

OPERATOR PROTECTION AGAINST DUST, SAWDUST, AND WOOD CHIPS

MUNICIPAL WORKSHOPS



ISSUE:

A STRONG SPACE LIMITATION

A municipality has a large technical centre whose premises have been sold for a building project. This technical centre had a woodworking workshop that had to be moved to a modernised building. The existing machine park was transferred and the city took the opportunity to acquire new machines.

This new equipment included 14 machines (saws, sanders, 4-sided grinders, machining centres, shapers, etc.). The existing dust extraction system, which protected the operators from the dangers of wood dust, was no longer able to provide the necessary performance.

The city wanted to reinvest in a new system to adapt to the new environment, ensure regulatory compliance, and further protect its operators. However, there was a constraint. The new technical centre had little space to store a waste recovery container outside the building.

SOLUTION :

THE RECOVERY OF DUST, SAWDUST AND SHAVINGS WASTE

The first step was to offer full support in identifying the need. These discussions enabled us to guide the customer towards the most suitable dust removal solution. Especially since in this particular case there were strong space constraints.

Once the solution had been selected, NEU-JKF Wood Industry installed a flow-compensated and regulated extraction system. This system ensures an optimum suction rate depending on the number of machines in use at the same time. The centralized suction system is connected directly to the machines on the suction outlets of the machine bonnets to protect the operators. On the other side the system is connected to the dust collector.



The system is automatically controlled. All suction ducts connected to the machines are equipped with an electro-pneumatic flap. The opening/closing of each flap is controlled and regulated by the use of the machine.

To solve the problem of space for waste storage, NEU-JKF Wood Industry has installed a briquetting press. The sawdust and shavings are transported to the briquetting press where they are compacted to 10 times their volume. Once briquetted, the waste no longer generates dust and can also be recycled (e.g. for use in a biomass boiler).