



• PB • OSB • MDF



COMPONENT DOSING SYSTEM

MULTIPUMP

FULLY AUTOMATED CHEMICAL DOSING OPERATIONS

With the **Multipump®** dosing system, each chemical component of the glue mixture has its own dosing line, consisting of a motorized dosing pump, flow meter and intermediate storage tank. The most evident advantage of this dosing configuration is that of being able to change the chemical composition of the glue mixture on line during production and to see the immediate effect on production, enabling quality issues (e.g. board with low IB) or production issues (blistered boards) to be solved almost instantly. With the traditional batch system on the other hand, you have to wait until all the glue mixture has been consumed before the results of the changes made to the chemical formula of the mixture become evident. With today's market requirements, more and more mills are producing "just in time" board lots and consequently need to be able to change production parameters easily and smoothly. At each production changeover, the **Multipump®** dosing system promptly adapts the chemical formulas of the glue mixture to the various productions, sending just the right amount of chemical components to the blender for that particular production. The batch system does not have such a prompt reaction at a production changeover because the mixture for the previous production has to be used up completely before the new chemical composition can go into the process, or before you are able to see the effects of the change, often wasting glue or creating problems with quality/production. The **Multipump®** system may be equipped with IMAL volumetric flow meters or with mass or magnetic flow meters. The chief advantage of the Imal volumetric flow meters is that once calibrated during start-up, they do not require recalibration for the rest of their mechanical life. Flow and flow rate may also be inspected visually through the graduated transparent vessel as it fills and empties in alternating cycles. The Imal volumetric flow meter consists of a vessel connected to pump suction and storage tank.

We have designed an efficient system for checking the flow meter calibration of mass or magnetic flow meters, if these are chosen, at least once a month without having to stop production. The system consists of a transparent graduated vessel paralleled to the hydraulic circuit. Whenever the need arises to verify the flow rate read by the mass or magnetic flow meter, it is possible to use a valve to divert the dosing pump suction from the storage tank to the graduated vessel, from where it is possible to use a stop watch to measure the actual flow rate and to then compare it with the electronic flow meter read out, without having to stop production. Each **Multipump®** dosing unit is fully assembled and the electrics and hydraulics are workshop tested prior to shipment. It is very quick and easy to install.

MAIN FEATURES

- To change the chemical composition of the glue mixture on line during production
- The system may be equipped with IMAL volumetric flow meters or mass or magnetic flow meters
- Each dosing unit is fully assembled and the electrics and hydraulics are workshop tested prior to shipment
- It is very quick and easy to install.

