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The main cleaning system design of garbage sweeper

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Keywords: the main cleaning system design: the design of lifting mechanism; two dimensional structure; 3D modeling.

Abstract. Sweeper is a set of road cleaning, new garbage collection and transportation as one of the high efficiency cleaning equipment. Simple said is refitted garbage in the special vehicle chassis cleaning sweeping vehicles, vehicle except chassis engine; add an auxiliary engine, four brushes driven by the hydraulic motor, fan, water tank, garbage and other ancillary equipment. With the rise and development of social production, the sweeper sweeping function have higher requirements, and the cleaning system is the essential, it is directly related to the overall effect of road cleaning. This paper mainly introduces the three-dimensional modeling design of 2D mechanism of the cleaning system and the main parts of the. This new model can be completed once the ground cleaning, cleaning, curb side road .Road teeth cleaning and sweeping the ground water after cleaning work, applicable to all kinds of weather and different dry pavement.

Introduction

This thesis mainly focus on the first design and using 2D parts main cleaning system of three-dimensional modeling software for 3D modeling, the design of the garbage cleaning car owners cleaning system and lifting mechanism is the system of road cleaning is very important, it can not only be road dust clean can absorb 50mm in the size of the particles, and it only needs a transmission device can make the good work that achieves a good energy saving effect. The main characteristics of this paragraph of refuse cleaning vehicle:

1) Through the main cleaner trash particles (≤ 0.5cm) adsorption into the garbage box.

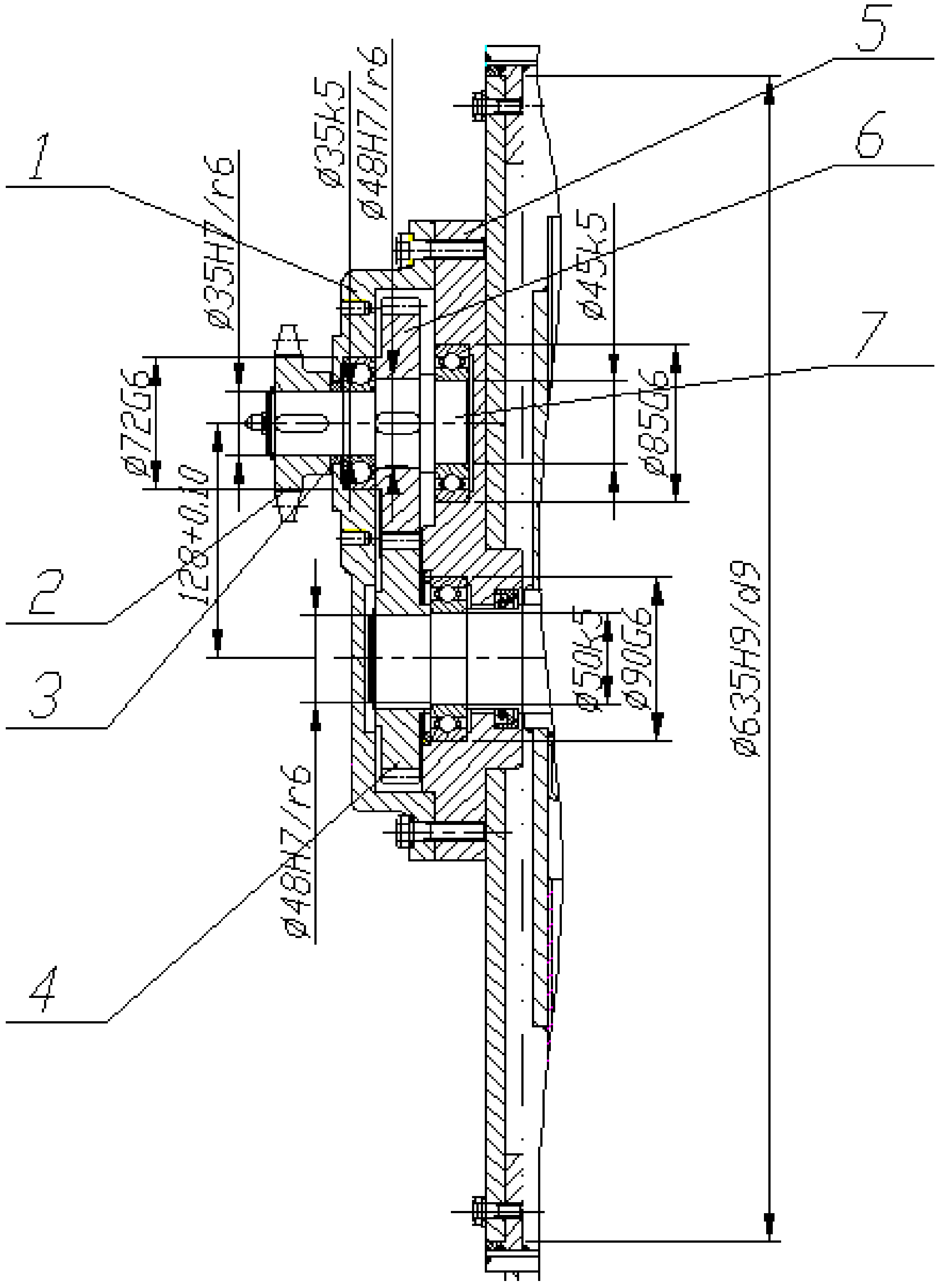
2) There is only one force garbage cleaning device, through the drive, drive the rotation of the wheels, and to drive the belt rotation, energy saving. Theoretical basis

Organization of the Text

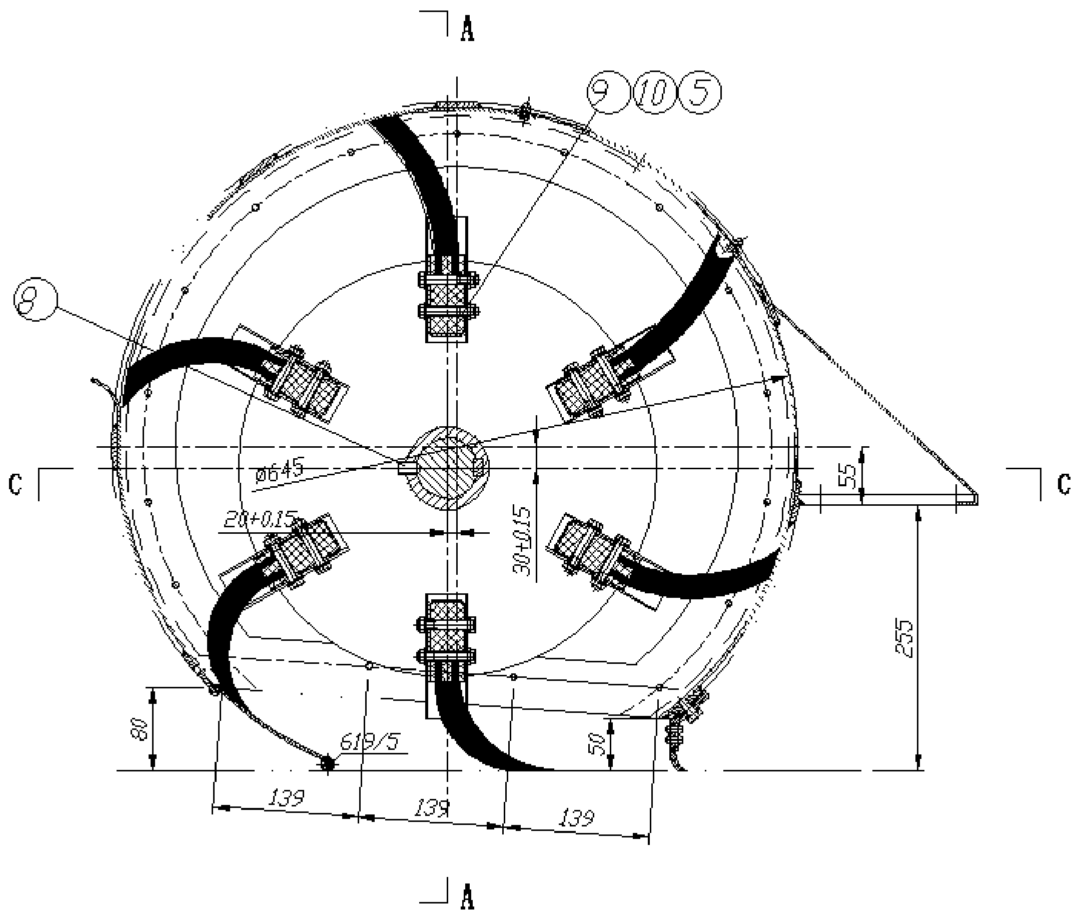
1：The cleaning system overview of Garbage sweeper

Cleaning system is very important in the whole cleaning car body structure is the key part of the system, road cleaning. It mainly consists of main components of the spindle, the left plate, a right end plate, a left frame, board, right bearing seat, right bearing cap, hair brush frame, brush, brush the left bracket right frame, gear box, gear box cover, chain wheel, shaft, small hard brush, soft brush.

2: A two-dimensional structure design of the main cleaning system

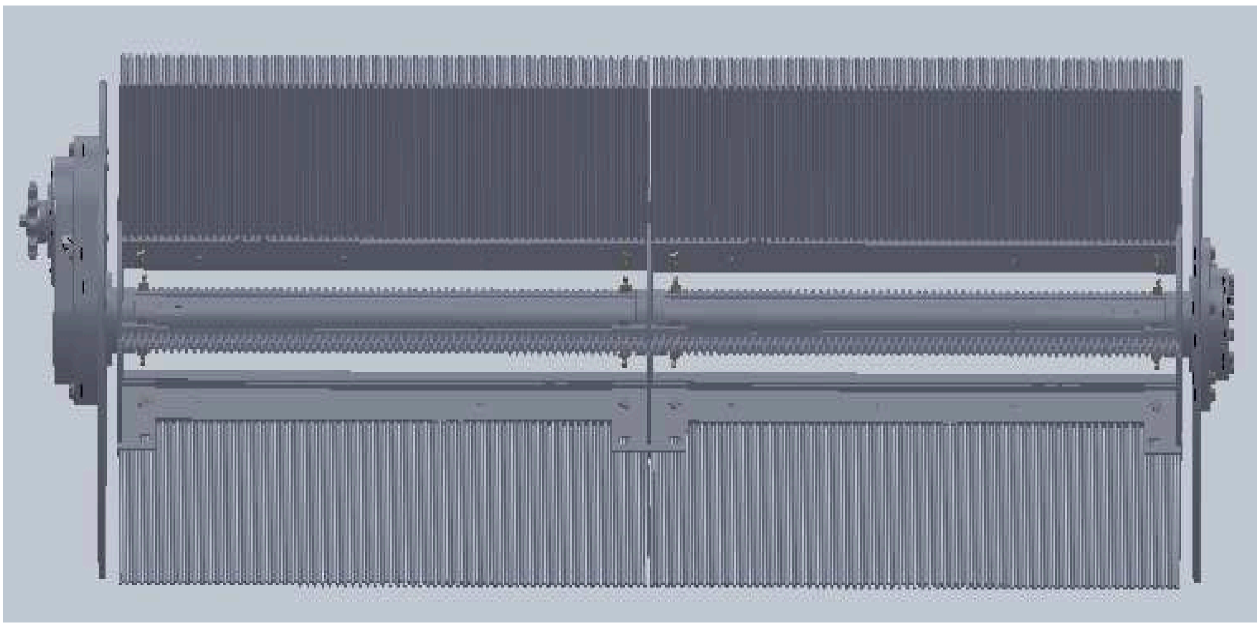


(a) 1**.** the gear box cover 2. sprocket 3. spacer sleeve 4. gear (two) 5.gear box 6. gear 7. small shaft



(b) 8.fastening screw 9. hexagon headed bolt 10. hexagon nut

3: Garbage cleaning car cleaning 3D assembly drawing:



4: The sweeper renderings:

Conclusion

This design adopts a method of garbage cleaning car cleaning system for 3D and 2D modeling, combined with the actual situation of the specific analysis, improved cleaning system components. The better cleaning effect, energy saving effect is better, and achieves the cleaning wider road looks more clean.

Acknowledgments

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