INTRODUCTION

In the EU the main principles to ensure the safety of workers are included in Directive on the introduction of measures to encourage improvements in the safety and health of workers at work [1].

In accordance with the mentioned framework directive, the employer has the duty of ensuring for all the workers the safe work place. Within the scope, the employer should: perform the threat assessment, combat its sources, take advantage of the new technological solutions and replace the high risk operations with the less dangerous activities, apply the collective and individual protection steps [1].

Specification of the framework directive are individual directives, which are focused on specific aspects of safety and health at work and especially risk related to: workplace, work equipment, personal protective equipment, physical agents, explosive atmospheres, mutagens or carcinogens, manual handling.

One of the basic elements ensuring safety within the work environment is monitoring over the used machines. It refrains from both: “Work Equipment Directive” 2009/104/EC as well as the “Machinery Directive” 2006/42/EC [2-5].

The first one (2009/104/EC) requires from the employer taking up the actions ensuring that the working equipment is applied without any workers safety violation. It describes the minimal safety requirements which must be fulfilled by the working equipment as well as the regulations concerning its usage [4].

Meanwhile, the “Machinery Directive” puts the responsibility for the safety of machinery on their manu-
individual protection means within the residual risks. The basis for these actions is proper identification of the used working equipment together with defining the legal requirements adequate to the work and the environment connected with it – Figure 1.

The aim of the carried out analysis was to identify the legal requirements being applied in order to ensure the safety in the processes, including the metallurgical processes. The chosen work safety requirements refraining from the framework directive and its individual directives [1,4] as well as the directives of the new approach and the harmonised norms, which should be taken into consideration to ensure safe work conditions [5] for the metallurgical production, have been presented on Figure 2.

RESULTS

Such a complex approach towards the risk identification, assessment and undertaking (Figures 1,2) brings the possibility of determination of the incompatibilities with the legal requirements, and as a result defining the actions aiming at minimising the risk – Table 1.
Risk being identified within the metallurgical processes, and resulting from the legal regulations, concerns the improper working equipment, being endangered with the influence of the physical and chemical agents, application of improper protective measures as well as documentation confirming the compliance with the requirements.

CONCLUSIONS

The metallurgical processes – due to the applied technologies, among which especially the applied work equipment, used materials and the ways of performing the works – accompany various work safety threats. Therefore, in case of these processes the identification and undertaking the risk involved is of high importance [6,7].

In the metallurgical processes the risk can be identified in the context of two groups of legal regulations: directives of new approach, especially the “Machinery directive” and the framework directive and its second individual directive – “Work equipment directive”.

In the first case, with the supposition of ensuring by the manufacturer the safety of the machines in design and construction, minimising such a risk can require applying the means pointed and suggested by the manufacturer. There also may be the risk connected with the EC declaration of conformity and the CE marking. Taking up such a risk, at first glance omitted, may have catastrophic consequences – meaning – withdrawal of the machine from usage.

In the second case, the risk refrains from unfulfilled minimal requirements concerning the working equipment as well as its usage. Similarly like in case of other health and safety minimal requirements, lack of the conformity concerns planning, realising and documentation of the activities covering: protection against the threats considering their elimination or limiting their influence, informing and training dedicated to the workers and consultancy with their representatives. Minimising the risk is connected with the application of the technical protection, organisational measures and collective and individual protection.

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REFERENCES


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