Research Orientation of Double Arrow

- Study on the feasibility of rigidity and turn of pipe conveyor belt under different turning angle, idler pitch, and in constant tension state. Using the Double Arrow pipe conveyor belt constant tension state inspection device, develop super low rolling resistance pipe conveyor (rubber is the SLRR with ultralow viscoelastic loss factor tanδ value) belt with the pipe diameter of over Ø800mm on bases of existing Ø600mm to satisfy clients' demands for large pipe diameter, long distance, and low rolling resistance conveyors.

- Study on the energy-saving conveyor belt (super low rolling resistance).To reach the leading level in the world, and become the world class conveyor belt product designer and manufacturer. On the basis of existing low rolling resistance (LRR), to study and develop ultralow rolling resistance conveyor belt(ultralow rubber viscoelastic loss factor tanδ value),and study and develop low rolling resistance conveyor belt at low temperature.

- Study on the dynamic splice efficiency of the high-strength steel cord conveyor belt(ST7500～ST10000) using the splice dynamic fatigue testing machine joint-designed by Double Arrow and American CDI company. Through formula and process design of the joint rubber to improve more than 50% of the dynamic splice efficiency to reduce the safety multiple. The safety multiple of the high-strength steel cord conveyor belt will be reduced to 4-5 times of working tension, which reach the advanced level in the world.

- Collaborative develop and innovate with extractive industries, power, cement, steel, wharf and other heavy industry customers in the conveyor belt field, change the high energy consumption, high emissions, dust flying situation of the traditional conveyor industry. Double Arrow will contribute to develop green environmental protection energy-saving conveyor belt to save energy and reduce emission for the green and low-carbon society.

- Study on various expanded rubber material with high performance which will gradually expands and achieve seal and leaking stoppage when touching oil, water, oil-water mixture, etc. With the unique properties of elastomer seal and expand seal after absorbing the liquid, it is used in basement, sewage treatment project, subway, tunnel, storage reservoir, hydraulic engineering, and construction joint, expansion joint, fissure in concrete project, etc. Especially widely used in oil fields as an expandable rubber packer material in the petroleum and natural gas mining industry.