

Papermaking felts are delicate consumables on paper machines, and they are also an effective guarantee for producing good quality paper. Choosing a good felt and using it properly is very knowledgeable. In the eyes of paper mill workers, how to Love it and maintain it in the routine work?

Firstly,we should be clear what will do harm to the felt in the paper production.

In the production process, the tiny fibers, fillers, glue materials, color materials etc. in the pulp material, as well as the impurities in the water, easily adhere to the felt, block the pores of the felt, and affect the absorption and drainage of the felt.

So, the felt washing is one of the key issues to ensure good dewatering performance of the press section and prolong the service life of the felt.

It is more important for needled felt because the surface fluff is long and thick, the interfiber space is small, it is easily blocked, and it is difficult to clean after being blocked

More than 90% of the blankets are not worn due to wear,but blocked,so the key to using the felt is washing.

The method of felt washing has two types of continuous washing and shutdown washing in normal production.

1) Water needle spray cleaning: water pressure is $1.47\sim 2.45\times 10^6$ Pa,

The advantage is that the water is used less, and the chemical cleaning agent can be used less by the forced impact of the water needle.

The disadvantage is that the damage to the blanket is large.

The cleaning surface is the blanket sticker page, and the washing water temperature stack is recommended to use about $50\text{ }^{\circ}\text{C}$, which can be determined according to the actual production situation.

2) On-machine intermittent chemical cleaning: intermittent cleaning can be done with detergent, hydrochloric acid or lye. They can be prepared at a suitable concentration and can be moved to the full-width felt. After using the chemical concentrate in the specified time, The chemicals left in the felt should be washed away by clean water. When cleaning with acid, the concentration should not exceed 5% of dilute acid, otherwise the nylon will encounter a thicker acid solution, which will make the hair harder and affect the drainage.

3)Continuous cleaning on the machine: the felt can be kept in the final state at all times to achieve the highest producing efficiency, and

continuous cleaning on the machine is the best method.

Continuous cleaning on the machine is not to remove dirt that does not cause the carpet to become clogged, but to remove the dirt before it is stained on the felt or just as it penetrates the felt. The concentration of the cleaning agent for continuous cleaning is generally 0.01 to 0.06%.

Continuous cleaning agent costs are high, but the advantage is that it can extend the life of the felt, and the blanket will be always in an optimal state, which is beneficial to reduce consumption, reduce breakage loss, and improve the quality of the paper.

Precautions for using a blanket:

In addition to the above, the operation of the felt must also pay attention to the following points:

- 1) The needle-punched wet felt is flat and thick, and it is not easy to be folded. when the new felt is on the machine, do not over-tighten it. First, slow-moving the felt and spray the water to evenly wet the felt to make it shrink naturally; and it needs to run for 6~10 minutes. Make it hydrophilic and remove a small amount of floating hair.

Before the pulp is feeding, the felt is properly tensioned. Generally kept loose, this will not affect the operation. If it is too tight, it will cause the

blanket to shrink laterally, and the base cloth hole will be deformed, which is not easy to filter.

2) When the paper machine is stopped, the felt must be relaxed to avoid tension after drying and to break the blanket. If the downtime is long, the felt should be washed with water and then relaxed.

When starting up, you should drive the machine slowly and spray the water to wet the blanket. After the blanket is soaked, then pressurize it and drive faster.

3) If the felt is too wide, it should be noted that the incision is neat and care must be taken when pulling. Some big grams felts, it is best to cut with scissors.