

FILTERING CHIP CONVEYORS

SELF CLEANING FILTRATION MIXED SHAPE CHIPS MIXED MATERIAL LNS

TURBO MH250 • TURBO MH500 AVAILABLE WITH 250µ OR 500µ FILTRATION

















THE VERSATILE CHIP CONVEYOR

The Turbo MH Series will handle any type of chip material and any chip geometry including fines, broken and stringy chips, all while providing filtered coolant to keep the machine tank clear of chips.

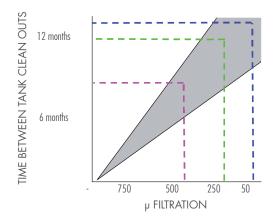
BENEFITS OF FILTRATION CONVEYORS

- Reduced maintenance to machine coolant tank
- Extended coolant life
- Improves coolant pump life
- Enables lights out operation
- Improved coolant quality to the cutting area
- Reduced machine down time
- Reduced non productive labour costs

BENEFITS OF THE TURBO MH SERIES

- Self cleaning filtration
- Very small footprint (same as a standard conveyor)
- Flexible design for various flow rates
- Handles any chip shape (long and small)
- Handles any material
- Attractive price
- Fits to most standard machine coolant tanks
- Robust construction
- Filtration can be upgraded through retrofit at anytime
- Single drive for reduced energy consumption

TYPICAL TANK CLEAN OUT SCHEDULE



EXAMPLE OF RETURN ON INVESTMENT

	STANDARD HINGE	TURBO	TURBO
	CONVEYOR	MH500	MH250
Machine tool tank clean outs per year	8	4	1
Machine down time per clean out	4 hours	4 hours	4 hours
Total machine down time per year	32 hours	16 hours	4 hours
Cost of replacement coolant per clean out	150€	150€	150€
Labout costs per clean out (4 hours)	140€	140€	140€
Cost of lost production per clean out (4 hours)	160€	160€	160€
Total cost per year	3'600€	1'800 €	450 €



LNS ECO

LNS's focus on reducing environmental impacts through reduced energy consumption has lead to a single drive motor to power the conveyor and provide the self cleaning filter function ensuring maximum efficiency. In addition to the reduced power consumption the self cleaning filtration helps maximise the coolant life, reducing the frequency of coolant tank clean outs and thus reducing the disposal costs of hazardous coolant liquids.

DESIGNED FOR PRODUCTION EFFICIENCY

Today's machining operations are becoming more and more complex since various operations are carried out on the same machine. Standard conveyors are often not versatile enough to handle the different types of chips produced. Where high investment in filtering systems cannot be justified the MH Series provides an excellent alternative.

The Turbo MH Series conveyor design provides an excellent method of removing large stringy chips as well as small broken chips in a medium to light chip load. The low conveyor investment makes this an ideal choice for multi tasking machines, turning centers, machining centers and drilling and tapping machining centers. Materials like aluminum, brass and cast iron are ideal applications.

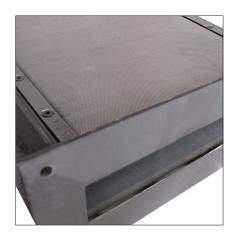




COMPATIBLE FOR NUMEROUS MACHINES

Many of today's machine designs have tight spaces in which the conveyor needs to fit. To introduce filtration systems to these machines is often either not possible or results in large bulky solutions that utilize a lot of precious floor space. The low profile frame design and integrated filtering system means the floor space required is often no larger than a standard conveyor.

The unique design of the MH Series of conveyors also enables the conveyor to be fitted into the standard machine tool tank without the requirement of a new tank or modifications to the existing tank in more than 90% of cases. This added benefit reduces cost, floor space and installation time.



COOLANT FLOW AND FILTRATION

The coolant flow rates used in modern machine tools vary greatly from machine to machine but the design flexibility of the Turbo MH Series means that it can handle most applications.

Each filter box is automatically cleaned during normal conveyor operation. Coolant flow and optimal filtration is assured. Due to the design of the Turbo MH Series the number of filter boxes used is matched to the requirements of the machine tools maximum flow rate.

The latest development from LNS allows any Turbo MH conveyor to be retrofitted with finer filtration boxes at any time by simply changing out the removable filter boxes.



RELIABLE OPERATION

Conveyors work in a tough environment. For over 4 decades, LNS has learned the best ways to design machine-tool peripherals for dependable, reliable operation.

To ensure continuous operation each belt has a minimum of 2 scraper cleats that clean chips that have been washed into the inside of the conveyor frame. Because all conveyor transitions use a smooth radius these scrapers do an excellent job of keeping the frame free of chips, reducing the risk of a belt jam.

As the scraper bars rotate around the end of the conveyor the small chips are transported around the curve and lifted to the top of the conveyor belt.

Brushes or wiper bars are used to wipe the box as the belt rotates. Any small chips that are wiped off by the brush / wiper fall to the bottom of the conveyor frame and are collected by the scraper bars.

The filter box contains metal filtering screens to filter all the coolant as it passes through the box and into the machine tank ensuring only clean filtered coolant can pass out of the conveyor. The filter box is mounted between the belt flights as shown.

Scraper cleats clean the entire surface of the bottom pan continually.

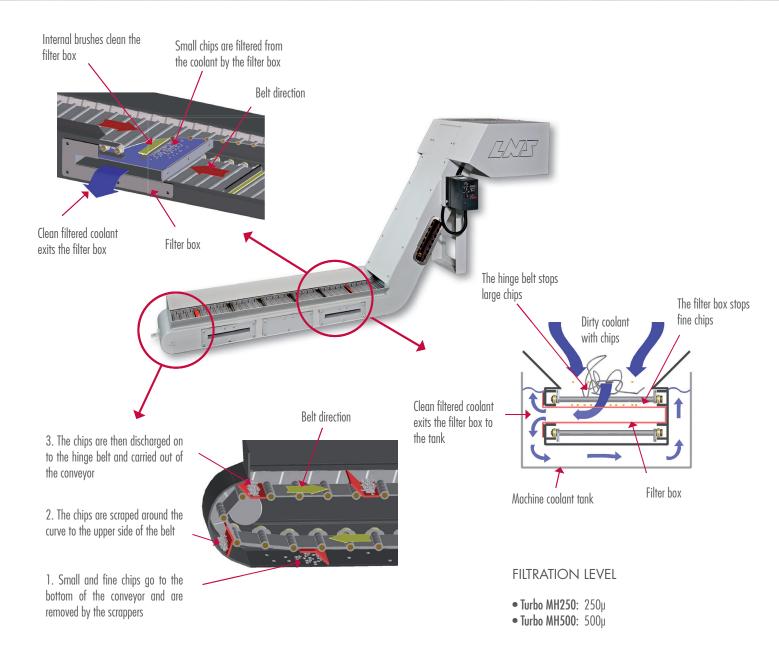
Filter box

Coolant

Some small chips wash through the hinge belt conveyor and fall to the bottom of the conveyor frame over time but are carried out by the scraper bars.



All chips are discharged from this part of the conveyor.



YOUR ONE-STOP-SHOP FOR MACHINE-TOOL PERIPHERALS

LNS provides a full range of bar feeders, chip conveyors, coolant management systems and air filtration systems which is second to none on the market. We are known in the industry for the solid expertise we have gained over several decades in an exceptionally wide range of applications, our excellent customer service and our technical support. This support is ensured by highly qualified technicians who are available at key locations throughout Europe.

