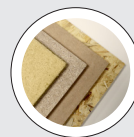


# ISOCYANATE DOSING SYSTEM

PRE-ASSEMBLED DOSING UNIT FOR ISOCYANATE



**BEST IN CLASS FOR:**



WOOD BASED PANELS:

PB/SPB

OSB/LSB/FOSB

MDF/HDF

Since isocyanate needs to be kept within a well-defined temperature range, it is stored in a tank equipped with special pumps, filters, valves, etc. to circulate the product safely, passing it through a special heat exchanger to keep the temperature within the desired range.

A second pump withdraws the quantity which is to be sent to the process and pumps the isocyanate to a flow rate measuring system downstream of which, there is an injection system.

A flow meter meters the product so that the exact amount of liquid required by the production process is sent to the injection system.

## MAIN ADVANTAGES

- Accurate dosing of the component
- Elevated environmental safety against product leakage or escape
- Fully proofed system
- Magnetic drag pumps or pumps with dual mechanical seals
- Low energy requirements
- Easy to install and inexpensive to maintain
- Material protected from external agents.

**BEST IN CLASS FOR:**

WOOD BASED PANELS:

PB/SPB

OSB/LSB/FOSB

MDF/HDF

**MAIN ADVANTAGES**

- No dust leakage • Mechanical closed loop conveying systems • Low energy requirements • Minimal overall dimensions • Easy to install and inexpensive to maintain
- Material protected from external agents and humidity • No filters and/or pneumatic conveyors required • Unlimited number of load and discharge stations • Suitable for all types of wood-based panel blending processes (particleboard, MDF, OSB)
- Supervision of all the component preparation stages right through to the actual dosing.

## FIRE RETARDANT / POWDER UREA DOSING SYSTEM

PRE-ASSEMBLED UNIT FOR DOSING POWDER PRODUCTS



Fire retardant boards are produced with the addition of powder additives. Furthermore, boards with low formaldehyde emission are also produced using pearl urea which is dosed and pulverized before it is added to the work process. IMAL has designed powder conveying and dosing systems for these applications which are easily suited to all kinds of plants.

The disk conveyors used for this kind of application have been designed to facilitate the conveying of the products that need to be dosed, to any point in the work process where the product is to be added.

The dosing unit, which consists of a weighed dosing screw, accurately doses the component to optimize consumption in relation to specific production requirements. The automated control, via a computerized system which runs with Windoser-PLCdosier, renders the handling of fire retardant products or solid urea extremely simple and practical.

The control system stores the formulas so that production of these special boards may be run and/or changed rapidly and efficiently. All the consumptions and productions obtained are stored on the supervision computer.



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