# RELIABILITY.

### The Slipstick is how.

Based on a minimum of moving parts with the fully enclosed drive mechanism consisting only of bearing-mounted, gear-coupled shafts, durability and reliability is built into every Slipstick horizontal motion conveyor. It's no wonder that the Slipstick has been proven in thousands of industrial installations for more than 20 years.

Rest easy. Stop dust. Work safe. With the Slipstick, you'll advance cleanliness, safety, and reliability.







#### **EQUIPMENT SINCE 1888**



finish, and assembly procedure. Each machine is fully assembled, tested and inspected prior to careful packing for shipping.

The product development process for the specialized application of custom designed machines starts with a problem to solve or an opportunity to realize. In this process, Triple/S Dynamics' sales engineering works with the customer in developing specification



for the equipment. This often includes testing in the company's Applications Laboratory, site visits to study the installation, and preliminary design engineering services to best match the equipment to the application.

#### INDUSTRIES SERVED

- Aggregate
- Mined Products
- Cement
- Minerals
- Chemicals
- Ores
- Clay

- Paper
- Coal
- Coke
- Plastics
- Primary Metals
- **■** Explosives
- Recycling

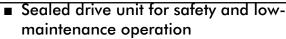
- Fertilizers
- Refractories
- Rock
- Foundry
- Rubber
- Glass
- Solid Waste

- Steel Mills
- Gravel
- Tobacco
- Gypsum
- Limestone
- Wood & Paper
- Many More

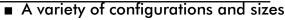




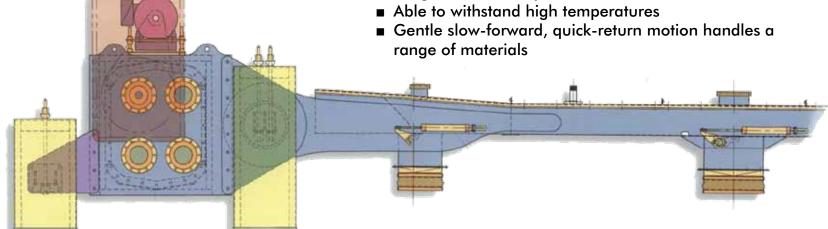
#### **FEATURES**



- Variable speed
- Reversible



- No springs, it is self-balancing
- Elimination of material damage and compacting
- Conveyor pan can be open channel or enclosed/sealed
- Long-term reliable performance





The Slipstick can be provided in lengths of over two hundred feet equipped with a single drive unit.

Tremendous load carrying capability, combined with the ability to withstand high temperatures, make the Slipstick the best conveyor for delivering scrap steel to the melt furnace.

Foundry applications benefit from stall-free load carrying capacity as well as noise reduction from the quieter conveying motion of the Slipstick.





#### **CASE HISTORY:**

## RELIABILITY WITH SERVICEABLE PARTS ON OUTSIDE OF MACHINE

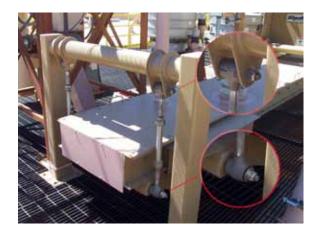


Dusty conditions are not ideal for belt conveyors at a ceramics parts producer plant. A robotic machine cuts ceramic parts creating abrasive dust. Because the machine is existing and is designed around a belt conveyor, the option for replacement of the belt conveyor are limited by space.



The ceramic dust from the cutting process rapidly brings failure to belt conveyor bearings. Bearings are located along the length of the belt conveyor which runs through the robotic finishing machine. This makes access to failing or damaged bearings difficult and cumbersome. The repair or replacement is complicated by the inaccessibility.

The solution is the installation of a Slipstick horizontal motion conveyor. The Slipstick's simple formed pan fits well and can extend through the entire machine of approximately 18 feet, leaving the drive on one end and the pan supports on the other end away from the product. Both components are outside the



original machine. This remote location allows for bi-annual oil changes and quarterly lubrication schedules. The Slipstick was designed to keep all moving parts outside of the machine envelope. With moving parts located on the outside of the conveyor they are not exposed to the dust loading and are easier to service at the normal intervals required.

The ceramics producer sequentially replaced all belt conveyors with Slipsticks over two years. The solution increased reliability and machine productivity.



www.sssdynamics.com

48000 PPH

deep x 170 feet pan,

wide x 12"

60 PCF, 960000 PPH PPH HDC-408H Split, 95" wide x 27" deep x 140 feet w/truss,









24" wide x 8"

deep  $\times$  70 feet pan, 16000 PPH

deep x 32 feet pan, 9000 PPH













36000 PPH 60000 PPH

pan,

deep x 150 feet deep x 180 feet

wide wide

36" 60"

25000 PPH

pan,

deep x 140 feet

wide  $\times 10$ "

30″

20000 PPH

120 feet

10″

wide x









110000 PPH

50 PCF,

deep x 180 feet w/truss,

wide x 12"

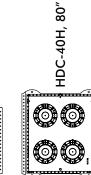




1220000 PPH

50 PCF,





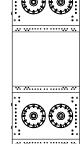
50 PCF, 1220000 PPH

x 150 feet w/truss,

deep

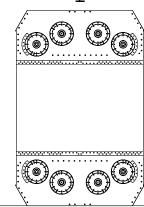
wide x 40"





50 PCF, 1220000 PPH

HDC-40H Split, 80" wide x 40" deep x 120 feet w/truss,



Max pan length and throughput based on 20 PCF (except where noted), no covers, no gates and 50% pan fill. Not all drive possibilities are shown.



#### INSTALLATIONS AROUND THE WORLD



The Slipstick Horizontal Motion Conveyor is not built like, nor does it perform like common vibrating conveyors. Conventional vibrating conveyors use a motion at an angle to the conveying surface to propel material by repeated impacts. The Slipstick uses a completely horizontal, slow-advance, quick-return motion which works on the inertia of material in the product bed, causing the material to slide along the pan of the conveyor.



Conventional vibrating conveyors typically use massive counterbalances to absorb the dynamic forces generated by the vibration of the machine. The Slipstick's drive force is largely

countered by the mass of the pan, which is rigidly attached to the drive. The entire assembly, pan and drive, is supported by the suspension rods from which the conveyor hangs.

The Slipstick conveyor has no springs to maintain, or speed and stroke tuning to monitor. As it is not a 'tuned' system, the Slipstick can be operated with variable speed for control of the material travel rate. A further benefit of the Slipstick drive system is that it is not 'de-tuned' by typical increases in material loading on the pan of the conveyor. Reversible conveyance is a unique attribute of the horizontal motion conveyor.



#### **BENEFITS**

- Fewer moving parts means near zero maintenance
- Heavy-duty construction to handle tons of unit loading
- More system flexibility
- Conveyor pan can be open channel or sealed
- Reduced noise levels
- Abrasive wear is two to four times less than a conventional vibratory conveyor

