ALUMINUM SLUG
PRODUCTION LINES
SLUGMASTER SAK.
ECONOMIC PRODUCTION AND MAXIMUM PRODUCT QUALITY.

Slugmaster SAK – a line for the manufacture of aluminum slugs.
Mass production in top quality. Schuler’s Slugmaster SAK is a fully automated blanking line which was specially designed for the mass production of aluminum slugs and other high-volume blanked parts. Thanks to its high degree of modularity, each line can be configured according to specific customer requirements.

The heart of the line, the press, can also be specified according to individual needs. It is available with press forces of up to 5,000 kN. Such high stamping forces ensure the reliable processing of very wide and thick aluminum coils. With ample power for all situations and a highly rigid design, the press can easily cope with even very high reverse tonnage.

The production line concept allows sustainable and economic production with maximum product quality.

THE BENEFITS

- Maximum product quality
- Sustainable production
- Excellent value for money
- Energy-efficient production line concept
- Turnkey solution

- High degree of modularity
- Intuitive operator guidance
- Reduced recurring costs
- Less downtime
- Efficient scrap logistics
THE SLUGMASTER SYSTEM.
MAXIMUM PRODUCTION RELIABILITY AND HIGH DEGREE OF MODULARITY.

The line can be individually configured with a variety of equipment. The various component options enable customers to adapt the line to their specific requirements.

KEY
1 Coil line
2 Precision servo feeding unit
3 Slugmaster press
4 AS scrap shear
5 Conveyor belt
6 Scrap removal
Coil line. The coil line consists of a double-sided decoiler each with two snubber rollers, a straightener, optional cropping shears, and a coil loop control with ultrasound sensor.

Conveyor systems. Different kinds of conveyors can be used for the removal of coil scrap and for the transport of good parts for downstream processing.

Precision servo feeding unit. The line can be equipped with a freely programmable, high-precision servo feeding unit. All parameters – such as feed angle, the angle for roller lifting and the roller pressure – are freely programmable and can be set in the line’s visualization system. The programmable parameters can be assigned to the corresponding products in the die database.

Slugmaster high-speed press. The heart of the press line has a nominal capacity of up to 5,000 kN and numerous sophisticated features for cost-effective operation, high product quality, and manufacturing reliability.

Line control. Software for ease of operation with process visualization for the entire line. Supports the operator during die change, set-up, and maintenance. Integrated instruction manual with spare part catalogue.

Coil lubrication unit. Depending on coil material and die steel, various systems are available for the lubrication of the upper and lower sides of the strip.

Scrap removal. A separate scrap shear cuts the scrap web into scissels. A haul-off device feeds the residual strip into the shears for shredding. There is therefore no need for residual strip handling after the press.
THE SLUGMASTER HIGH-SPEED PRESS. EFFICIENCY AND MAXIMUM QUALITY.

The rigid press frame of the Slugmaster ensures low deflection and permits press forces of up to 5,000 kN.

Extended die lifetime. 8-way pretensioned roller guiding ensures precise slide movement. In turn, this ensures extremely long die service lives.

Absolute precision. For a high degree of rigidity and minimal punch penetration depth, the crankshaft runs in roller bearings. In order to dampen the vibration, the connecting rod is equipped with bronze bushings. This unique combination makes a significant contribution toward achieving maximum precision and long die service lives.

Shorter downtimes. Roller rails in front of the bolster plate and rollers that can be raised and lowered in the bolster plate ensure that dies can be quickly and reliably moved in and out of the press. Hydraulic clamping elements provide reliable locking of the dies on the press bed and on the slide.

Smooth operation. The dynamic counterbalance reduces vibration and guarantees especially smooth and quiet operation.

Reduced investment costs. The lack of any need for costly special foundations reduces the customer’s total investment costs.

Fast-action braking. In the event of a fault or malfunction, the fast-acting hydraulic clutch and brake combination brings the slide to a stop within one revolution of the eccentric shaft.

Efficient line control. The line control with visualization and process monitoring is simple to operate and supports operator personnel during production, set-up, die change, and maintenance. If faults cannot be compensated by the control system, the operator is provided with suggestions for clearing or correcting any faults.

Sustainable production. The main motor is protected from stamping-related vibration by the use of vibration dampening elements. The drive is transmitted by means of a flexible clutch. The belt pulley runs in separate bearings, thus preventing strain on the motor bearings by belt tension.

THE BENEFITS

- Longer service life of die and drive
- Reduced machine downtime
- Comprehensive and efficient line control
- Lower staff requirements
- Reduced maintenance needs
- Outstanding product quality
- Sustainable production
- Prolonged die service lives
WE-3 PRECISION SERVO FEEDING UNIT.
NO CHANCE FOR FAULTY MATERIAL.

The WE-3 guarantees reliable production and raises slug quality.

The press feeding unit plays a decisive role in the manufacture of aluminum slugs. If the roller pressure is too high, it leaves marks on the aluminum coil. If it is too low, this causes slips and so-called half-moons are stamped – with possible damage to the press.

The WE-3 recognizes faulty material before the blanking process. The scrap flap in the die bed opens and the faulty material is led directly onto the scrap conveyor.

The WE-3 uses a hydraulic servo axis to regulate the roller pressure. In combination with the hydraulic servo axis for the roller lifting, the servo roller drive means that all drive parameters can be freely programmed and stored in the database.

THE BENEFITS

- Highly reliable production
- High product quality
- Easy to operate
- Fast set-up times

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