

CORE COMPETENCIES ASSESSMENT OF EMPLOYEES WORKING IN METALLURGICAL INDUSTRY

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Approaches for understanding of competences have been reviewed. Comparison of required and actual level for competences has been given. Analysis of competences had been conducted resulting in assessment of skills and knowledge.

Keywords: competences, skills, knowledge, core competences model, level of competence, approach to understanding.

The main role assigned in political and practical management for modern organizations. The time is come, when requirements of a high-quality product, services and maintenance of operations forced attention on business that as performance style of operation are allowing and maintain an advantage in the market.

There are many different formulations of competences. According to Steve Viddet and Sarah Holiford, most of the statements - it's just the two definitions of the options, which vary the sources of [1]:

- A description of performance goals or expectations for the results. These descriptions are originated from the national training and development, such as the National / Scottish Vocational Qualifications and the Management Charter Initiative (MCI).

In these systems, a competence is defined as "the ability of the manager to act in accordance with standards established by the company» (MCI, 1992);

- The description of the behavior. This theme was emerging among scientists and consultants involved in the research of effective management of personnel development. Various formulations of behavioral competence - they are different versions of the same definition of competence: "competence - this is the main characteristic of the person, the owner of which is able to achieve good results in the work» (Klemp, 1980). The concrete interpretation is usually supplemented reference to what quality are included in the basic characteristic. In addition to the other definitions are needed to add competency - motivation, character traits, skills, self-esteem, and social significance, the knowledge that an employee uses in his work (Boyatzis, 1982). The behavioral competence are involves staff behavior observed when operating efficiently workers exhibit individual motives, character traits and skills during the implementation of objectives leading to achieve the necessary results in [1].

Other people are believe that the competence - a combination of knowledge, skills and abilities, contributing to the success of professional activity. It is also necessary to mention that today there are many definitions of the term «competence» and specialists offer a variety of definitions. However, the main today there are two approaches to understanding the competencies:

The American approach - competence as a description of the behavior of the employee; competence, these are the basic properties of the employee, having

which it can be the correct behavior, and as a result, to achieve high performance in operation.

The European approach - competence as a description of performance goals or expected performance; competence - it is an employee's ability to act according to the standards adopted by the company.

In other words, competence is a set of knowledge, skills and abilities that contribute to the successful implementation of professional activities. Skills first assimilated as separate automatic actions, then merge into a single unit (skill system), and the skills themselves are generalized to the level of so-called "secondary skills" that are characterized by flexibility, variability, mediation of knowledge.

Funds are also skills such as are perceptual skills, motor skills and intellectual skills (ways of doing things). Formation of skills takes place in the following stages:

- Start thinking skill. For this phase is characterized by a sense of purpose, but uncertain ideas about how to accomplish it. As a result, there are serious errors when attempting to perform the tasks;
- The conscious, but inept execution. For this phase is characterized by a clear understanding of how to handle the job, and sure enough, the unstable performance of the job, despite the enhanced concentration. There are many unnecessary actions and movements;
- The automation of skill. At this stage, there is a better performance of tasks under reduced voluntary attention and opportunities distribution. There is a reduction of unnecessary movements;
- The highly automated skill. At this stage, economical, sustainable performance of tasks, and sometimes becomes a means of meeting other, more complex task, which is performed under conscious attention [2].

On the basis of the knowledge and skills related to a specific activity, the ability to form a specialist. The ability is always involved self-employment specialist. We call attention to the views expressed by V.D. Shadrikov, according to which «intelligence can be defined as an integral manifestation abilities, knowledge and skills» [3].

Skills are forms an indissoluble unity. On the one hand, the mastery of a certain range of skills is a prerequisite for the formation of skills, on the other - a person with ability, can easily learn new skills. The process of formation of skills also goes through several stages:

- The initial skills. When to sense of purpose and activity to find ways of its implementation, based on the previously acquired (usually domestic) knowledge and skills. Activities are carried out by trial and error;
- insufficiently skilled activities. Knowledge of how to perform an action and the use of previously acquired skills, not specific to this activity.

The keys competencies of employees of blast furnace production (DP) presented in the Table.

Below is an example of competences for Furnace man Blast Furnace:

Feature works: the preparation, maintenance and removal of the slag tap whole bulge at the furnace, cutting iron notch, pig iron production, preparation and filling of the main tray, cast iron, replacing the lances and embrasures serving blast

furnaces up to 930 cubic meters under the leadership the Furnace man blast furnace (the first one). Dismantling and packing box slag notch, iron tap hole, filling ditches and filling iron, slag troughs. Determining the degree of heating and the composition of the slag and pig iron produced.

There is model of core competencies for the metallurgical workers production

The Competition	Name of requirements
Prevention of accidents	<p>The Safety in a workplace is determined by principles, rules and activities, which should provide the employee an effective and safe movement up the career ladder from the first day of work before retirement.</p> <p>This applies to employees and employers. Maintain a safe working environment requires the involvement and attention to detail.</p> <p>Knowledge and understanding of the Domain-specific production risk: gas, hot metal and slag, high pressure of the great vessels, water and dust.</p> <p>Knowledge and understanding of the hazards of the workplace in the company.</p>
The raw	<p>The Raw: The Raw is an integral part of the blast furnace. It is not just the range of raw materials, but also their composition.</p> <p>Knowledge of the composition, quality and value in use of standard operating procedures (SOPs), benchmarking.</p> <p>The ability to detect and react to deviations DP natural and blast-furnace gas.</p> <p>Flow and logistics. To know the origin and availability, storage conditions all material and SOPs.</p>
Technology	<p>Technologically blast furnace consists of the following parts are: loading, the blast Furnace, casting yard, air heaters, gas cleaning system. They must be thought out, such as the stage of manufacture, granulation transport iron.</p> <p>Knowledge of SOPs, benchmarking. Ability of identify and solve problems.</p>
Operation	<p>The operation of the blast furnace consists of the following parts: loading, blast furnace cast house, air heaters, gas cleaning system.</p> <p>Abilities, knowledge and skills for the maintenance of different pieces of equipment.</p> <p>Knowledge of SOPs, benchmarking. Ability of identify and solve problems.</p>
The change	<p>This project includes the preparation of IAC files (for investment approval) diverse specialists, engineering issues, training to a halt, cooling, removal and reconstruction of the blast furnace. Upon completion of the project to be provided and feedback report.</p> <p>It is able to manage one or more phases of the project.</p> <p>It is able to perform an interim assessment.</p> <p>It is able to detect and correct the changes in the current work that</p>

	they expected results. It is conduct an audit of the production hall.
Interaction	The interaction with related processes and key stakeholders has been for the process. It is to negotiate, understand and persuade key players, knowledge of related processes. It is able to discuss, assign, and monitor the implementation of the planned actions, the impact of DP products for the production of steel (containing Si, P ...) according TSO.
Management	In addition to the general aspects of management to effectively manage the DP should take into account the work of a particular area. The ability to understand the effects on job of DP. Ability to carry out the audit justifies and implements the following action plans.

Its must be know! The technology process of smelting irons is including in a blast furnace; device maintained equipment; chemical and physical properties of raw materials and fuel.

There are in preparing and changing the lances and embrasures tubers assemblies, cutting iron notch, release iron preparation and filling the main tray, cast iron, serving blast furnaces of 930 cubic meters. Up to 2000 cc. under the leadership of the Furnace man blast furnace (the first one) - 6th rank;

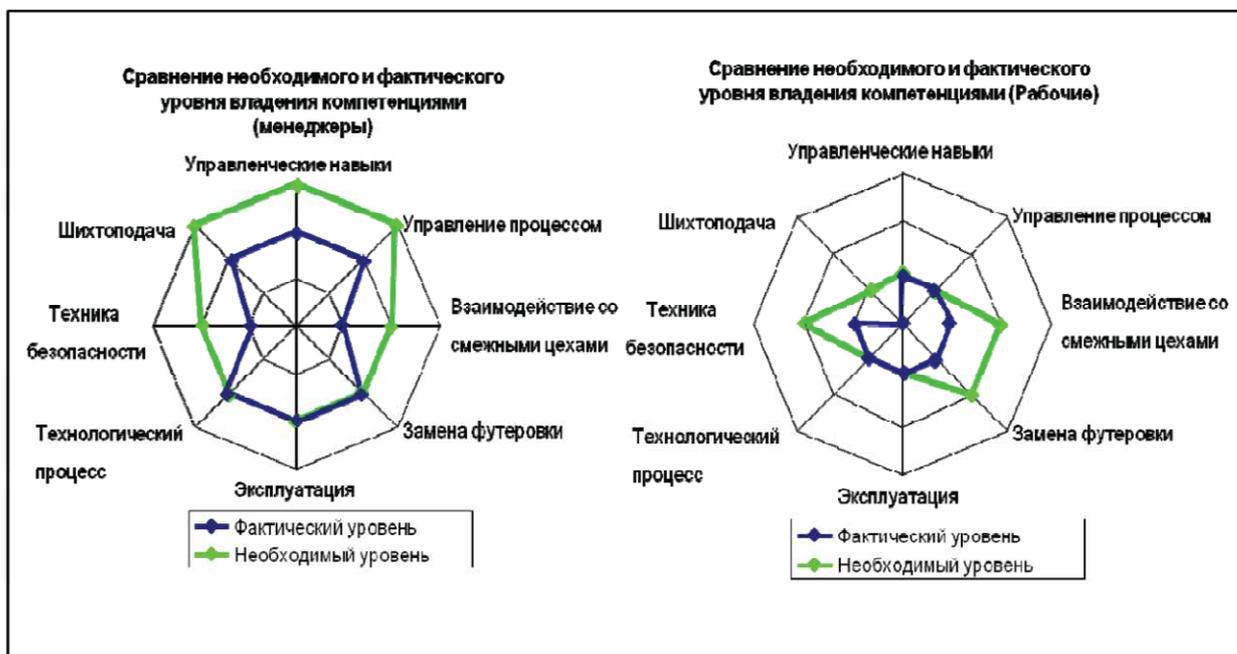
There are in preparing and changing the lances and embrasures tubers assemblies, cutting iron notch, production of pig iron, the preparation and filling of the main runner for iron blast furnaces serving a 2000 cc. m or more under the guidance of the Furnace man blast furnace (the first one) - 7th rank.

Patterns are formed on the basis of such normative documents as a single tariff qualifying directory of jobs and professions, Quality Management System (QMS) based on ISO 9001: 2008 Management System Occupational Health and Safety (FSMS & B), Environmental Management System (EMS) based on MS ISO 14001: 2004.

In accordance with the competency model, they were shown in Table 1; the workers were evaluated in accordance with the grade level of compliance with competence - basic, intermediate, advanced and professional level of compliance.

Analysis of the consistency required and the actual level of knowledge of competence identified deviations in certain categories of competencies. Comparative characteristic are shown in Pic. 1.

The analysis showed that both the workers and the managers of the Domain shop the required level of competence in certain categories coincide with the necessary level. For managers, such categories are understood of the process equipment operation and replacement of the lining. For workers the necessary level of competence coincides with the actual in categories such as knowledge of the process, equipment operation, process control and management skills. Thus, for managers is safety, the interaction with the adjacent shops and managerial skills.



Picture 1. The comparative characteristics of the fact and competence knowledge required level.

According to Picture 2, can be judged insufficiently developed competences to be developed. So 19 out of 31 have only a general knowledge process and equipment operation, 13 people out of 31 have original and not enough skilled knowledge in batches preparation, 20 of 31 people have a general knowledge of replacing the lining.

In results of competition analysis was done assessment by knowledge and skills of workers. The competitions have been identified as inadequate or general; have been made in the development plan. Recommendations were made to further develop the necessary skills.

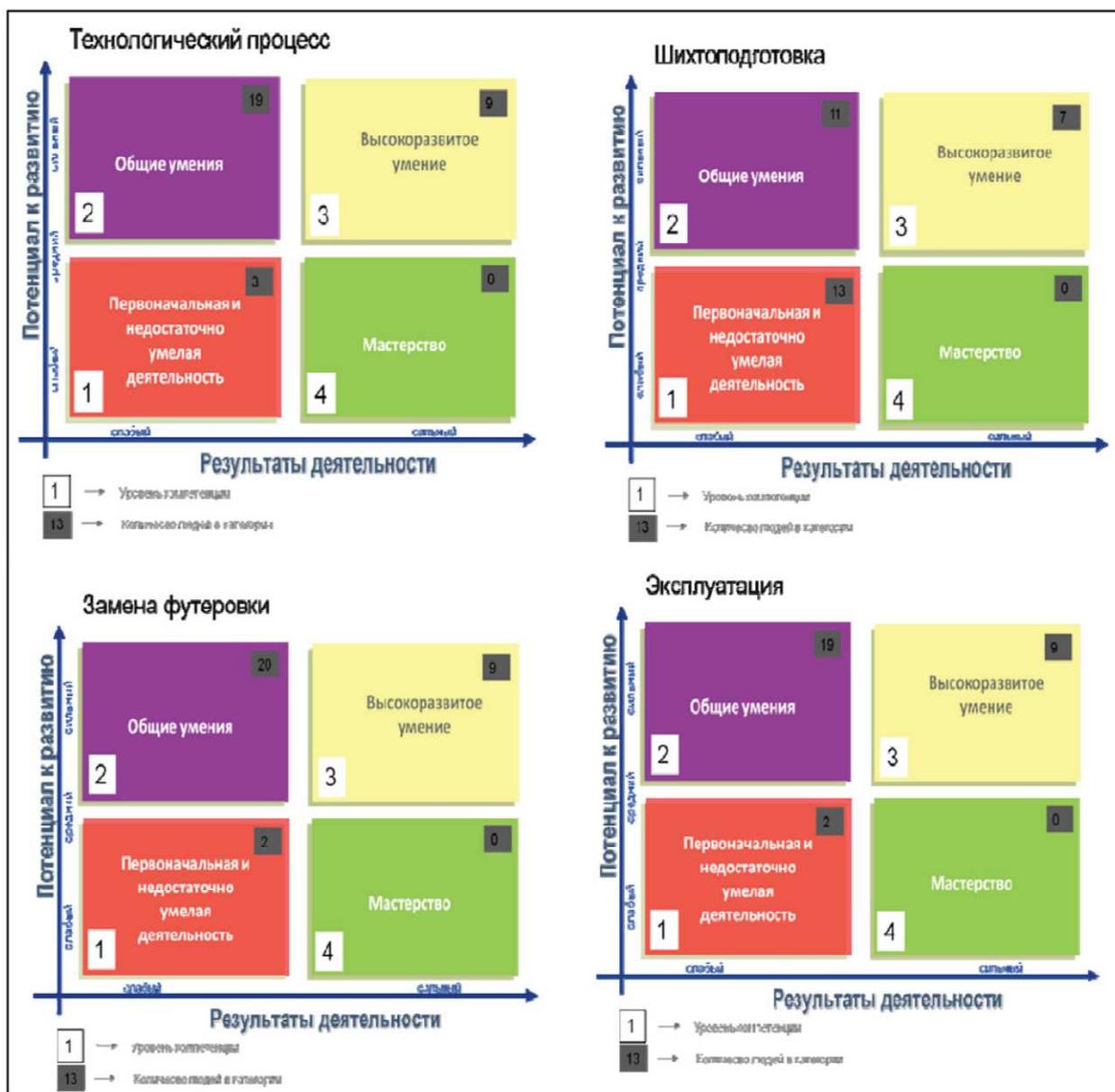
There is a number of privileges staff estimates based on competency model.

In particular, for this organization is:

- Development of common standards is describing the effectiveness of promoting mutual understanding between employees of different departments;
- Consistency is in the evaluation of the employee all experts alike understand what "valuable qualities" of the employee and know that you must evaluate, and what can be ignored;
- The opportunity to identify the strengths and weaknesses of each employee and to use this information for career planning and development;
- There are grounds for a reserve and career planning staff;
- Developing standards of work.

There are for employees:

- A better understanding of what makes an employee and what qualities he needs, and what the requirements are presented to him;
- The opportunity to get feedback, learn about their strengths and weaknesses, the overall potential and career prospects.



Pictures 2. The level of competition's category

Bibliography

1. Holiford S., Viddet C. Management of Competency: Per. Translated from English. - M.: Publisher GIPPO, 2008—228p.
2. S.V. Ivanov. Methods for assessing core competencies//Management staff. Journal of Russian practice HR-practices. 2002. №12. P. 27-31.
3. Shadrikov V.D., Cheremoshkina L.V. Mnemonic abilities: develop and diagnostics. - M.: Pedagogy, 1997.