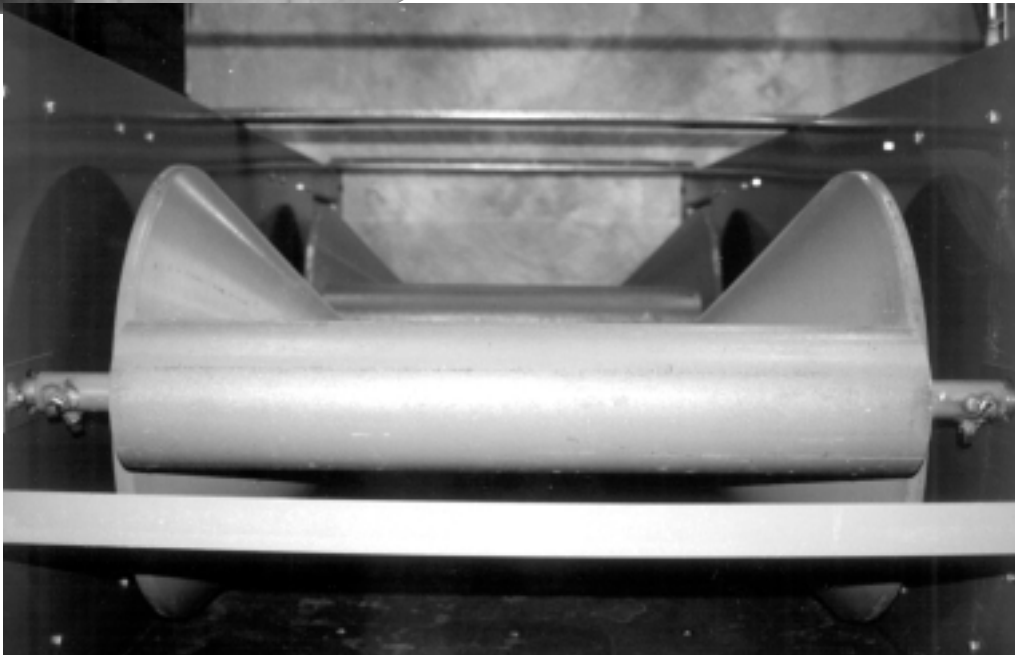


Super Roller

Models 36 through 72



Invest

in

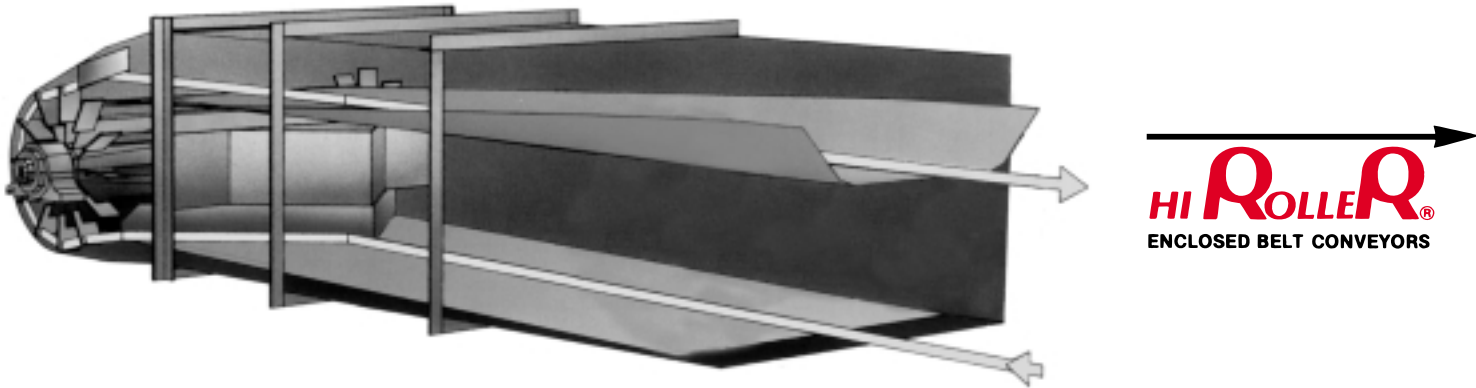
efficiency.


HI ROLLER[®]
ENCLOSED BELT CONVEYORS

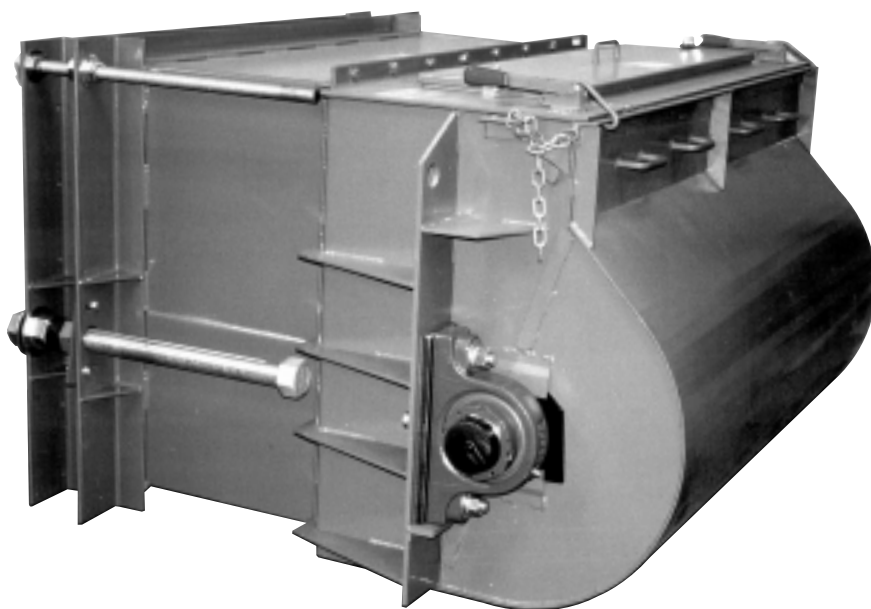
The Problem Solver

Hi Roller Enclosed Belt Conveyors are designed for the safe, gentle, and efficient handling of dry, bulk materials. This unique, totally enclosed belt conveyor contains dust and spilled material *and* automatically reloads that material back on to the belt.

The arrow shows the flow of dust and spilled material back to the tail section where it is directed into reloading vanes, then thrown and deflected back on to the top belt.



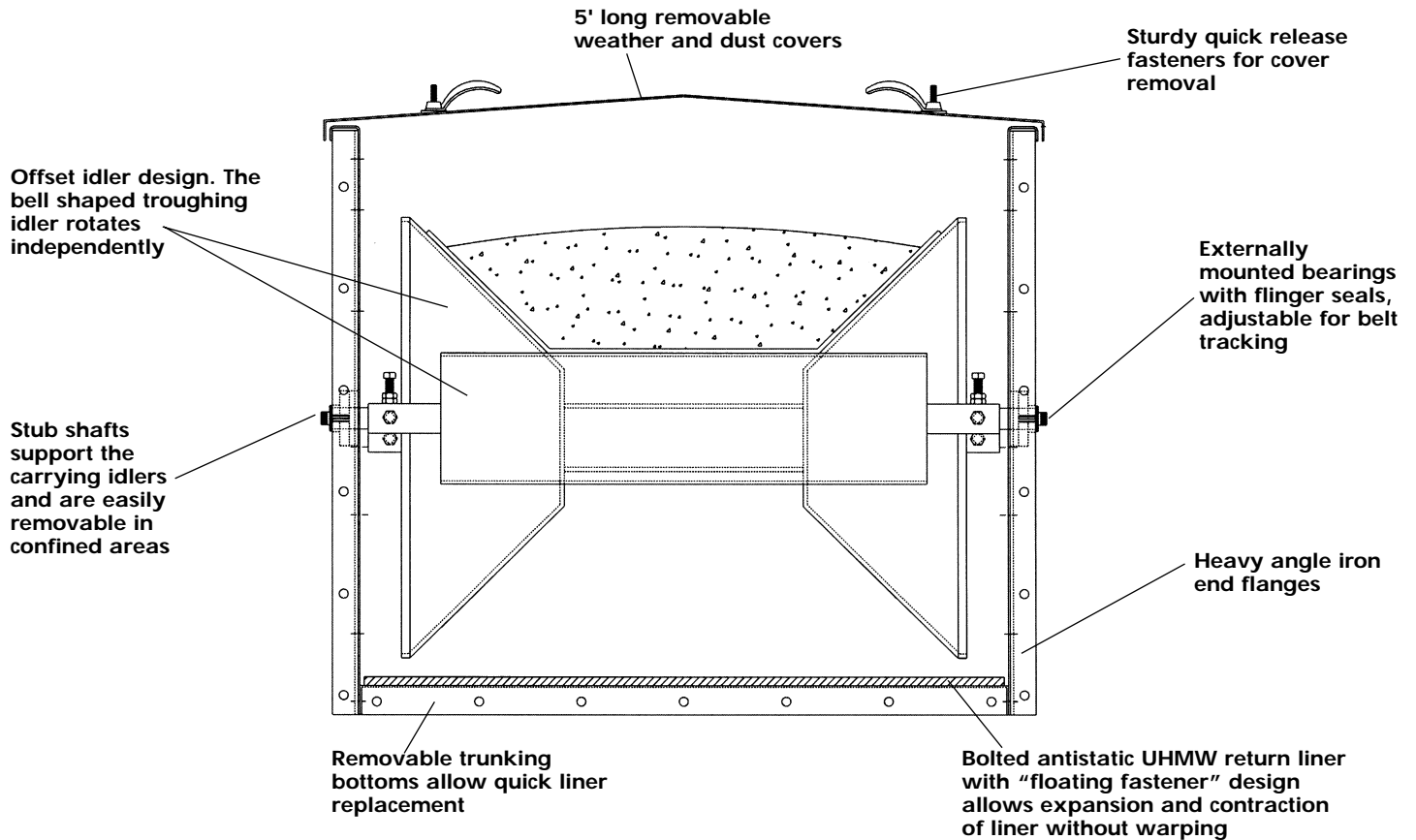
Hi Roller Enclosed Belt Conveyors are heavy duty, low maintenance, safe, gentle, and efficient. Hi Roller uses unique idlers which allow all bearings to be isolated from internal dust and contaminants. Internally, the troughing belt gently conveys bulk materials to the discharge point. The returning belt slides over an antistatic return liner and continually wipes the bottom enclosure clean of any dust or spilled material. The patented reloading system is the key to a successful system. The absence of this feature can cause product build up, plugging, costly wear, and downtime.



The heavy duty tail section incorporates a gasketed sliding box take-up with tensioning and leveling rods. The tail shaft is supported by external pillow block spherical roller bearings. The tail shroud splits at the shaft so that the pulley can be removed without cutting the belt. The shroud comes complete with safety chains and can be removed without the use of tools.



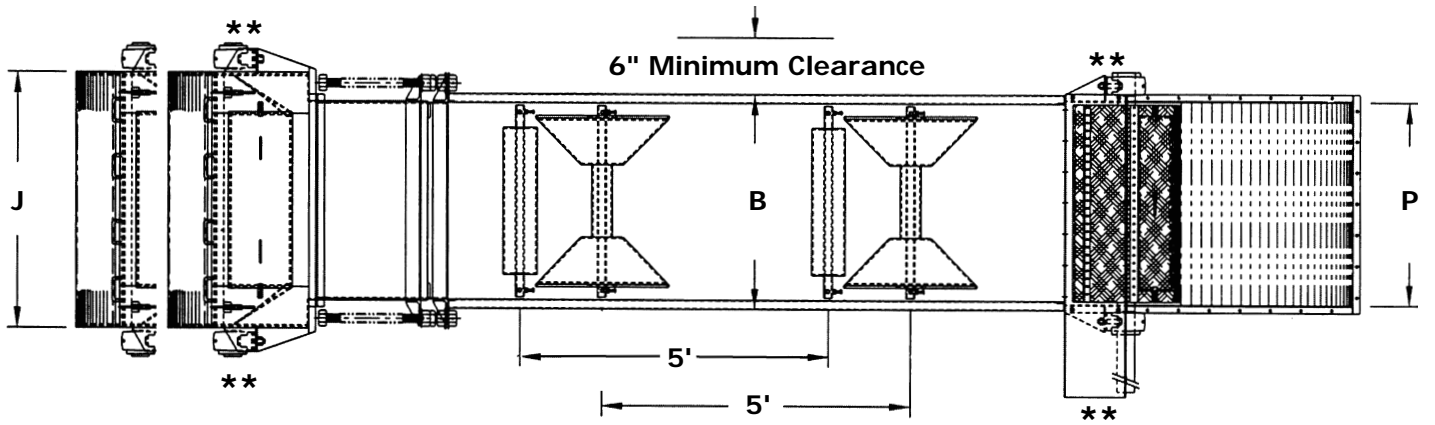
Internally, the spiral winged tail pulley provides constant belt contact for extended belt life. The patented reloading system includes a rugged plow, reloading flippers and a stationary deflector.



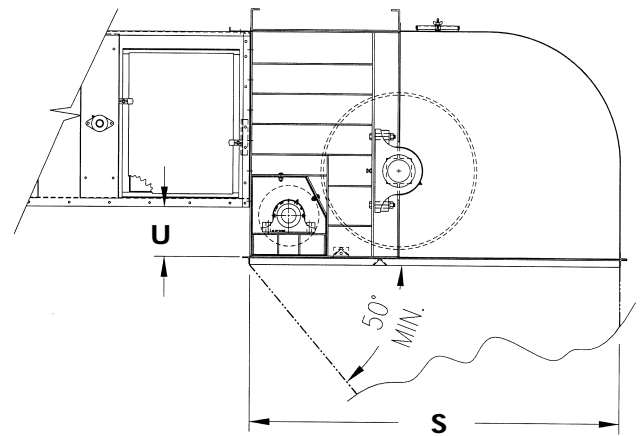
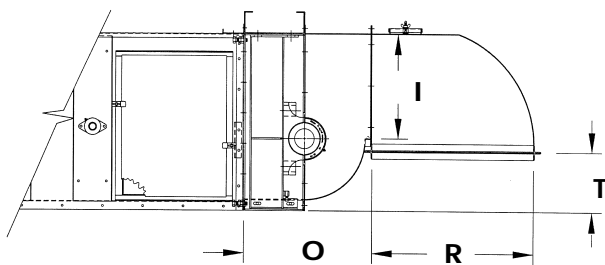
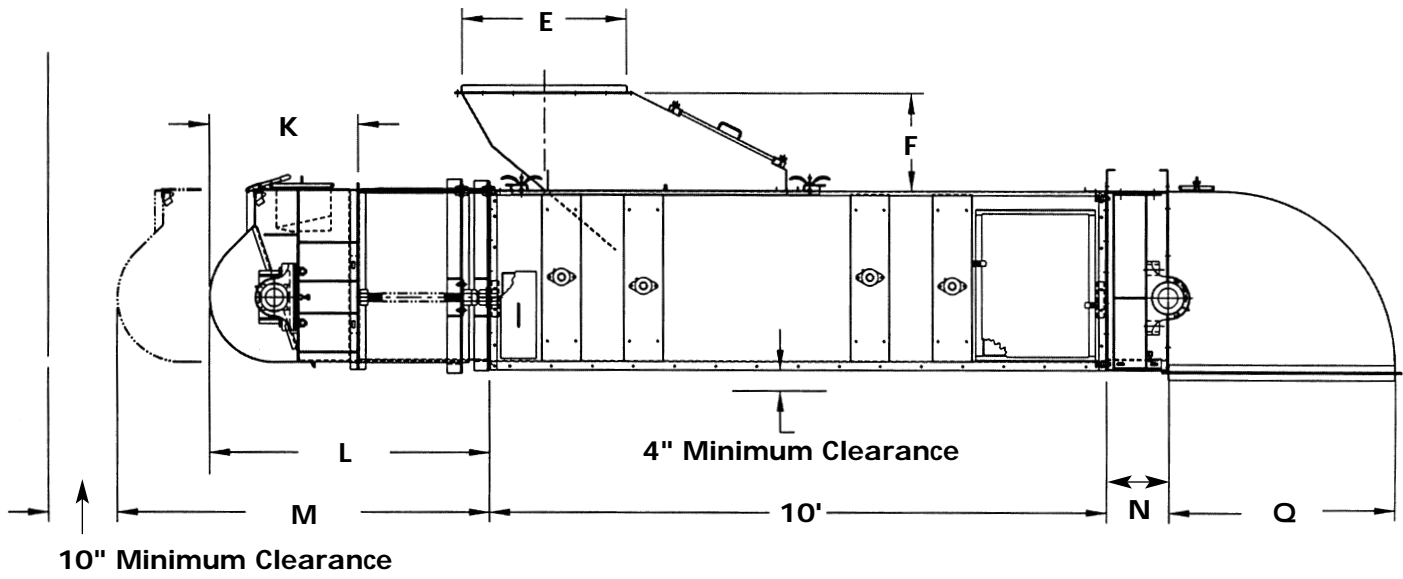
SUPER ROLLER CAPACITIES

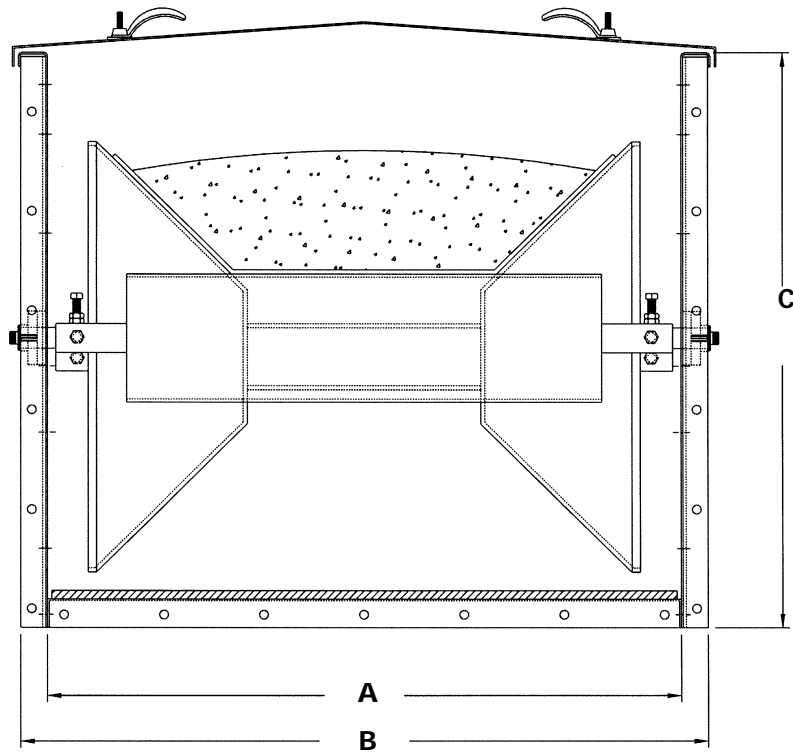
		BELT SPEED IN FEET PER MINUTE							
MODEL	UNITS	350	400	450	500	550	600	650	700
36	BU/HR	18,251	20,859	23,466	26,074	28,680	31,288	33,896	36,503
	CF/HR	22,712	25,957	29,201	32,446	35,690	38,935	42,180	45,424
	MTPH	494	565	636	706	777	848	918	989
42	BU/HR	24,536	28,043	31,549	35,087	38,560	42,065	45,571	49,076
	CF/HR	30,535	34,897	39,259	43,662	47,984	52,346	56,708	61,070
	MTPH	665	760	855	950	1,045	1,140	1,234	1,329
48	BU/HR	31,078	35,520	39,960	44,400	48,840	53,280	57,720	62,160
	CF/HR	38,676	44,201	49,726	55,251	60,776	66,302	71,827	77,352
	MTPH	842	962	1,082	1,203	1,323	1,443	1,564	1,684
54	BU/HR	37,865	43,278	48,688	54,098	59,507	64,916	70,326	75,736
	CF/HR	47,123	53,855	60,587	67,319	74,050	80,782	87,514	94,246
	MTPH	1,026	1,172	1,319	1,465	1,612	1,759	1,905	2,052
60	BU/HR	44,888	51,304	57,717	64,130	70,543	76,956	83,369	89,782
	CF/HR	55,862	63,843	71,823	79,804	87,784	95,764	103,745	111,725
	MTPH	1,216	1,390	1,563	1,737	1,911	2,085	2,258	2,432
66	BU/HR	52,156	59,611	67,063	74,514	81,966	89,417	96,868	104,319
	CF/HR	64,908	74,180	83,453	92,725	101,998	111,270	120,543	129,815
	MTPH	1,413	1,615	1,817	2,019	2,220	2,422	2,624	2,826
72	BU/HR	59,694	68,226	76,755	85,284	93,811	102,340	110,868	119,396
	CF/HR	71,289	84,901	95,514	106,127	116,739	127,352	137,964	148,577
	MTPH	1,617	1,848	2,079	2,310	2,541	2,772	3,003	3,234

FPM = Feet Per Minute BPH = Bushels Per Hour CFPH = Cubic Feet Per Hour MTPH = Metric Ton Per Hour (Based upon 769 Kg per cubic meter)
 Capacities are based upon horizontal installation and even belt loading.



**Overall width determined by bearing and drive size.





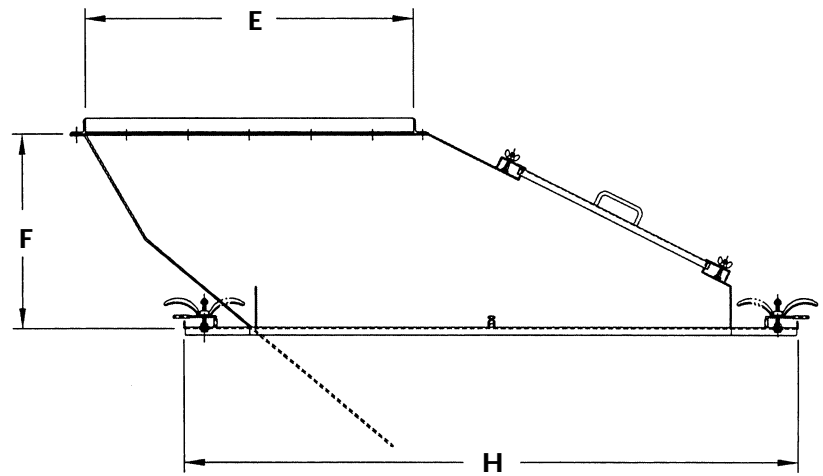
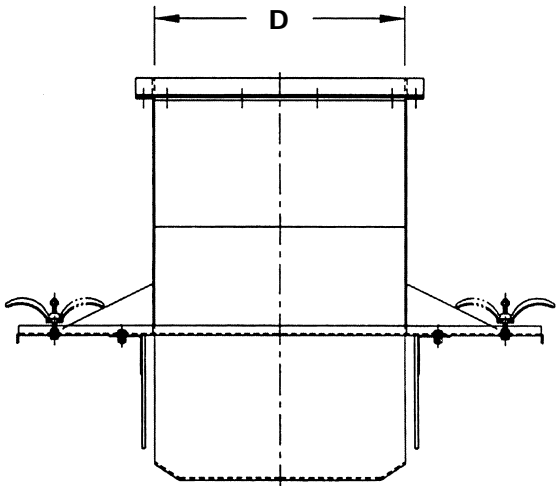
S U P E R R O L L E R D I M E N S I O N S

SPECIFICATIONS		SUPER ROLLER MODEL						
DESCRIPTIONS	36	42	48	54	60	66	72	
A	Trunking Width (inside)	38	44	50	56	62	68	74
B	Trunking Width (outside)	41½	47½	53½	59½	65½	71½	77½
C	Trunking Height (outside)	34¾	34¾	34¾	34¾	34¾	34¾	34¾
D	Inlet Opening Width	20	26	32	38	44	50	56
E	Inlet Opening Length	32	32	32	32	32	32	32
F	Standard Inlet Height	19	19	19	19	19	19	19
G	Cleanout Inlet Height	1½	1½	1½	1½	1½	1½	1½
H	Inlet Cover Length	60	60	60	60	60	60	60
I	Lo Profile Opening Height	20½	20½	20½	20½	20½	20½	20½
J	Tail Width (less bearings)	49½	55½	61½	67½	73½	79½	85½
K	Stub Tail Length	29	29	29	29	29	29	29
L	Take-up Length Retracted	Take-up Length + 36½"						
M	Take-up Length Extended	Take-up Length x 2 + 36½"						
N	Standard Head Length	12	12	12	12	12	12	12
O	Lo Profile Head Length	25⅞	25⅞	25⅞	25⅞	25⅞	25⅞	25⅞
P	Discharge Opening Width	39½	45½	51½	57½	63½	69½	75½
Q	90 Degree Discharge Length	44	44	44	44	44	44	44
R	Lo Profile Discharge Length	32	32	32	32	32	32	32
S	Snubber Discharge Length	73⅞	73⅞	73⅞	73⅞	73⅞	73⅞	73⅞
T	Discharge to Trunking Bottom	11¾	11¾	11¾	11¾	11¾	11¾	11¾
U	Discharge to Trunking Bottom	9¾	9¾	9¾	9¾	9¾	9¾	9¾

The above dimensions are stated in inches.

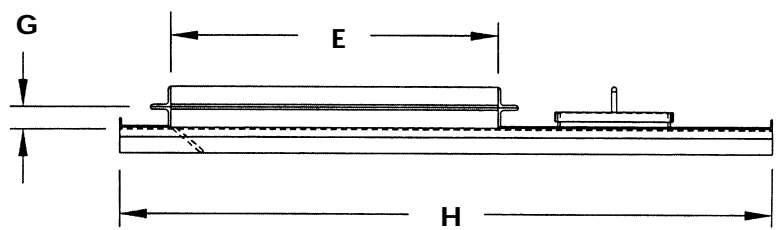
Designs and specifications are subject to change without notice.

Hi Roller Conveyors are manufactured under several Patents and Pending Patents.



Above: Typical initial inlet with fixed skirts

Below: Typical cleanout inlet with swing-down skirts



Inlet heights and lengths can be customized to your specific applications

The Super Roller Conveyor incorporates a unique spool shaped idler adjacent to a flat load support idler. The dual idler combination utilizes four external bearings as opposed to six internal bearings on more conventional idlers. This design permits the troughing portion of the idler to rotate at similar RPM's to the flat idlers. This reduces slippage between the idlers and conveyor belt.

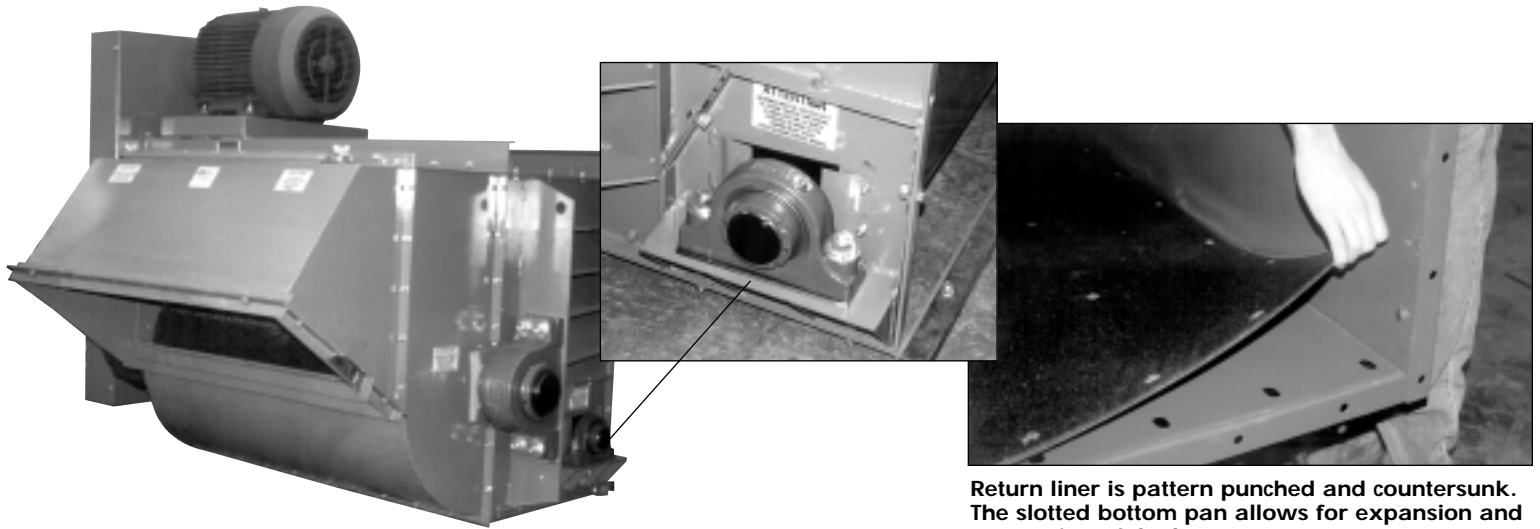
The idler is constructed with a heavy wall pipe that passes through the center of the idler. This provides rigid support. The center pipe is then reamed to just the right tolerance to accept the turned and polished stub shaft that passes through the external bearings.

This design is superior to a single continuous shaft

for obvious reasons. First, installation clearances do not always permit the removal of a single continuous shaft. Second, more generous tolerances are needed to pass a continuous shaft through the complete idler. This permits shaft deflection through the idler and bearing. Third, over a period of time a continuous shaft is more apt to become seized to the internal idler which would require cutting the shaft for idler removal.

The stub shaft and bearing are supplied by Hi Roller as an assembly to assure that the shaft can not rotate independently of the bearing and that the shaft cannot move in or out within the bearing. The bearing itself is easily adjustable for belt tracking.

Features & Options

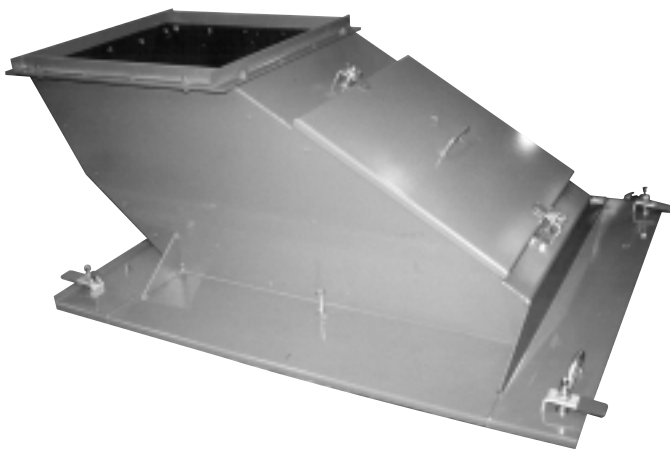


Shown is a Snubber head with a Lo Profile Adapter and 45 Degree Discharge. Head Sections split at the shaft so that the pulley and shaft can be removed without cutting the belt. Snubber pulleys are also mounted in a removable framework.

Return liner is pattern punched and countersunk. The slotted bottom pan allows for expansion and contraction of the bottom.

- Gradual Inclines
- Sharp Upbends
- Intermediate Discharge Trippers
- Enclosed Movable Trippers
- Reversing and Reloading with Both Directions
- Built-in Two Way Discharges
- Bi-Directional Inlets
- Internal Gravity Take-ups
- Galvanized Exterior Housing

- Stainless Steel Exterior Housing
- Metric Components
- Outboard Bearing Mounts with Shaft Seals
- Intermediate Sidewall Inspection Doors
- Support Legs
- Integrated Truss and Walkways
- High Span Trunking
- Abrasion Resistant Bottom Liners
- Belt Scales



Inlets are designed to direct the material with the travel of the belt. Counterweighted swing down skirts on intermediate inlets come down with the weight of the product and automatically retract as product stream stops. Multiple Inlets can be used at the same time. Inlet liners can be replaced through the large inspection doors.

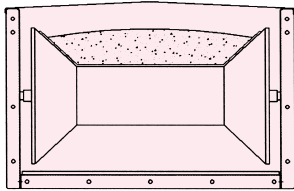


Shown is a Standard head with a 90 Degree Discharge. Head Bearings are easily adjustable for belt tracking. All inlets and discharges are supplied with matching flanges.

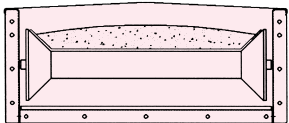
Hi Roller is more than a manufacturer. We can review your project on-site, make recommendations, prepare proposal drawings, and provide start-up assistance. We have found that a successful installation relies upon a clear understanding of the process, from the spouting and placement of the material on to the belt to the discharge and spouting out the other end. Put our design experience to work for you.

ProductLine

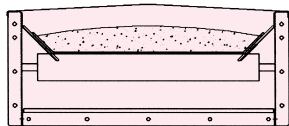
Hi Roller Conveyors are custom built to your specific requirements. Some of our more popular models include:



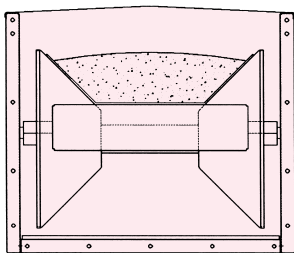
Hi Roller: Available in belt widths from 18" to 60," this is our original and most popular model. The unique bell-shaped carrying idler provides the trough for the belt and utilizes two external bearings as opposed to the six internal bearings associated with a conventional idler. The bell-shaped idler also has built-in self-aligning characteristics for both single and bi-directional conveyors.



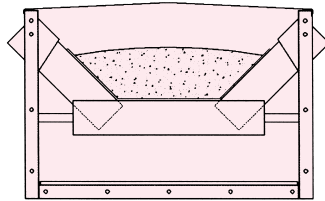
Mini Roller: Available in belt widths from 16" to 36", the Mini Roller includes all the benefits of the Hi Roller in a lower profile design.



Lo Roller: Available in belt widths from 12" to 36", the Low Roller utilizes a flat carrying idler to support the loaded weight of the belt and relies on the UHMW side slides to form a trough for the belt. This design provides continuous belt support and creates a seal at the edges.



Super Roller: Available in belt widths from 36" and up, the Super Roller combines a larger bell-shaped idler and a flat idler turning independently. This design provides a deeper trough than the Hi Roller Conveyor and reduces the slippage between the belt and the idler.



Hi Life: Our newest development, the Hi Life utilizes possibly the heaviest, longest life, most reliable conveyor idler available. Resembling a conventional conveyor idler, the Hi Life idler is much thicker, the bearings are much larger *and* there are no brackets or bearings exposed to the internal atmosphere of the conveyor housing.

Specials: Tailored to your specific application, we can customize conveyors such as the V Roller (two idlers mounted in a V configuration), Hi Bulk (an enmasse belt conveyor designed to move large quantities of material in limited space), Hi Lift (a steeply inclined conveyor utilizing cleats or buckets fastened to the belt). The Consignor is a belt conveyor with a totally enclosed, moveable discharge tripper to discharge material off at any location along the conveyor.



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Belt
Conveyors
have long
been known
as the
most
gentle,
efficient and
durable means
of conveying
materials.