

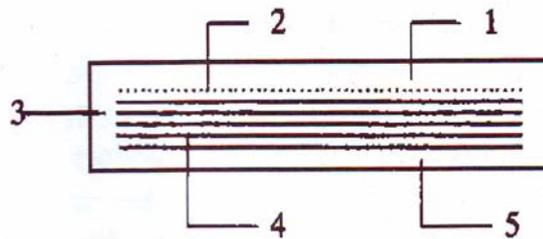
Research & Development of heat resistant conveyor belt

---improvement of skeleton material

Heat resistant belt include three parts: top cover, bottom cover and strength layer, showing in figure 1. Some belt is mould edge, and some belt add heat insulation layer (fiberglass/Asbestos net) in top cover and/or buffer layer, as figure 2.



Pic.1



Pic.2

Pic1. structure of conveyor belt

Pic2. 1- top cover 2-buffer layer or heat insulation layer

3-side cover 4-skeleton layer with high strength

5-bottom cover

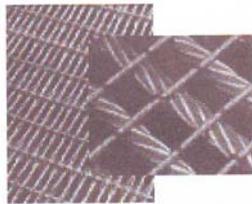
Domestic situation: We mainly study and developed Heat resistant 150°C conveyor belt in China. And it's difficult to find the report on Heat resistant 175°C conveyor belt. The study of Heat resistant belt in China mainly focus on Fabric layered HR belt. Steel curtain net HR belt has been just developed for recent years. For now, the report of research and result and application are very rare. And only few factories study solid woven HR belt.

Abroad situation: HR conveyor belt can reach to 200°C in some oversea countries. They attach importance to skeleton layer, mainly on Layered

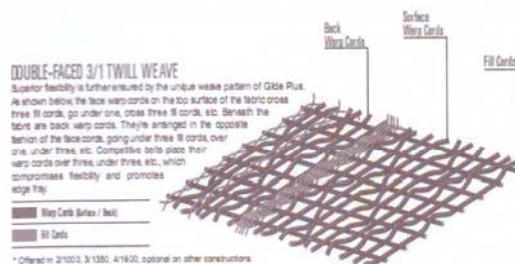
HR belt and steel curtain net HR belt. Now, layered heat-resistant conveyor belt is still taking a larger proportion, including PP, NN, EP, GL, Kevlar canvas or Kevlar textile canvas. In Europe, EP/PP/GL is widely used in HR conveyor belt; EP/NN canvas is mainly used for HR conveyor belt in Japan.

Steel curtain net HR conveyor belt have two types: SW structure and IW structure.

Steel curtain can bear high temperature, and avoid penetrating burning. Its reticular structure of steel materials is helpful for heat dissipation. The steel curtain is widely used in Europe and Japan. This kind belt mainly applies for delivering high temperature material in long distance.



Pic.3



Pic.4

Pic3. Steel curtain net with IW type

Pic4. Steel curtain conveyor belt of heat resistant