



# **TURBO SFCOMPACT CHIP CONVEYOR**

### FINE FILTERING CHIP CONVEYOR Self-cleaning filtration down to 50 microns

Mixed Materials Coarse or Stringy Chips All Sizes Mixed



Aluminum
Fine Chips
Coarse and Stringy



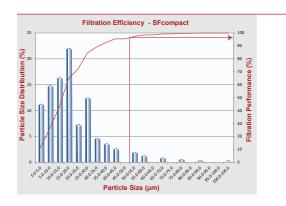












## Coolant Flow and Filtration Efficiency

Today's machining operations produce a wide range of chip types, traditionally the best filtering chip conveyors have used filter drum technology to filter coolant down to a level of 50 microns. These products have a proven record of filtration efficiency but come at a price, not only financially but also in terms of reliability and floor space requirement.

The SFcompact takes a revolutionary approach to fine filtration, integrating the filters within the conveyor frame. Using a patented dual cleaning technique for these filters, LNS ensures filtration levels as good as or often better than drum conveyor filtration.



#### Reliable Operation

Conveyors work in a tough environment, the SFcompact combines more than 30 years of knowledge designing, building and servicing chip and coolant products for the machine tool industry. The SFcompact is the culmination of 3 years of development, learning from customers' experiences and developing simple yet reliable solutions.

Using a totally enclosed filter system, LNS is able to prevent some of the traditional issues seen with drum conveyors such as chips wrapping around the drum, blocking or even tearing it. Combined with other key features such as hardened curves and using modern material such as Kevlar, wear resistance and performance are greatly enhanced.

The frame is designed to withstand the torsional forces it will see in tough machining applications. The robust frame handles small or large chip capacities. Hardened track is used in all high wear areas, such as the curves, to provide long conveyor life. The curves and tails are smoothly transitioned so chips have no areas to accumulate in.

	Standard Hinge Conveyor	Turbo SFcompact
Machine tool tank clean outs per year	8	1
Cost of replacement coolant per clean out	\$220	
Machine down time per clean out	4 hours	
Labor cost per clean out (4 hours)	\$200	
Cost of lost production per clean out (4 hours)	\$230	
Total cost per year	\$5,200	\$650
Total machine down time per year	32 hours	4 hours

#### Return on Investment

The fine filtration efficiency of the SFcompact, the excellent price point, ease of integration as well as other key benefits makes it the ideal choice for customers machining a range of materials and producing a mix of chip types from stringy stainless steel to fine brass and aluminum.

Compared with traditional drum filtration conveyors the SFcompact brings equivalent performance in a more compact and rugged package, ensuring minimal cleanouts and maximum machine up time.





#### Floor Space Utilization

Many of today's machine designs have tight spaces in which the conveyor needs to fit or have limited floor space around the machine tool. Traditional fine filtration systems such as drum filter conveyors use a large amount of floor space due to the construction and space needed to accommodate the drum and backflush cleaning pump.

The revolutionary SFcompact eliminates this need for extra floor space by integrating the filter system within the frame. SFcompact is no larger than most standard hinge belt conveyors. This makes the SFcompact ideal for factories with limited floor space and obstructions such as pillars, walls or with multiple machines side-to-side and/or back-to-back.



#### Machine Compatibility

With the SFcompct, the space within the machine tool and the electrical interface needed is no more than with a standard hinge type conveyor and in most cases can utilize the standard supplied coolant tank.

The varying coolant flow rates are handled through integration of a number of specially designed, self-cleaning filter boxes, depending on your machine tools configuration.

Using just 10 cu in/min of compressed air from the factory air supply and just one small electrical motor (0.25hp) to power the full system, the energy efficiency and usability of the system is greatly enhanced compared to other fine filtration systems on the market that often use 2 or 3 motors plus back wash pump.



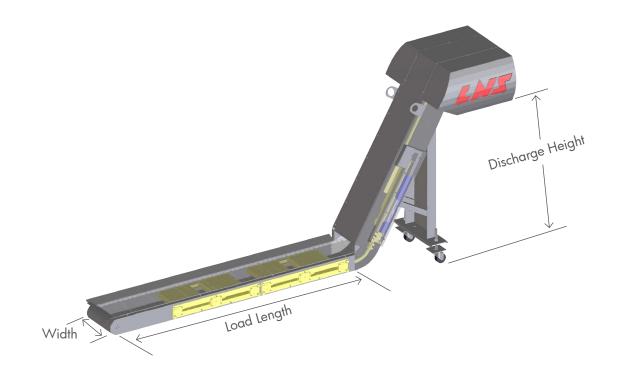
#### Serviceability

The Turbo SFcompact is designed with the customer and operator in mind. With any product, throughout its life, wear and faults can occur. As a result of listening to our customers LNS has developed simple, modular building blocks for the Turbo SFcompact. If an issue should occur, the impact on machine down time is minimal and does not require a deep product knowledge or skill to get the product up and running. Compared to products of similar performance that use drum filters, filter changes, when necessary, can take up to one day. The filter removal of the Turbo SFcompact can be completed within 15 minutes after the conveyor is removed.

# TURBO SFCOMPACT CHIP CONVEYOR TECHNICAL SPECIFICATIONS



Features		
Filtration	Down to 50 Microns	
Chip Shape	Mixed (long, stringy to fine)	
Material Type	Mixed (suitable for most material types from stainless steel to brass and aluminum)	
Discharge Height	800 mm - 3000 mm	
Width	267 mm, 318 mm, 368 mm, etc.	
Pitch	40 mm	
Motor	0.25 hp	
Air Consumption	10 cu in/min	
Filter Type	Self-cleaning filter box with woven stainless steel mesh	



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

LNS provides a full range of barfeeders, chip conveyors, coolant management systems, air filtration systems, and workholding systems that is second to none on the market. We are known in the industry for the solid experience 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 throughout North America.

