

# ROBOSHOT: SUSTAINABILITY

Energy Savings and Carbon Neutrality



Roboshot is an industry leader in lowest energy consumption costs for injection molded parts. The award-winning FANUC servo motor/drive systems provide up to 75% energy savings using its energy recovery system. Roboshot's reduction of carbon footprint has continued through improvements in motor/drive technology, eliminating heat losses, monitoring and managing power load, and the development of features to process recycled resins. Using CNC accuracy and repeatability, molding quality parts minimizes scrap and lowers resin consumption. With superior uptime and reliability, Roboshot is a leader in lowest cost of ownership.

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## Energy Savings and Carbon Neutrality

### High performance molding

Reducing human error can eliminate scrap. Secure your process by locking inputs. FANUC CNC controls, motor and drives ensures ultimate accuracy and exceptional reliability across all processes, as well as highly-precise motion, position, and pressure control.

### Energy consumption

Insulated barrel covers can prevent heat radiation and can reduce the power consumption by 8.9%. This can be observed on the power consumption monitoring page of the Roboshot, where the CO<sub>2</sub> emissions are displayed. Optimize power usage via plastic energy monitoring and synchronized barrel heat up to reduce peak load.

### Preventative maintenance

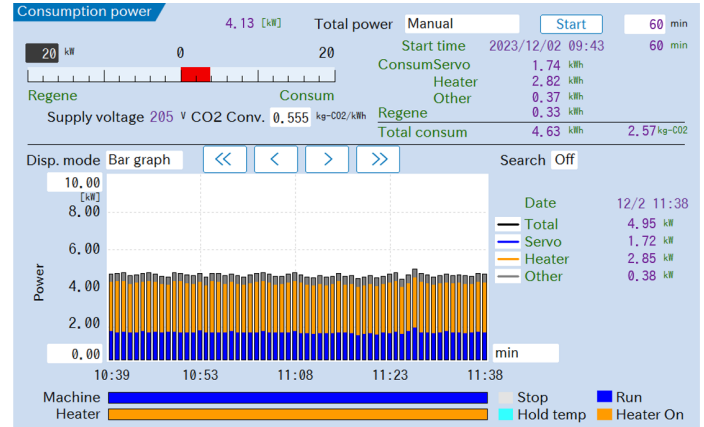
AI backflow monitoring will show you changes in the wear of your check ring. Anticipating when parts need to be replaced allows for reduction in the downtime needed for reactive maintenance. Temperature and mechanical load can also monitored.

### Recycled material

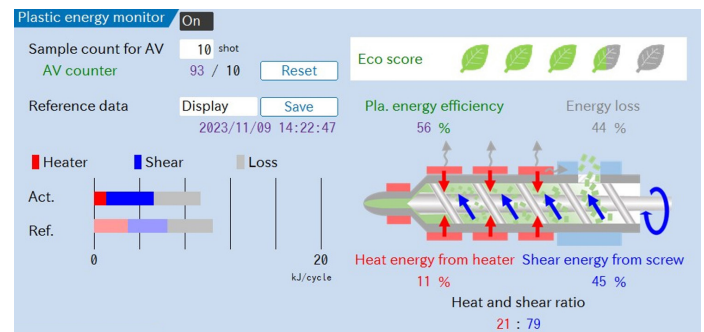
The Roboshot uses the processing power of LINKi2 to evaluate the resin characteristics of regrind materials. This allows operators to compare batches of regrind and adjust the process to produce identical parts. The addition of the recycled resin screw will achieve stable plasticization.

### Energy regeneration

The Roboshot uses technology called a "regeneration" circuit that allows the servo motors to generate power during motor deceleration so it can be recycled. This feature provides for a far more energy efficient operation with over 16% improvement in some cases.



Power consumption monitoring



Plastic energy monitoring

