in developing two types of new wire winding machine for manufacturing the AC servo motor "P series" and for boosting production:



1. The inner wire winding machine containing the composite actuator
2. The work rotation type wire winding machine for large divided cores

As a result of this development, stringent wire winding specifications are fulfilled and productivity is greatly improved by installing these new machines in the production line.

Kazuyuki Kitazawa

Joined company in 1972

Production Technology Development Department

Worked on element technology, new product development and controls after working on production engineering of fan motors and stepping motors
