

An energy efficient drive solution for production machinery

Reference
Mecmetal Oy



In co-operation with SEW-EURODRIVE Oy and Mecmetal Oy

Mecmetal Oy and SEW-EURODRIVE Oy have a long history of cooperation. The first deliveries were in the 1990s. Over the years, the customer relationship has deepened further – from a component supplier to an innovation partner.

Mecmetal utilizes MOVI-C® drive technology for servos and gearmotors in its latest production machine. The companies have also jointly performed energy consumption measurements of production lines designed and manufactured by Mecmetal.

Energy consumption measurement in a nutshell:

- In the energy consumption measurement, Mecmetal's electrified concrete product machine and a competitor's hydraulic machine were measured.
- Separate measurements of both product machines were performed with a power quality analyzer.
- The measurements included the apparent power [kVA] and active power [kW] of the product machines' electrical consumption.



Concrete industry production machine manufactured by Mecmetal Oy.



MOVI-C® modular automation system supplied by SEW-EURODRIVE Oy.

Mecmetal Oy

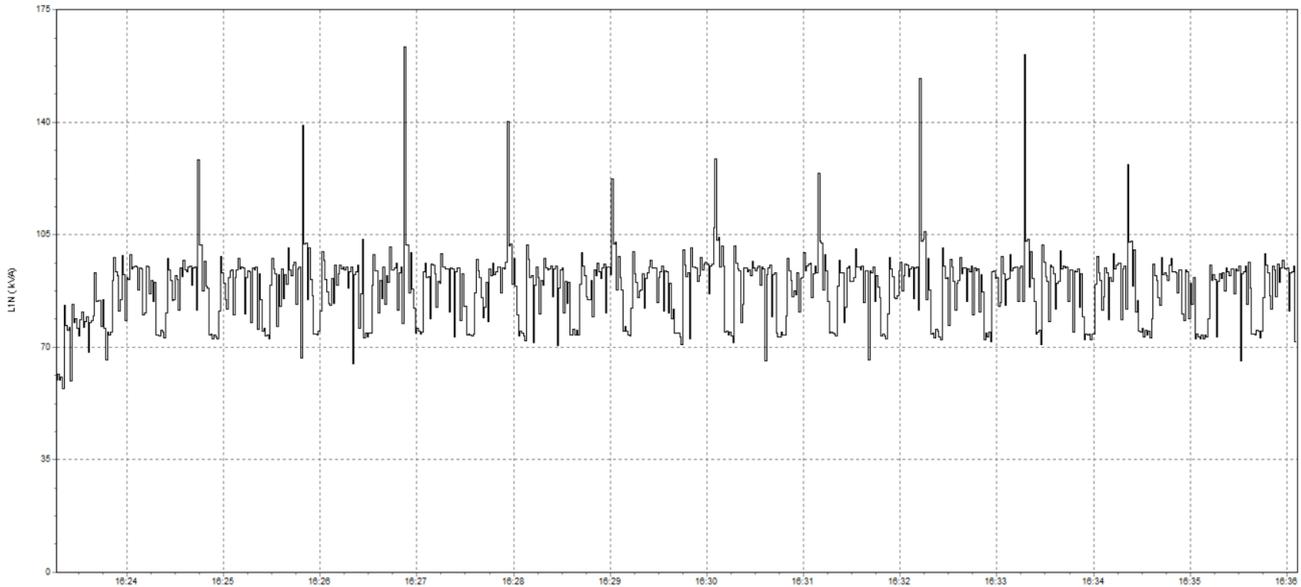
State of the art production lines created with Finnish integrity.

Mecmetal Oy is a Finnish production line technology developer and manufacturer. The company's journey started by specializing in production equipment for concrete blocks, insulated blocks, and paving stones, but nowadays the company has developed its production lines to make products from many other materials than just concrete, yet using the same manufacturing method.

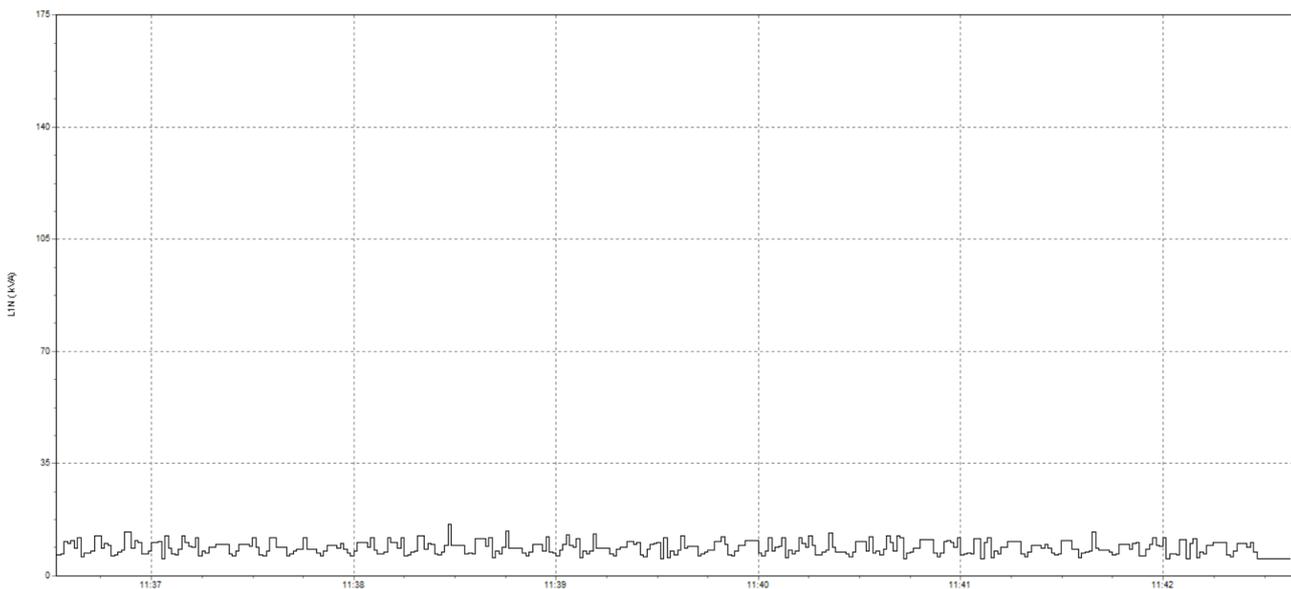
With a strong emphasis on R&D, Mecmetal has developed completely electro-mechanical production line models.



Energy consumption measurement results



A cyclical 163 kVA / 124 kW start-up peak occurs in the hydraulic solution. Otherwise, during the production a continuous average of 88 kVA / 74 kW is consumed.



In the MOVI-C[®] servo solution, there is a cyclical 15 kW peak caused by the lifting operation. Otherwise, during the production, a continuous average of 8,7 kVA / 6,8 kW is consumed. With servo drives, the apparent power corresponds to the active power and reactive power does not need to be compensated.

Saving potential is up to **90 %**.

The energy consumption measurement results showed that replacing hydraulics with electric drives significantly saves energy. The MOVI-C[®] servo drive solution significantly reduces the industry's carbon footprint and life cycle costs.

Products, services and solutions - everything from a single source

SEW-EURODRIVE Oy (Finland) is specialized in drive technology. The company's head office and Drive Technology Center operate in Hollola, and Service Centers in both Hollola and Tornio. Regional Sales Offices are in Hollola, Kotka, Tampere, Kuopio and Tornio. The company was founded in 1975.

The company is part of SEW- EURODRIVE Group. Founded in 1931, the family business has more than 20,000 employees in 54 countries and a turnover of more than 4,2 billion euros.



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