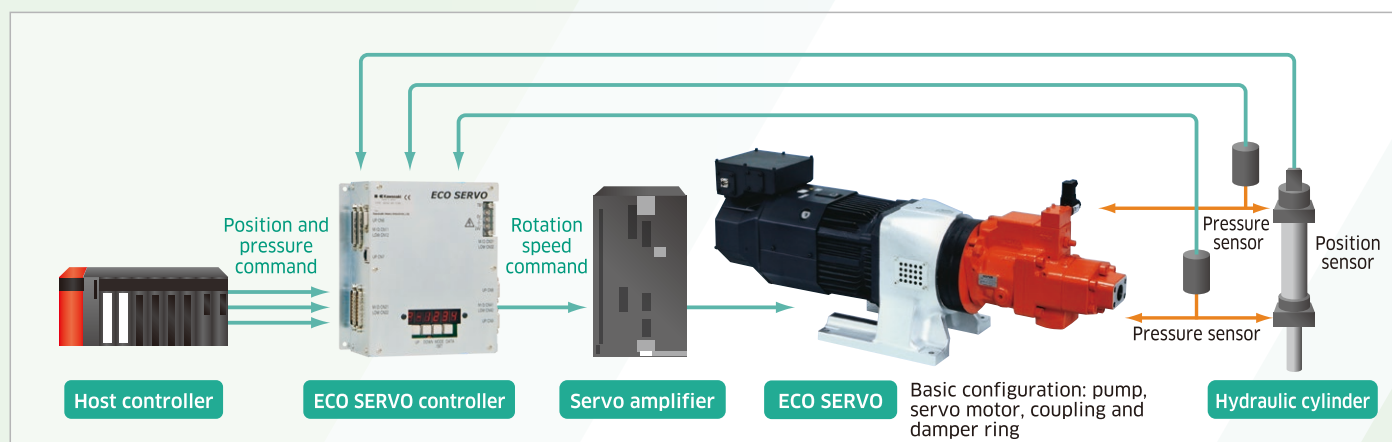


**Product lineup**

Pump displacement		cm <sup>3</sup>	22	45	80	140	200	500					
Inverter drive	Motor capacity	kW	7.5	11	22	30	30	37	45	55	75	90	The pump displacement of 500 cm <sup>3</sup> is individually available. When considering this capacity, please contact Kawasaki for more details.
	Rated torque*2	N·m	47.7	70	140	191	191	235	286	350	477	572	
	Max. torque*3	N·m	71.6	105	211	287	287	353	429	525	715	858	
Servo drive	Motor capacity	kW	5	7	7	11	11	15	37	45	45	55	
	Rated torque*2	N·m	23.9	33.4	33.4	70	70	95.5	236	286	286	350	
	Max. torque*3	N·m	71.6	100	100	210	210	286	707	859	859	1,050	
Pump pressure	Max. operation	MPa	32										
	Peak	MPa	35										

\*1: When you consider other combination of pump displacement and motor capacity, please contact Kawasaki for more details. \*2: Rated speed of electric motor is 1,500 min<sup>-1</sup> (2,000 min<sup>-1</sup> for the servo drive rated at 5 kW and 7 kW). \*3: The maximum torque is short-time rating value. Please select the appropriate servo or inverter drive, so that the effective torque for each cycle is below the corresponding rated torque.

**System configuration**



**Related products** Pump, tank, and valve block, all-in-one energy saving hydraulic units

**ECO SERVO Light / Avant**

These newly launched products, selectable from two hydraulic units according to your use, offer long system longevity, are easy to maintain, and use minimum hydraulic oil for energy saving.



# ECO SERVO

**Electro-hydraulic hybrid system**

New-generation high-performance control system that surpasses electric servo



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Precision Machinery  
Division Website



# ECO SERVO Electro-hydraulic hybrid system

## Environmentally friendly ECO SERVO changes the operation of hydraulic machines.

ECO SERVO electrically controls the flow rate of hydraulic pumps and maintains the optimal operating conditions, providing solutions to the problems that industrial machine systems need to address, such as high capacity, high efficiency, and energy saving.

Reduced loss;  
reduced heat

Energy saving  
**-80%**

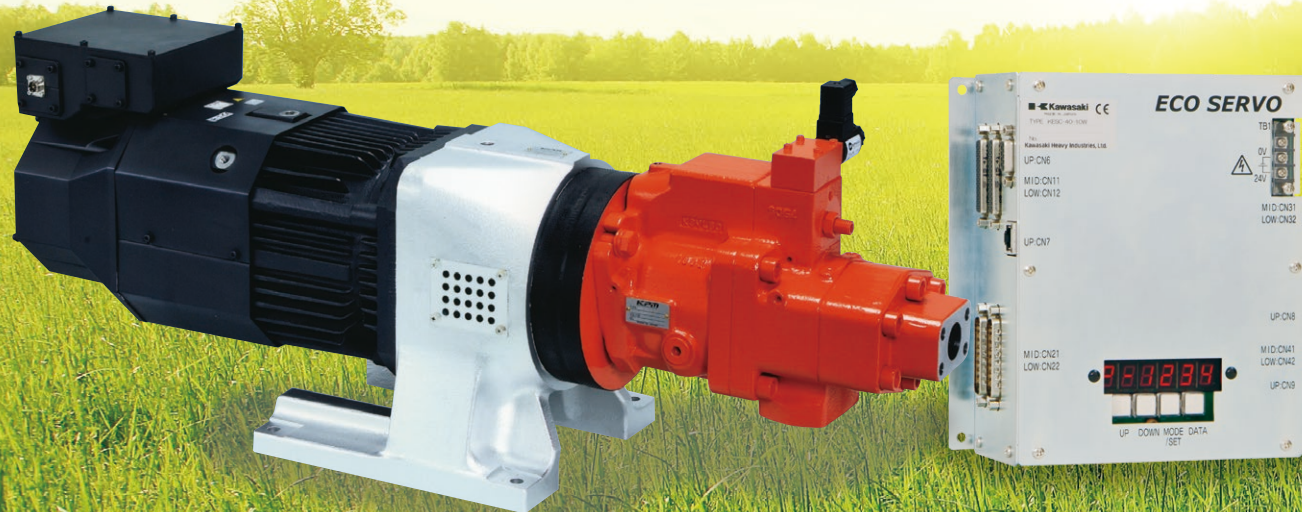
Controlled speed; reduced  
power consumption

Downsizing by a simplified  
hydraulic circuit

Reduced hydraulic oil  
**1/20**

Reduced installation area  
**1/3**

\*In comparison with existing hydraulic systems



Space-saving  
machine tools

Substantially reduced  
power consumption;  
reduced CO<sub>2</sub> emissions



### Expanded applications of ECO SERVO:

Various press machines (forging, automotive parts forming, CFRP forming, and scrapping), iron and steel machinery, transport equipment, machine tools, injection molding machines, test equipment, ventilation equipment, commercial dehydrators, marine civil engineering machinery, environmental facilities, etc.

#### Energy saving

An excellent energy saving system is achieved by highly efficient pump with controlled speed.

#### Reduced cost

Variable displacement pump with speed controller optimizes the motor capacity, thus reducing cost.

#### Improved controllability and control functionality

The electro-hydraulic hybrid system achieved excellent responsiveness and reproducibility comparable with an electric system.

#### Improved maintainability

A simplified hydraulic circuit eliminates operator's complicating adjusting works.

#### Lower noise

Idling stop system reduces overall operating noise.

#### Compact configuration

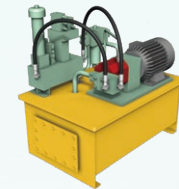
Downsized oil tank and cooler capacity achieves more space saving.

ECO SERVO provides the optimal solutions to the various issues of industrial machine systems.

Substantially  
down-sized  
oil tank

#### Press machine application

Conventional



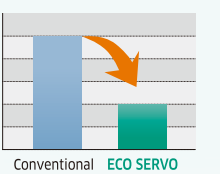
ECO SERVO



Oil tank (400 Lit)

Oil tank (20 Lit)

Installation area **-60%**

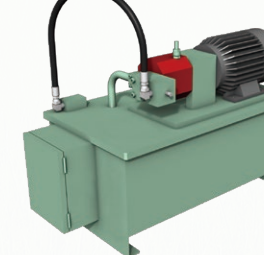


Oil tank capacity **-95%**

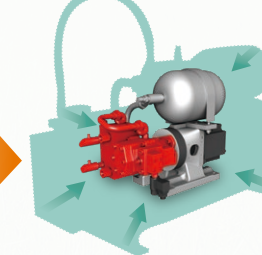


#### Machining tool application

Conventional



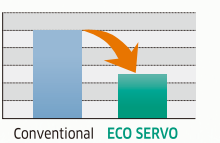
ECO SERVO



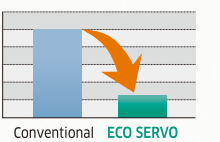
Oil tank (80 Lit)

Oil tank (20 Lit)

Installation area **-50%**

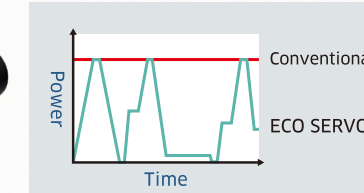
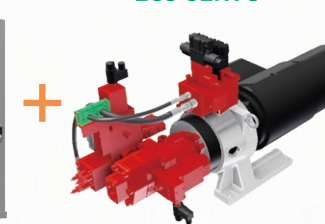


Oil tank capacity **-75%**



#### Industrial machine application

ECO SERVO



\*The chart is just for illustrative purpose.

Power consumption **-70%**

