

## Launch of New Energy Saving Hydraulic Unit Equipped with Synchronous Motor

### 1. Market trends and our initiatives

For achievement of carbon neutrality, efforts such as energy saving are being demanded in every industry. We contribute to prevent global warming by providing energy-efficient products through manufacturing.

We have developed and launched hydraulic units focusing on energy saving since the 1990s, which especially serve as the hydraulic source for machine tools and general industrial machinery, earning a high reputation with the phrase 'For energy saving, it's definitely NACHI's hydraulics'.

This time, we launch a new energy-saving hydraulic unit equipped with a high-efficiency synchronous motor that achieves overwhelmingly better energy conservation than ever before.

### 2. Overview of the new energy saving hydraulic unit equipped with a synchronous motor

#### (1) Target market and needs

Industrial machines such as machine tools

#### (2) Features

##### ① Energy efficiency

The new energy saving hydraulic unit is equipped with a variable capacity pump and is controlled by an inverter, which make it possible to automatically select the most energy-efficient operating state. Furthermore, by improving the energy efficiency of hydraulic pumps and adopting ultra-highly efficient synchronous motors, power consumption can be reduced by up to 74% compared to conventional hydraulic units.

##### ② Low heat generation

Equipping a unique cooling system limits the temperature rise of the operating oil to +5°C above room temperature or less. Therefore, the processing accuracy is improved, and the deterioration of the hydraulic oil is reduced to prevent unexpected troubles.

##### ③ Quietness

The noise level during continuous pressurization is 54 dB, equivalent to that of a quiet office. This unit makes a workplace comfortable and contributes to our customers' productivity.

##### ④ Miniaturization

The layout changes and miniaturization of the motor has reduced the volume of the unit by 12% compared to conventional hydraulic units. As a result, the unit can be installed more flexibly.

##### ⑤ Exempt from regulations on induction motors

The new energy saving unit equipped with a synchronous motor is exempt from the high-efficiency regulations on induction motors. Therefore, it is not subject to overseas regulations, and the export destinations will significantly expand.

##### ⑥ Response to IoT(Internet of Things)

The inverter that drives synchronous motors shares information such as electric power with the customer's system via digital communication, contributing to preventive maintenance of the equipment.

### 3. Launch date and sales target

#### (1) Launch date: August 2024

#### (2) Price: Open Price

#### (3) Sales target: 1,000 units per month by the fiscal year 2026

### 4. Inquiries about the new product

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