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## 自走式菜用大豆摘荚机的设计

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摘要: 随着近些年来国内外对菜用大豆需求量的不断增长,菜用大豆实现机械化收获的需要尤为迫切,针对该种需求及当今该领域研究制造的不足,吸收了现有菜用大豆收获机型的经验,分析、总结和优化了现有文献中的构想及同类机械的工作原理,设计了自走式不对行菜用大豆摘荚机,该机主要由机车系统、滚筒弹齿式采摘台、输送系统、清选系统、储运箱等组成,能够一次性完成豆荚的采摘、清选作业,不仅提高了摘净率、降低了破损率,还具有很好的筛选效果,提高了豆荚采摘的质量,更加符合我国的国情。

Abstract: As the growing demand for green soybean in recent years both home and abroad, the needs of the mechanized harvesting is particularly urgent. In accordance with the need and the shortage of the current research in this field, having absorbed the experience of existing models of soybean harvester, analyzed and optimized the idea in the existing literature and the working principle of the congener mechanical, the no-line self-propelled green soybean harvester was designed. It is mainly composed of locomotive system, drum spring-tooth picking platform, conveying equipment, cleaning equipment, storage tank and so on, which can complete pod picking and cleaning all at once, not only improves the net rate, reduce the damage rate, but also has very good filtering effect, improve the quality of the pod picking, more suitable for the conditions of our country.

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