

Classification of Factors Affecting the Labor Maintenance Personnel in Mass Production

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Factors influencing on a repair personnel payment in mass production of a machine-building complex, promoting increase of a manpower motivational component to effective work and gaining high achievements in their activity are considered.

Key words: Factor, mass production, rating estimation, stimulation, enterprises.

At the machine-building complex mass production enterprises there is the system of payment which is not considering features of payment fund formation in market conditions, which as a result negatively affects labor productivity level of workers on maintenance service and process equipment repair, and on efficiency of enterprise activity as a whole²⁻³. Efficiency of machine-building manufacture directly depends on how duly and qualitatively an active part of the basic production assets is repaired and supported in an efficient condition that is achievable only at working personnel activation demanding improvement of toolkit and provision of economic stimulation according to modern market conditions⁷. The payment of machine-building enterprise workers stimulating modernization processes in economy is poorly adapted for modern branch specificity, and job content of the repair personnel is characterized by multi functionality of active job as opposed to job content of workers in other branches⁵.

Financially stimulating source for a repair brigade is the additional premium for final result of

brigade work. Analytical researches assume, that a final result of repair personnel brigade work in mass production influences on a set of quantitative (quantity of the repaired equipment in a shift; quantity of equipment readjustments) and qualitative (quality of production output, quality of personnel work coordination, ability to work in a team, initiative, etc.) factors¹. Introduction of the above-stated actions in payment distribution on the basis of performed work can stimulate growth of repair personnel labor productivity on quality improvement of its work, and also strengthening of social justice rules in payment and stability of a moral and psychological climate in a working staff⁶. A paramount task of the enterprise repair service is maintenance of equipment working capacity, fitting with technical and technological norms, including performance of procedural works on repair and maintenance service of the process equipment during all repair cycle¹. The repair cycle is less at mass production in comparison with single-part or medium-size type of production. As a result of it the enterprise service repair personnel bear moral and material liability for uninterrupted process of equipment work and repair in more under time.

As a rule, acting enterprise system and forms of a payment divide a monthly payment of the repair personnel on two parts: the first part

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depends on performance of working official duties and observance of local statutory act requirements (internal labor regulations, etc.), and the second (bonus) part - is paid as compensation on results of repairmen brigade work and the whole shop for a month¹. Often bonus payment has the depersonalized character and the personnel perceive it, as without saying fact of encouragement, not understanding for what they receive it¹⁰. Workers also cannot correct the premium size as it is defined at discretion of enterprise administration. Quite often there are cases when the worker considers, that the brigade by results of work for a month has executed all parameters and should receive material encouragement, but does not receive it as the management considers differently^{8:7}. Finally, it leads to growth of intensity, both in the working staff, and in relations between a brigade and a management, that negatively affects efficiency of repair personnel work. This explains work individual results ignoring at calculation of wages, absence of transparency in calculation procedure (impossibility of the worker to affect for the size of wages). The multiple-factor approach on formation

of enterprise repair personnel payment allows improving a payment of repairmen, to stimulate duly and qualitative performance by each worker his functional duties, to use rationally a payment fund¹.

The multiple-factor approach is caused by specificity of repair personnel work which consists in high complexity of work at maintenance service and equipment repair, in unpredictability of highly technological equipment repair work terms and volumes in mass production. The given approach allows providing uninterrupted service of the process equipment in productions, precise interaction of all groups participating in mass production and corresponds to organization and quality requirements of repair and maintenance service of the equipment. At the mass production enterprises the skill level of the repair personnel directly depends on the process equipment repair complexity. For the mass production enterprises the multiple-factor approach to formation of repair personnel wages creates preconditions for motivating independence of workers on the basis of a duly and regular work results estimation according to real achievements by means of a rating

Table 1. Features of the organization of repair work in the mass production and the factors influencing the labor workers pay for the repair and maintenance of equipment [1].

Features of the organization of repair work in mass production	Factors affecting the labor workers pay for the maintenance and repair of equipment	Objectives, implementation of which is aimed at improving the system of labor remuneration of workers in maintenance and repair of equipment
specialized maintenance workers	the effectiveness of the work performed	1) interest of maintenance workers
high labor intensity	complexity of labor input span of control mechanization of repair work compensation work plan	in improving productivity; 2) seamless service provision process equipment; 3) motivating maintenance workers using timely and systematic evaluation of the results of the work in accordance with the real achievements;
short process(three days)	specialized maintenance and repair of equipment rationalization proposals ability to work in a team	4) labor activity of maintenance personnel is aimed at providing a rhythmic mass production; 5) stimulating working effectively improves the quality of work.
the monotony of work	initiative regulations idle process equipment	
high degree of precision and continuity of the process	incentive payments worker's skills	

estimation system as a set of factors and ways of quantitative and qualitative factors estimation should be considered at rating creation, allowing to investigate interested qualities of rating creation object and to assign a rating [1;7]. Besides, the rating estimation system itself acts as the major means of motivation.

The multiple-factor approach in rating estimation systems allows, firstly, to direct efforts of the repair personnel to introduction of the new, progressive equipment and technology; secondly, to provide realization of stimulating function in payment system of their work; thirdly, to find additional stimulus to work quality improvement, motivating and defining repairmen really necessary for the enterprise; fourthly, to estimate the individual contribution of the repair personnel to achievement of repair service work results, most fully meeting the requirements of the basic production.

Rating estimation system of personnel labor on maintenance service and equipment repair in mass production should consider essential factors which aim the repair personnel at improvement of work quality. The first group of factors is connected with the organization of maintenance service and equipment repair; the second - with professional work of the repair service personnel; the third - with payment system and payment form of the personnel; the fourth - with personal qualities of the worker [1;7].

At a criterion choice for encouragement of the repair personnel it is expedient to allocate basically such factors performance of which renders decisive influence on increase of repair work quality efficiency, achievement of high final work results, namely efficiency depends on what is particularly stimulated.

Simultaneous use of all revealed factors is inexpedient from the practical point of view as in real conditions it will be connected with significant expenditures of labor and unjustified estimation process complication of their influence on formation of a personnel payment on maintenance service and equipment repair¹.

Mass production type is characterized by large volume production output narrow range of continuously produced for a long time. At the same time jobs are highly specialized and uploaded performing the same operation on the same items.

Particular attention is paid to the specifics of the repair work in mass production, as this area is almost not stand out from the general wage system. The dependence between the specificity of mass production and the amount of the premium wages for repair and maintenance of equipment, which is influenced by certain factors (table 1).

Integrated automation and mechanization of production processes increases the dependence of its efficiency on the coherence and rhythm of work of all departments and services of enterprises, the labor activity of maintenance personnel must be aimed at ensuring the rhythmic and efficient production, as timely maintenance and repair of equipment is a prerequisite for reliable operation in all enterprise as a whole.

CONCLUSIONS

At a multiple-factor approach to payment scheme management as a result of active and uniform labor of the personnel the labor payment increase prospect is defined. Thus, the rating system allows considering the factors influencing labor payment formation of the repair service personnel and features of mass production.

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