TURBO MH SERIES CHIP CONVEYOR

FILTERING CHIP CONVEYOR

Self-cleaning filtration down to 140 and 500 Microns

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

Mixed Materials
Coarse or Stringy Chips
All Sizes Mixed

Aluminum
Fine Chips
Coarse and Stringy

YOUR "ONE-STOP-SHOP"
FOR MACHINE-TOOL PERIPHERALS

Benefits of the Turbo MH filtration conveyor

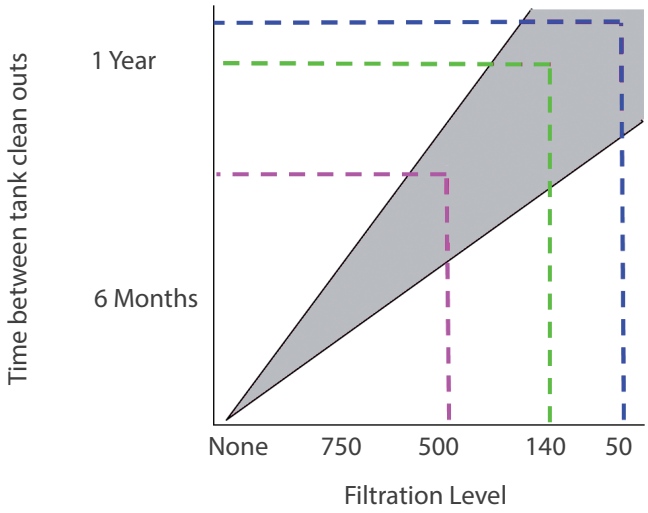
- Reduced maintenance to machine coolant tank
- Extended coolant life
- Improves coolant pump life
- Enables lights out operation
- Improved coolant quality to the cutting area
- Reduced machine down time
- Reduced non productive labor costs

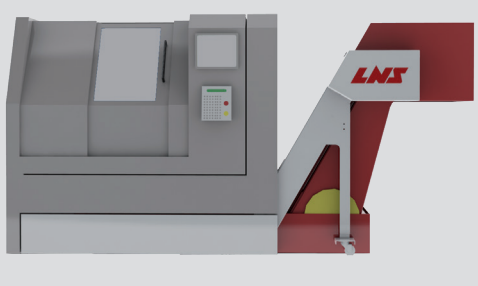
Example of return on investment	Standard Hinge Conveyor	Turbo MH500	Turbo MH140
Machine tool tank clean outs per year	8	4	2
Cost of replacement coolant per clean out	$300	$300	$300
Machine down time per clean out	4 hours	4 hours	4 hours
Labor cost per clean out (4 hours)	$250	$250	$250
Cost of lost production per clean out (4 hours)	$275	$275	$275
Total cost per year	$6,600	$3,300	$825
Total machine down time per year	32 hours	16 hours	4 hours

Additional 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





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.

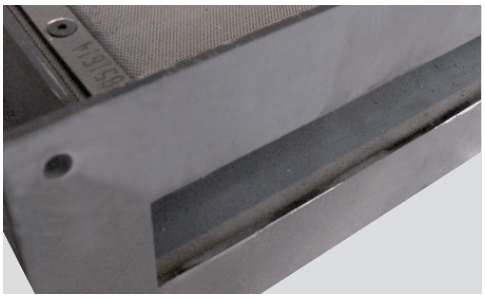
Designed for production efficiency

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 small lathes, turning centers, machining centers and drilling and tapping machining centers. Materials like aluminum, brass and cast iron are ideal applications.

LNS eco solutions

LNS's focus on reducing environmental impacts through reduced energy consumption has led 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 maximize the coolant life, reducing the frequency of coolant tank clean outs and thus reducing the disposal costs of hazardous coolant liquids. Back flush pumps are not required providing further savings in energy costs.



Coolant flow and filtration

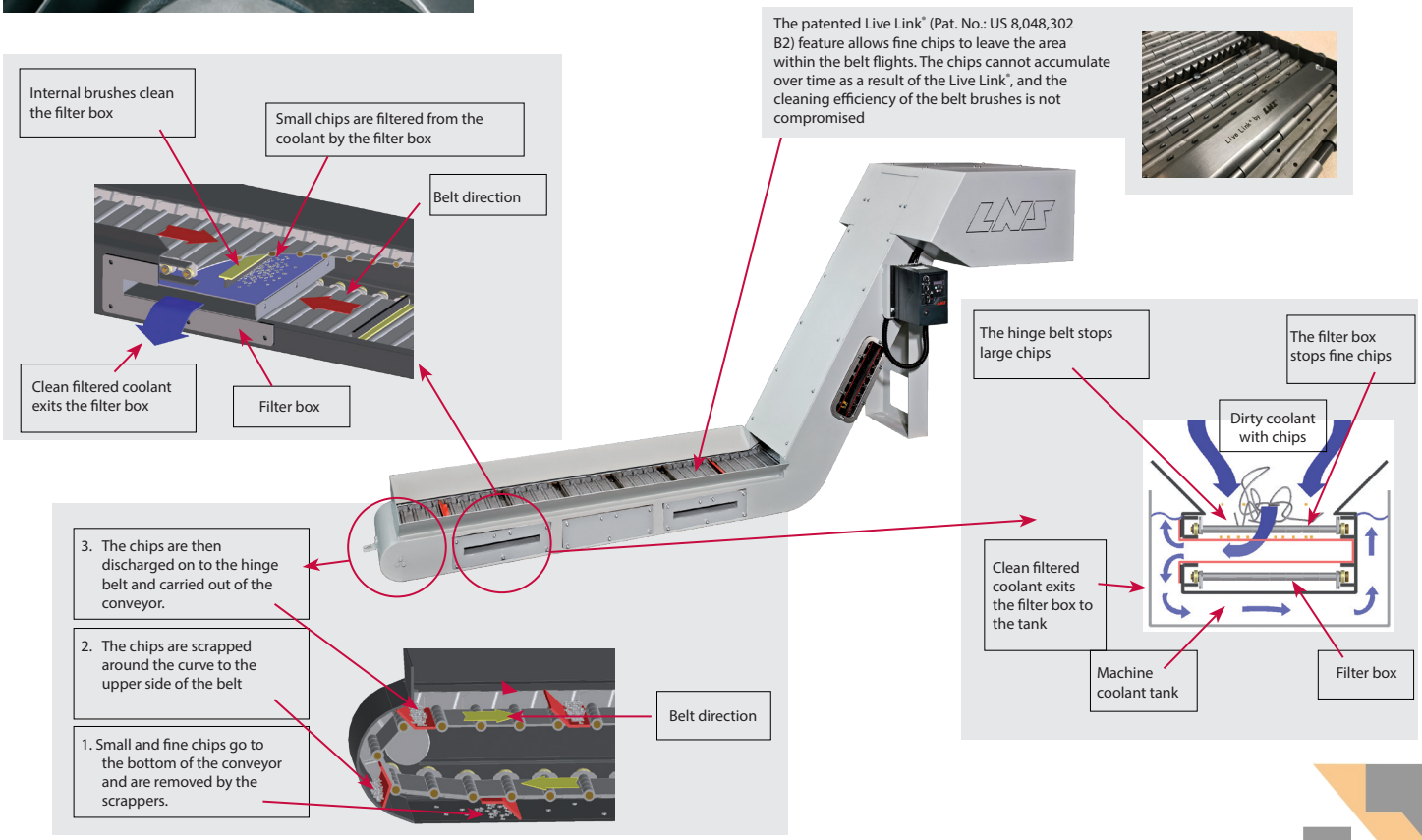
The coolant flow rates used in modern machine tools vary greatly from machine to machine but the design flexibility of the Turbo MH Series means that it can handle most applications.

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

Reliable operation

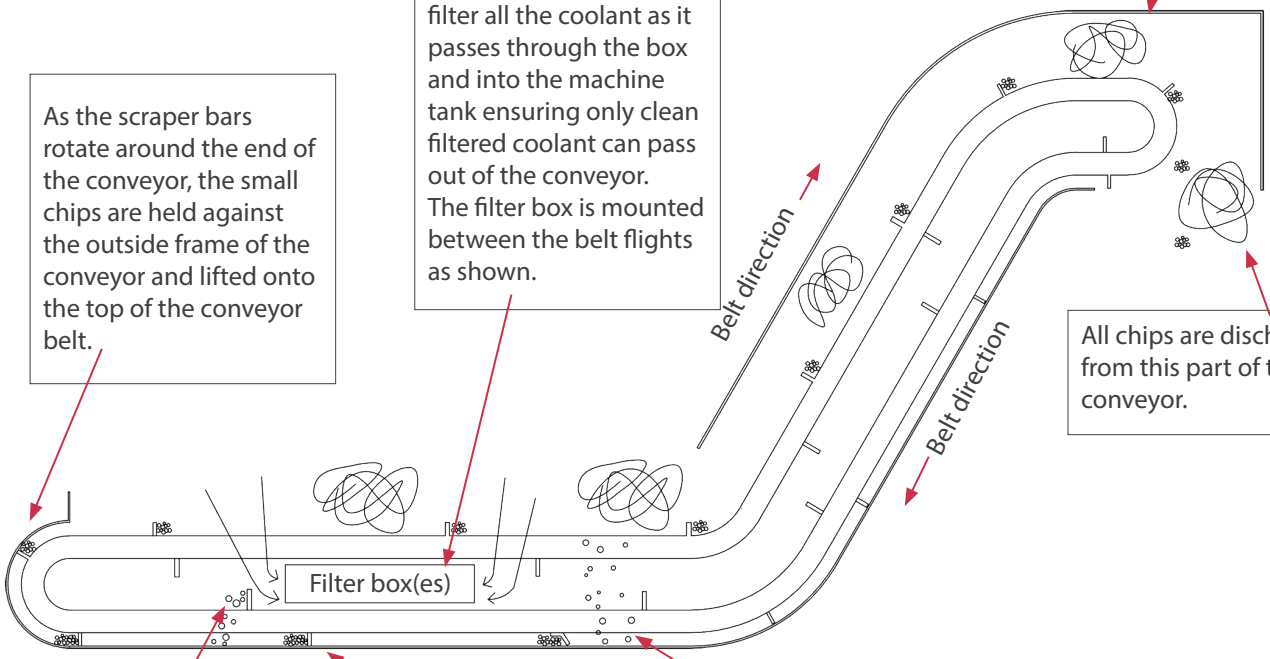
Conveyors work in a tough environment. For over 3 decades, LNS has learned the best ways to design conveyors for dependable, reliable operation.

Each belt has a minimum of 2 wiper cleats that clean chips that have washed into the inside of the conveyor frame. Because all conveyor transitions use a smooth radius, these wipers do an excellent job of keeping the frame free of chips, reducing the risk of a belt jam. All belt rollers, tail disks, and curved track are hardened for durability.



TURBO MH SERIES CHIP CONVEYOR

TECHNICAL SPECIFICATIONS



Large, stringy chips are stopped and taken out by the continuous hinge belt conveyor.

The filter box(es) contain 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.

As the scraper bars rotate around the end of the conveyor, the small chips are held against the outside frame of the conveyor and lifted onto the top of the conveyor belt.

All chips are discharged from this part of the conveyor.

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.

Scraper bars scrape the bottom surface of the conveyor to gather any small chips that have fallen to the bottom of the conveyor frame.

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.

PERIPHERAL VISION

Peripherals, by definition, are an outer boundary. But at LNS, that boundary is where we put our focus. Because here's the secret—with LNS peripherals on your side, you can turn your attention to what you do best—making chips and making money.

That's why we do what we do. Five product categories and industry-best expertise means no company on earth can match the passion and vision we have for machine tool peripherals.

LNS Turbo
203 Turbo Drive
Kings Mountain, NC 28086

704-739-7111
CCsales@LNS-northamerica.com
www.LNS-northamerica.com