



With intelligently used technology and extensive planning, Kleemann optimises all process sequences in the quarry. The machine components and outputs are tuned to one another and therefore guarantee less material and fuel consumption.

IMAGE SOURCE: Kleemann

Optimum processes and good consultation for more sustainability

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- Kleemann emphasizes the importance of technical innovations and thorough planning in achieving efficient processes that reduce material and fuel consumption in quarries and recycling companies.
- The Continuous Feed System (CFS) by Kleemann optimizes crusher feed efficiency, monitoring the fill level of the crushing chamber and adapting the feed to the process, resulting in lower material wear and reduced fuel consumption.

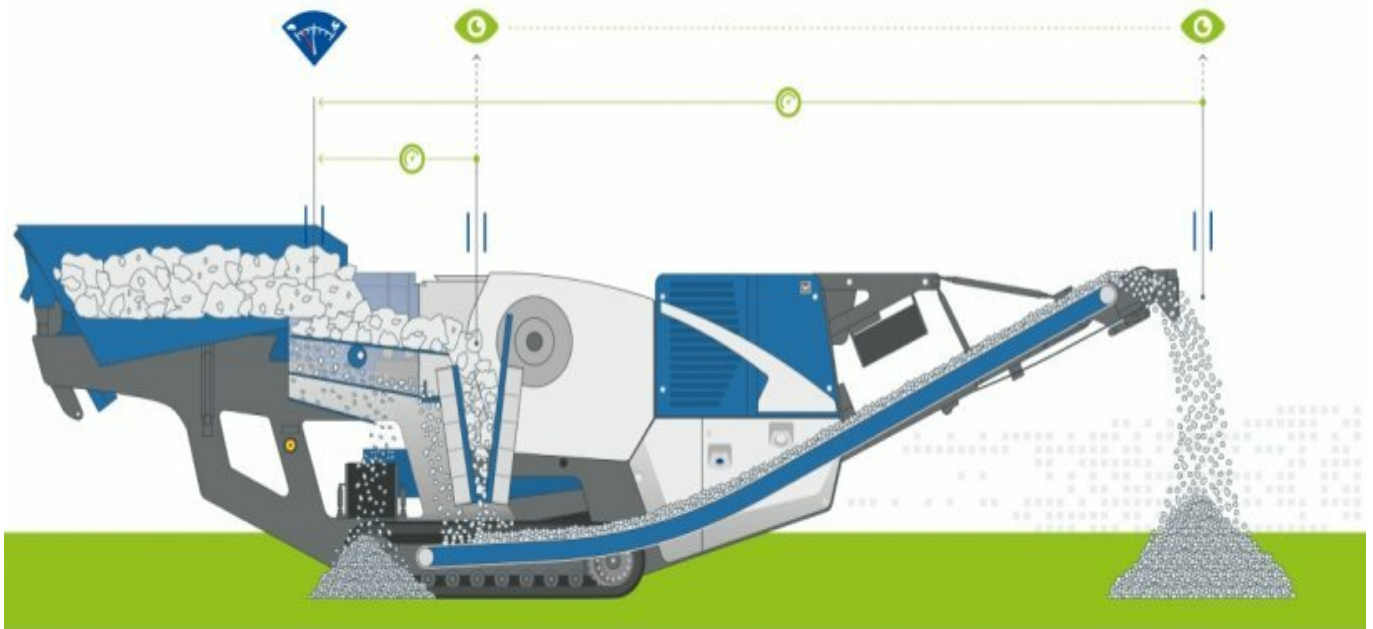
- Efficient and trouble-free processes are highlighted as crucial, with the CFS serving as an example of how intelligent technology can optimize the entire process when all components work in harmony.
- Proper machine sizing and tuning are essential for effective and resource-conserving operations, with the right selection of crushing plants, screening machines, and stockpile conveyors being key to minimizing power consumption and wear.
- Kleemann underscores the environmental benefits of optimized processes, noting that reduced wear on components not only saves money but also significantly cuts CO₂ emissions.
- Comprehensive consultation with customers is a cornerstone of Kleemann's approach, involving application advisers who plan processes, use flow chart software like AggFlow for detailed simulations, and provide technical and organizational advice for efficient solutions.
- Kleemann relies on both advanced planning software and the expertise of experienced application technicians to engineer custom-fit plant trains for their clients, ensuring sustainable and economical machine operation.

Technical innovations and good planning guarantee efficient processes and therefore uses less material and fuel consumption

Many quarries or recycling companies want machines that can be operated economically, but also as sustainable and emission-free as possible. **Kleemann** here counts on innovative technical solutions and comprehensive consultation with the customers.

Intelligent technology optimises the processes

The technical solutions related to process optimisation include precise regulating instruments such as the innovative Continuous Feed System (CFS). It ensures that the feed material at the crushers is always conveyed with maximum efficiency through the machines. The fill level of the crushing chamber is monitored continuously and the feed is adapted to the process. This optimised process ensures that material wear is as low as possible. Furthermore, the fuel consumption is also reduced – both of which are good for the environment.



The CFS feed control guarantees a trouble-free process. The system checks that the feed material at the crushers is always conveyed with maximum efficiency through the machines.

IMAGE SOURCE: Kleemann

Just as important: efficient, trouble-free processes

The Continuous Feed System (CFS) is an example of how the complete process can be optimised by intelligent technology. Technical innovations, however, are only building blocks. Good planning of a plant train is just as important, if not more. Technical innovations can only fully demonstrate their strengths when all components closely mesh with one another.



A flow chart demonstrates what the machine can produce by means of simulation. Fuel-saving and resource-conserving operation requires the best possible interaction of all components.

IMAGE SOURCE: Kleemann

Good tuning is indispensable

To work effectively and in a resource-conserving manner, the machine must be neither too small or too large. The selection of the crushing plants with the matching crushing tools is therefore decisive, and the screening machines, equipped with the ideal screening media, must be well tuned to the process. Stockpile conveyors that offer a capacity that matches the complete plant must be provided and consideration of the capacity of the loading device belongs to the overall process.

If machines are set accordingly, the power consumption can be reduced many times over. A process optimised in this manner also means that wear is reduced to an absolute minimum. This is also an important

point because if components wear quickly, new components have to be produced with a high material and energy input. Avoidance of unnecessary wear therefore not only helps save money, but also reduces CO₂ emissions by a considerable extent.



Based on their expertise and extensive practical experience, the Kleemann application and process technicians are important contact partners in the company when this involves the new and further development of machines.

IMAGE SOURCE: Kleemann

Application consultancy guarantees efficient solutions

In this area, Kleemann relies on comprehensive consultation with the customers. Application advisers plan all processes in advance. In the case of extensive processes, a flow chart (AggFlow) is prepared with which the material flow can be simulated in detail. The consultation covers technical solutions in addition to information on how processes can be better organised. The custom-fit engineering of a plant train requires

good planning software, but also a lot of experience and sure instinct. Kleemann therefore relies on technical solutions and support from experienced application technicians.

Source: Kleemann

CRUSHERS