SINCE 1919

I.J. WHITE SYSTEMS

"Putting Innovation Into Motion"

TECHNICAL BULLETIN

CLEANING: SPIRAL BELT, TRACK, AND CAGE BARS

Maintaining a clean Spiral Belt and Wearstrip is the best way to reduce belt tension. A regular, scheduled cleaning program is essential for proper system operation. The frequency of cleaning is determined by the quantity of carry over from your product, the air quality of surrounding environment including temperature, and the system application. The following are recommendations to address three critical areas of your I.J. White System.

SPIRAL BELT

Only use "Dawn" Dishwashing Detergent. Never use Caustic Cleaners or De-greasers.

The Spiral Belt must be kept clean so that it can collapse as it enters and travels around the Spiral Cage. As the belt becomes covered with debris, friction increases between the belt and Track Wearstrip. Even a slight amount of dirt will have a negative impact on belt and system performance.

1. Utilizing the Spiral Belt Washer with high-pressure water @ 500 PSI or more, is a most effective means of removing debris.

2. To achieve best results, the Spiral Belt speed should be reduced to as slow as possible. A complete cleaning may require multiple passes through the Belt Washer.

3. During the washing cycle, activate the air manifolds to remove the excess water and debris from the belt.

4. After washing, the manifolds can remain on to achieve better belt drying.

If you have I.J. White Dip Tanks or if any excessive dirt has accumulated on the Spiral Belt, a manual steam cleaning may be necessary. Call our Technical Service Group for recommended guidelines.

TRACK WEAR STRIPS

As dirt accumulates on the Spiral Belt, it transfers onto the Track Wearstrip. As the Wearstrips become dirty, the friction level dramatically increases. After the Spiral Belt has been thoroughly cleaned, then the Track Wearstrips must be wiped down. This procedure is called "ragging."

Key Warning Signs:

- High Belt Tension and Rising
- Increased Belt Overdrive
- Take-Up Motor Amps are Rising
- Erratic Belt, Pulsing, Jerking or not tracking properly

Try this simple test: Only with the system turned off and locked out, lift the Spiral Belt and run your finger along 12" of the surface. If your finger is clean, then you are ready to run. But if it feels sticky, gritty, gummy, or just dirty, then it is time to clean.

1. Turn the Spiral System "OFF", and follow lockout procedures.

NOTE: The Track Wearstrip must have a smooth surface. Once they become rough or gouged, the Spiral Belt tension will dramatically increase. At this point, the Track Wearstrips must be replaced.

Ragging The Track Wearstrip:
Only use "Dawn" Dishwashing Detergent

2. Moisten small rags with diluted "Dawn" dishwashing detergent. At the Infeed of the Spiral, place eight (8) to ten (10) rags, approximately three (3) feet apart, between the track and the Spiral Belt.

3. After checking that all personnel are clear and safe, reduce the Spiral Belt speed and allow all the rags to travel through the system. The leading rags will quickly become saturated with dirt, and can be removed partially through the system. To remove these rags the system must be "OFF" and system locked out.

4. The remaining rags will travel to the Spiral Discharge and then they must be removed.

NOTE: If the rags are not getting to the Discharge, this is a good indication that there is damaged or missing Track Wearstrip. Before going into production, these areas must be identified and repaired or severe damage will occur.

5. The Track Wearstrip has been cleaned. The Belt Washer should be activated for one final rinse cycle and then sanitized.

NOTE: All Wearstrips should be stored in a covered, cool dry place. Exposure to sunlight will cause brittleness, and affect the life of the material.

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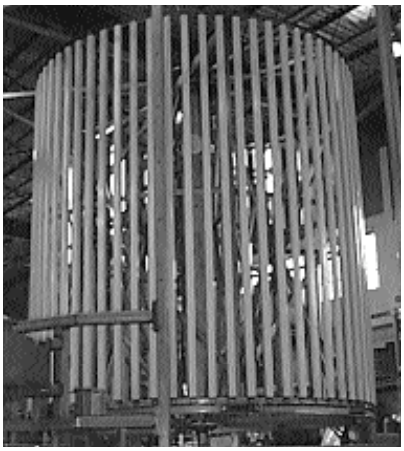
Vertical Cage Bar WearStrips

Key Warning Signs:

- Belt Tension is High or Rising
- Belt Overdrive has Increased
- Take-Up Motor Amps are Rising
- Erratic Belt, Pulsing, Jerking or not tracking properly.

The Vertical Cage Bar Wearstrips must be kept clean and free of all oils, lubricants and greases. Once the Cage Wearstrips become even slightly contaminated, the result is a dramatic loss of drive force from the cage and higher belt tensions. Cleaning the Cage Bar Wearstrips is usually not required as frequently as the Spiral Belt or Track Wearstrips.



1. Only with the system turned "OFF and locked out, inspect the surface of the Wearstrips. Rub your hands on the surface, if your hand feels sticky, gritty, gummy or just dirty, then it is time to clean.

NOTE: The Vertical Cage Bar Wearstrips must have a smooth surface. Once they become rough and gouged, the Spiral Belt tension will dramatically increase. At this point, the Cage Bar Wearstrips must be replaced.

2. We have found that the easiest method is with a non-caustic foaming agent applied with a spray gun.

3. From a safe distance, start at the top of the Cage with the system running at a slow speed.

4. Follow the foam manufacturer's recommended activation time. Then, thoroughly rinse down the system. If there is any remaining residue continue rinsing until all are completely clean.

NOTE: Foaming agents have a tendency to leave a white powdery residue; which will increase the friction between the belt and the Track System, causing high belt tension.

NOTE: It is critical that the Cage Bar Wearstrips be clean, smooth, and free of any oils and greases. These substances reduce the ability of the cage to drive the Spiral Belt; which will have a dramatic effect of higher Spiral Belt tension.

NOTE: All Wearstrips should be stored in a covered, cool dry place. Exposure to sunlight will cause brittleness and effect the performance and life of the material.

Spiral Belt Lubrication

NOTE: Use D.C. 200 Fluid, Food Grade 350 cSt on the Outside Track Wearstrip only.

Key Warning Signs:

- Belt Tension is High or Rising
- Belt Feels Dry or Rough
- High Pitch Screeching Noise

After the Spiral Belt, Track and Vertical Cage Bar Wearstrips are clean, if belt tension is still high then a very light coating of D.C. 200 can be applied to only the outside Track Wearstrip.

D.C. 200 is applied using the same "ragging" procedure described above with 2 or 3 rags only on the outside Track Wearstrip.

NOTE: Never apply D.C. 200 on the inside tracks because the oil will eventually migrate onto the Vertical Cage Bars, and harm the belt and Spiral System.

ABL System

If you have never done the above procedure, or if regular outside track oiling is necessary, this lubricating can be automated using our ABL System. Please call Technical Service Group for more information and the latest updates.

Bearing Maintenance

All bearings must be greased at least every 200 hours and greased after every system wash down. When greasing new bearings, they should be rotated with every pump of the grease gun until the bearing is well packed with grease. This procedure will ensure that 100% of the bearing is greased.

Technical Services Programs

- PM Video
- On-Site System Training
- PM Service Programs
- Cleaning Systems
- Belt Cleaning Bulletin
- Operations Manual
- Replacement Parts

Technical Services Group

For information, call
1-631-293-2211

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I.J. WHITE offers 24 hour - 7 Days / Week Emergency Technical Service

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