FORMING THE FUTURE

ECO FORM

SCHULER ECOFORM

Sustainable forming solutions





ENERGY-EFFICIENT AND ECONOMICAL FORMING

SUSTAINABILITY AS A DRIVER FOR INNOVATION.

Energy costs – an important factor in the press shop. Is it possible to minimize resource consumption in presses and automation devices, at the same time as achieving sustainable, economical successes? Sustainability and energy efficiency are the main trends of our world: They are changing our society and revolutionizing the economy. Schuler offers specific answers to these global challenges – and by doing so gives you the opportunity to design your plant and production facilities optimally for the future.

Forming the Future. Many do have the topic of sustainability on their agenda – as a leader in technology and innovation for forming technology, we have it in our DNA. With our expertise as well as our market and process knowledge, we supply the answers to urgent questions in the forming industry with intelligent system solutions spanning industry and technology boundaries.

Schuler is moving ahead. With the development of technologies that enable our customers to produce with energy and resource efficiency, at the same time as improving productivity. Its name reveals what it does: ECOFORM. The press shop of the future. As a pioneer, Schuler is laying the foundations for the press shop of the future with the ECOFORM sustainability program. With ECOFORM we are improving assemblies, system solutions, and forming processes in terms of energy. This is because ECOFORM is a groundbreaking program that combines innovation, sustainability and efficiency in an ideal way. And the future has already started: The first specific applications are already impressing our customers.

Welcome to the future – with intelligent energy manage-

ment. With ECOFORM, Schuler is bearing down on all relevant parameters in plant and process technology. Whether it is a matter of saving electrical energy, cooling water, air, space requirement, machine configuration or process optimization: We attend to every detail.



SUSTAINABLE FORMING SOLUTIONS



SCHULER ECOFORM

REDUCING RESOURCE CONSUMPTION AND CUTTING ENERGY COSTS.

You save with us. Without you missing anything. As a leader in innovation and technology, Schuler has been working for 175 years so you can benefit from progress. Schuler always has the complete system in view – allowing it to reduce energy costs with innovative technologies without loss of productivity.

With successful projects like our intelligent energy management – for example using energy recovery and innovative energy supplies – or start-stop and standby solutions, you can already benefit from tomorrow's technology today.

The ECOFORM sustainability program combines all these measures throughout the company – from analysis and optimization of existing plants through to development of new assemblies, processes and system solutions. The result: reduced consumption of valuable resources and a sustainable reduction in energy costs.

ECOFORM is anything but run-of-the-mill. But it is a solution for every day – and every application. This is because ECOFORM is not just a program for intelligent series production in the press shop with reduced use of resources; it is also the implementation of a vision: Energy savings are achieved intelligently, automatically and irrespective of the machine operator.

SCHULER ECOFORM OFFERS:

ENERGY ANALYSIS IN THE PRESS SHOP

Measuring the energy requirement, evaluating the result and the actual performance enables us to establish your potential cost savings.

USE OF ENERGY-EFFICIENT COMPONENTS

We rely on new components with maximum saving potential that increase efficiency. Individual components and assemblies are replaced by energy-optimized components.

INNOVATIVE SYSTEM SOLUTIONS

Optimized provision of drive power according to demand by implementing solutions across system and process boundaries – such as intelligent energy recovery and start/ stop and standby systems.

INTELLIGENT CONTROL SOLUTIONS

24/7 monitoring by innovative measuring systems and live evaluation as well as data and software solutions for energy-optimized processes.

PRACTICAL CONSULTING

Consulting on the basis of extensive economic efficiency analyses and recommendation of alternative processes, solutions or possible funding programs. "The whole is more than the sum of its parts." Aristoteles

SCHULER ECOFORM

MINIMIZING CONSUMPTION, MAXIMIZING EFFICIENCY.



New automatic blanking press MSC 2000 with 50% energy saving compared to conventional automatic blanking presses.

SPECIFIC ENERGY COST SAVINGS: PRACTICAL EXAMPLES OF ECOFORM.

Saving up to 60% by EHF (Efficient Hydraulic Forming) compared to conventional hydraulic presses in sheet metal forming and forging. Automatic in all processes, in any operating mode.

Saving 50% in servo press lines of the latest generation compared to conventional mechanical high-speed press lines by Schuler Smart DC grid, speed-controlled drive systems with energy recovery capability, intelligent standby and intermittent switching as well as energyefficient units (e.g. bolster cushion).

Saving 50% in the new MSC 2000 automatic blanking press compared to conventional automatic blanking presses by an innovative drive with two electrically coupled, userprogrammable connection points without gear unit.

Saving 20% when using the new Crossbar Robot 4.0 compared to conventional industrial robots through intelligent energy management with integrated energy recovery and 50% weight reduction.

Saving 20% when forging with the new linear hammer with servo drive compared to a conventional hammer.

High saving potentials with Schuler Service retrofit solutions.

SCHULER ECOFORM

PROVEN IN PRACTICE. INTELLIGENT AND WITHOUT OPERATOR INFLUENCE.



Hydraulic forging press with EHF (Efficient Hydraulic Forming). Energy saving 60%.

Saving up to 60%. With EHF (Efficient Hydraulic Forming), Schuler is significantly minimizing the energy requirement of hydraulic presses. In particular in processes with long unproductive times due to production reasons, and comprehensively: automatic without intervention by the operator, in all processes, in every operating mode – and in all performance classes!



Schuler Servoline – fast, compact and flexible.

Saving 50%. In servo press lines of the latest generation compared to conventional mechanical high-speed press lines by Schuler smart DC grid, speed-controlled drive systems with energy recovery capability, intelligent standby and intermittent switching as well as energyefficient components (e.g. bolster cushion).



SUSTAINABLE FORMING SOLUTIONS



Crossbar Robot 4.0. More energy efficient, lighter, more dynamic: the new generation of press automation.

Saving 20%. When using the new Crossbar Robot 4.0 compared to conventional industrial robots. Intelligent energy management with integrated energy recovery and 50% weight reduction make this saving possible. The hand axis, the arm of the robot, is also much lighter. All in all, these optimizations add up to increased speed, efficiency and performance.



First linear hammer with servo technology

Saving 20%. The new drive technology from Schuler permits maximum adaptability to increasingly specialized applications and processes in forging. The lack of rebound shocks mean that fewer forging blows are required overall, thereby reducing the cycle time and energy applied for forging. The energy saving is up to 20%, supplemented by the non-contact and zero-maintenance linear drive in which the electrical energy is directly converted into the mechanical movement of the hammer.

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