

Brief Talk about Diet Processing Machine Repair and Maintenance

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Abstract: *With the rapid development of science and technology and economy, the degree of mechanization of food security is gradually strengthened. Diet processing machine plays a more and more important role in promoting the development of food industry and improving the ability of logistics support. But in the development process of diet processing machine, China's diet processing machine in the maintenance and maintenance of some deficiencies, most practitioners lack of awareness and professional skills, leading to diet processing machine is difficult to play a maximum role, affecting the development of the food industry and security ability to improve. Based on this, this paper focuses on the maintenance and maintenance of diet processing machine, expounds its significance and content, analyzes the current problems, and puts forward targeted countermeasures, in order to provide some experience for practitioners.*

Keywords: *Diet Processing Machine, Mechanical Maintenance, Mechanical Maintenance*

1. The introduction

With the increasing mechanization of food security, new diet processing machine with high efficiency and wide application range has been widely used, which has a crucial impact on the improvement of food security ability. How to ensure good mechanical properties of food and promote the successful completion of the task of food security has become an important link to improve logistics support ability and enhance combat effectiveness. Therefore, the maintenance and maintenance of diet processing machine is analyzed and discussed in this paper.

2. Significance of Diet Processing Machine Repair and Maintenance

The development of diet processing machine is the basis for the efficient completion of the task of food security. Diet processing machine equipment repair and maintenance, to ensure the normal operation of diet processing machine, so as to maintain good food order. The application of diet processing machine must avoid the occurrence of failure as far as possible. Once mechanical failure occurs in the process of use, it will not only cause the stagnation of food work, but also lead to major operational accidents in serious cases. This requires users and managers to strengthen the maintenance and maintenance of diet processing machine equipment, so that diet processing machine operation is always in a good state of performance. Maintenance of diet processing machine science, and regular maintenance, can be found in advance of diet processing machine safety risks, to ensure the stability and improvement of its performance. Diet processing machine in daily use, will be affected by a variety of internal and external factors, including the environment, so that some of the performance is difficult to achieve the best state. Through repair and maintenance, can analyze and summarize the various factors affecting the operation of diet processing machine, and judge the degree of its performance deviation. It can be seen that the maintenance and maintenance of diet processing machine needs to have a certain degree of professionalism and technology, and has higher requirements for operators and managers. But this is too important work to be treated negatively.

3. Maintenance and Repair of Diet Processing Machine and Equipment

3.1. Maintenance of Diet Processing Machine

Diet processing machine maintenance according to the type, generally divided into daily

maintenance, regular maintenance, long-term storage maintenance. [1]

Daily maintenance. The daily maintenance of diet processing machine is almost a daily maintenance in the daily use of equipment. Its significance is reflected in maintaining the good performance of mechanical equipment, maintaining the normal operation of mechanical equipment, extending the service life of mechanical equipment, so as to nip in the bud. Diet processing machine in the use of the process, it is inevitable that there will be some dust, oil stains, food materials and other residues in the equipment, these residues will increase the friction of mechanical equipment use, produce greater resistance, damage to the parts of the equipment, and then affect the normal operation of the accident machinery, reduce the efficiency of diet processing machine guarantee. Therefore, in the process of using diet processing machine, it is necessary to clean up the dust, residual oil stains and food residues in time. Of course, in the process of using the machinery, the external of the machinery will carry part of the soil, these soil carry in addition to bring great friction to the machinery, but also accelerate the external corrosion of the machinery, so as to shorten the period of mechanical use. Therefore, in weekdays, after the use of diet processing machine, also want to clean up the external soil, dust and sand. In addition, the user in the process of use to regularly add lubricating oil to the internal parts of the machine so that the internal parts of the machine can reduce friction in the process of use, to avoid the damage of parts. To clean the machinery regularly, to ensure that the machinery can start normally and normal heat dissipation, to avoid damage to the machinery because of high temperature.

Regular maintenance. Due to natural or human factors, some parts of diet processing machine will become loose, worn and corroded in the process of use, until they reach their service life and completely lose their ability to operate. Lubricating oil and so on will gradually be consumed and deteriorated with the passage of time, and some means and methods must be taken for maintenance. Such as inspection, adjustment, fastening, replacement, cleaning, etc., to ensure its good performance state. Regular maintenance is intermittent comprehensive inspection in accordance with a certain periodic rule, eliminate safety risks, keep diet processing machine in a good state of performance, to ensure that the work efficiency is improved. There are three main aspects of work: one is to check the use and replacement of diet processing machine oil. Operators should regularly check the use of oil, timely supplement, to ensure sufficient oil to make the engine work normally. In addition, because the oil has a certain use time standard, it is necessary to replace the oil regularly. When replacing the oil of diet processing machine, it is necessary to choose the appropriate oil, considering both product performance and price, and selecting the oil with high cost performance. [2] The second is to check the lubrication state of food equipment. Any mechanical equipment is composed of a number of parts, in the process of equipment operation, the movable parts will make relative movement according to the specified contact surface, the relative movement of the contact surface will have friction, will consume energy and cause the wear of parts. Therefore, lubrication has a great impact on the technical status of diet processing machine. Applying lubricants appropriately to contact surfaces in relative motion to lubricate them is the most common, economical and effective way to reduce friction, wear and energy consumption. Three is to check the wear of the parts, do the relevant statistics, so that targeted maintenance, replacement and so on. Mechanical equipment is made up of countless parts and components, the technical status of each part may have a significant impact on the normal operation of the entire mechanical equipment, so it is necessary to check the state of parts and components regularly to ensure the normal operation of the machinery[3].

Long-term storage and maintenance. Diet processing machine seasonality exists in the specific use process, so individual diet processing machine will be in the long-term idle, storage process, during this period of maintenance is called long-term storage maintenance. Generally speaking, long-term storage and maintenance according to the instructions on the correct storage of products, including the selection of appropriate environmental temperature[4], humidity, etc. Some machinery may also need to meet special storage requirements such as away from the power supply and avoid the magnetic field. It should be properly stored to prevent deformation, corrosion, aging and other adverse consequences due to the influence of the external environment. Through long-term storage and maintenance, diet processing machine can maintain a good technical state in the idle process, prolong the service life, and achieve ideal results in the future use process[5].

3.2. Maintenance of Diet Processing Machine

Diet processing machine maintainers need to have professional maintenance skills, and have a deep understanding of the structure and working principle of diet processing machine, can independently analyze the causes of common faults, and master common troubleshooting methods. When diet processing machine failure, the first time to suspend the operation, open the careful inspection, find the

cause of the fault in time and immediately eliminate, before troubleshooting is never allowed to continue to work, otherwise it will cause serious accidents. Diet processing machine breakdown generally has two reasons. One is the mechanical failure caused by the natural wear and tear of parts. Diet processing machine is composed of many parts, each part has its service life, in the process of use due to environmental impact or mutual friction and other inevitable normal loss, when the loss to a certain extent will affect the normal work of diet processing machine. Second, the operator in the process of using improper operation caused by human failure. Diet processing machine operation and use need to be carried out in strict accordance with the operation and use process, once the maintenance of improper use, may cause mechanical failure.

In the maintenance of diet processing machine, usually according to the following three steps. One is to determine the cause of the failure. Mechanical equipment failure has a certain form of performance, such as abnormal performance, abnormal sound, abnormal temperature, oil leakage or odor. Analyze the cause according to the manifestation to find the fault point. Equipment in use process, for example, produced a certain degree of peculiar smell, can be in many ways the analysis judgment, may be some non-metallic materials in the operation process of equipment in the high speed friction produce certain focal stink, may also be anxious burnt flavour of electric system and the conductor is burned to produce, also is likely to be oil leakage caused by burning smell and so on, according to the specific situation analysis of the cause of the problem, Diagnose the equipment in time. Second, troubleshooting. After determining the cause of the fault, the maintainer shall carry out maintenance strictly in accordance with the maintenance operation rules. Mechanical equipment has a certain complexity and technology, so the professional requirements of the maintainer is high, the maintenance process must ensure safety maintenance, in the equipment shutdown state, otherwise prone to safety accidents. In addition, the overall benefit should also be considered in maintenance to determine whether the maintenance cost can obtain the corresponding value. If the maintenance value is low, it can be scrapped. Third, test performance status. After the maintenance is completed, the maintainer needs to carry out the performance test of the equipment to confirm that it is in a good technical state and can work normally and safely before continuing the operation.

4. Problems and Countermeasures of Diet Processing Machine Repair and Maintenance Work

4.1. Problems Existing in Diet Processing Machine Repair and Maintenance

4.1.1. Low Maintenance Awareness

Diet processing machine is used currently operating personnel and management personnel overall quality is generally not high, low education level, only in front of the mount guard after a simple operation training began to engage in work production, without system maintenance knowledge training, it is difficult to form the good maintenance consciousness, thus in the practical work, personnel mechanical improper operation situation, Because maintenance consciousness is shallow, understanding is not in place, ignoring the importance of maintenance, resulting in maintenance work becomes a mere formality, difficult to implement.

4.1.2. Poor Maintenance Technology

In actual production, operators lack of mechanical related professional background and management experience, professional technical knowledge is not enough, do not have mechanical maintenance technology. And the lack of follow-up training after work, can't form technology update open channel, bringing to a halt maintenance personnel ability, existing knowledge and skills to solve various problems encountered in practical work, can only rely on self-study to grope for maintenance, both affect the efficiency of maintenance, and affect the quality of maintenance, and may even cause unnecessary loss of diet processing machine equipment.

4.1.3. Insufficient Maintenance Facilities

There are many kinds of diet processing machine, and the advanced nature of each equipment is also different. Individual precision machinery advanced sex is stronger, for parts, lubricants, hydraulic oil and fuel quality and changing the demand is higher, such as maintaining conditions of existing infrastructure maintenance can not meet the requirements, plus some personnel of maintenance facilities and utilization of inadequate, use does not reach the designated position, overall, maintenance, weak infrastructure, seriously affecting the effects of diet processing machine maintenance.

4.2. Countermeasures for Diet Processing Machine Repair and Maintenance

4.2.1. Improve Maintenance Awareness

Relevant departments should strengthen the training of food production personnel, enhance the maintenance consciousness of operators and users through ideological guidance, and improve management methods. At the same time, the maintenance of diet processing machine should always follow the basic principle of prevention first and maintenance first, and cultivate good maintenance consciousness of operation and production personnel in daily maintenance.

4.2.2. Increase Regular Skill Training

Relevant departments should develop feasible training mechanisms, and carry out training work on diet processing machine maintenance and maintenance skills according to the updating situation of diet processing machine and the actual work, so as to comprehensively improve the maintenance skills of employees through centralized training and decentralized training. In addition, when necessary, experts can also be sent to the production line for on-site guidance, combining theory with practice, so as to comprehensively improve the maintenance ability of diet processing machine personnel.

4.2.3. Strengthen Infrastructure Construction

Relevant departments should give support in terms of policies, support diet processing machine maintenance work, vigorously promote the construction of basic maintenance network, create a good atmosphere, and increase capital investment. All departments attach great importance to, cooperate fully, plan as a whole, and arrange reasonably to build infrastructure network that can meet the maintenance needs and improve the maintenance quality.

5. Conclusion

In a word, diet processing machine plays a vital role in the improvement of food security ability and the development of food industry. But the actual use process, because of its own with complex structure, high technical requirements for related personnel, in order to guarantee that the performance of the diet processing machine in good condition, can work normally, it is imperative to carry out repairs and maintenance of diet processing machine, must cause the attention of practitioners, achieve timely maintenance, maintenance on time, Thus ensuring that diet processing machine plays an indispensable role in the development of the food industry.

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