

Cool Conveyor Belt

Applicable Age Group 5-6 year-old toddlers

- Activity Objectives**
- ☑ Use gear transmission to design a conveyor belt structure.
 - ☑ Understand the function and application of idler gears by observing the rotation direction of gears.

Activity Description Conveyor devices are used at security checkpoints in airports, railway stations, and subway stations. People place large and small bags on the conveyor belt, and the scanner inside the machine checks whether the items in the bags are allowed. This activity involves using gear transmission to design a conveyor belt. During operation, children will encounter a problem: two meshed gears rotate in opposite directions, but we need them to rotate in the same direction. Through this, they will learn about the function and application of idler gears.

STEAM Literacy Development Indicators

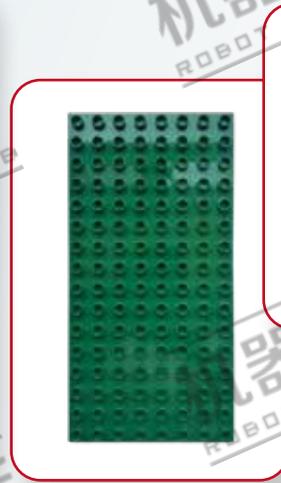
Method Indicator	Raise questions to understand the function of a conveyor belt	Design a conveyor belt using gear transmission	Explore the function of an idler gear	Further understand the function of conveyor belts
Curiosity and Imagination				
Flexibility and Adaptability	●	●		
Verbal and Written Communication Skills				
Cross-boundary Cooperation and Exemplary Leadership				
Critical Thinking and Problem-solving Skills			●	
Proactive and Pioneering Spirit				●
Ability to Evaluate and Analyze Information				



Interactive Tips

- The gear combination needs constant adjustment; it rarely works perfectly on the first try. Give children time and encourage them to find the right arrangement by themselves.
- Installing the belt is relatively difficult; you can assist children with the belt installation.

Find These Blocks



Find the Gear Arrangement, Install the Motor, and Make the Conveyor Belt Run Using Gear Transmission

