

COMPARATIVE STUDY BETWEEN FINES FOR LACK OF EQUIPMENTS FOR INDIVIDUAL SAFETY X REGULARIZATION OF THE WORK

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Abstract: This study aimed to identify and quantify the costs with fines and with the regularization of works in the execution phase, in the Municipality of Santa Helena in the State of Paraná, due to compliance or not with the Regulatory Norms NR (REGULATORY RULE)-6 and NR (REGULATORY RULE)-18 regarding the use of Personal Protective Equipment. In the methodology, a checklist and an on-site visit were used to verify the use of safety equipment, the requirement by parts of the construction companies or even, training of the workforce for its use. The fines were estimated according to the methodology contained in NR (REGULATORY RULE)-28. The results showed a relatively high cost of fines for irregularities in view of the reduced cost for prior regularization of the situation. The average value of the fines was R\$ 19,992.84, while for adequacy the average was R\$ 406.85. That is, of the total amount applied in fines, around 2.0% of this would be responsible for the regularization of the work in terms of Work Safety.

Keywords: Occupational Safety, personal protective equipment, Ministry of Labor.

INTRODUCTION

According to IBGE data (2020) the Civil Construction sector in Brazil, in the years 2015 to 2017, was responsible for about 8.0% of the jobs held in the country, however, it is among the sectors with the highest risk of accidents. of work. In 2015, according to data published in the Statistical Yearbook of Social Security (AEPS) of the Ministry of Social Security (MPS, 2017), of the 622,379 work accidents that occurred in the country, 45,376 occurred in the middle of civil construction, approximately 7, 3% of all accidents. In 2017, there were 549,405 accidents, of which 30,025 were in the civil construction sector, that is, 5.46% of the total accidents.

In this scenario, the evolution of Brazilian

legislation in the area of occupational safety highlights the growing importance of measures to be used by companies/industries in preventing accidents and offering safety to employees. Started in 1919, with Legislative Decree No. 3,724, considered the first law dealing with accidents at work in Brazil, this evolution had two other important milestones in history: in 1943 with Legislative Decree No. 5,452, of May 1, which institutes the Consolidation of Labor Laws (CLT); and another in 1978 with the issuance of the Ministry of Labor Ordinance No. 3214, which approved the set of Regulatory Norms, called NR (REGULATORY RULE)'s (Zocchio, 2002).

There are currently 36 Regulatory Norms in force, which are mandatory for public and private companies, for the Legislative and Judiciary powers and all companies that have employees governed by the CLT. Failure to comply with these NR (REGULATORY RULE)'s can result in penalties, fines or even interdiction of a work (Chirmici & Oliveira, 2016). This work, however, was based on only three (3) of them: NR (REGULATORY RULE)-6 (Individual Protection Equipment); the NR (REGULATORY RULE)-18 (Working Conditions and Environment in the Construction Industry) and the NR (REGULATORY RULE)-28 (Inspections and Penalties).

NR (REGULATORY RULE) 6, as seen, deals with the use of INDIVIDUAL PROTECTION EQUIPMENT, which, in turn, is required by law and is included in articles 166 and 167 of the CLT and Ordinance No. 3,214 of July 8, 1978, which provides for the company's obligation to provide employees, free of charge, with INDIVIDUAL PROTECTION EQUIPMENT appropriate to the risks in their area and they must be in perfect condition and functioning (Oliveira, 2009).

This supply of Personal Protective

Equipment, as Montenegro & Santana (2012) reminds us, must be accompanied by guidance on this work equipment according to the activities to be carried out, in addition to training for a better understanding, on the part of workers, of the functionality and their importance. In civil construction, these trainings need to be constant, because in addition to the high turnover, the level of education of employees is commonly low (Chiavenato, 2002).

In view of this, the objective of the present work consisted in verifying compliance with some items of NR (REGULATORY RULE)-6 and NR (REGULATORY RULE)-18 regarding the use of INDIVIDUAL PROTECTION EQUIPMENT's in twenty (20) construction sites in progress in the City of Santa Helena in the State of Paraná. Subsequently, based on NR (REGULATORY RULE)-28, the amounts of fines due to non-compliance with such rules were estimated, whose amounts were compared with the cost to regularize the situation.

MATERIAL AND METHODS

The study took place in 2019, from January to August. Visits were made to 20 works in the execution and construction phase, within the municipality of Santa Helena/PR.

Data collection consisted of applying a checklist based on the Ministry of Labor's NR (REGULATORY RULE)-6 and NR (REGULATORY RULE)-18 standards. This was separated by type of PERSONAL PROTECTIVE EQUIPMENT: helmet, goggles, protective mask, ear protection, respirator and air purifier, gloves, protective footwear and seat belt. Then, after verifying the use or not of the INDIVIDUAL PROTECTION EQUIPMENT's, as well as answering the questions contained in Table 1, the applicable fines for each work were quantified.

The Item infraction (Column 2 of Table 1) corresponds to the gradation of fines given by the rule and corresponds to the data presented in Table 2. Its value increases according to the type of infraction, ranging from 1 as milder and 4 as more serious and It also depends on the number of employees in the company.

The Type of infraction (Column 3 of Table 1) is related to the competence of the irregularity, that is, whether it was committed by the Safety (S) or Occupational Medicine (M) area. In the present study, all the fines verified are of type S, that is, within the competence of the Occupational Safety.

Finally, the fines were calculated according to the number of company employees present at the site at the time of the visit, verifying the degree of infraction and crossing the data from Tables 1 and 2, in order to obtain the value final in reais – Brazilian currency (R\$). The value calculated is in accordance with the UFIR, since the National Treasury Bond (BTN) unit was extinguished by Law 8,177 of 1991. The value of the UFIR froze after the year 2000, pursuant to Paragraph 3 of Article 29 of the Provisional Measure 2095-76. Its value was set at R\$ 1.0641 and has been in force ever since.

The amounts of the fines, in turn, were then compared with the costs of regularizing the works. For the adequacy of the items, a budget was made, for each INDIVIDUAL PROTECTION EQUIPMENT, in three (3) construction material stores in the city of Santa Helena/PR. The values considered correspond to the average of the budgets obtained. The cost of training was acquired from a specialized company in the Municipality of Cascavel.

RESULTS AND DISCUSSION

After data collection was completed, they were analyzed and presented in the form of graphs. Initially, for the twenty (20) visited works, a total of 57 employees were added.

NR (REGULATORY RULE) 6 e NR (REGULATORY RULE) 18

ITEM/SUBITEM	INFRACTION	TYPE
6.3 – Does Company provide free of charge, in perfect state of conservation and operation?	4	S
6.6.1 - a) use in the appropriate activity?	3	S
6.6.1 - b) Does the employer require its use?	4	S
6.6.1 - d) Was there a training in use, storage and conservation?	3	S
6.6.1 - e) replacement when lost or damaged?	3	S
6.6.1 - f) Is there periodic cleaning and maintenance?	2	S
6.6.1 - h) is its supply to the worker registered?	2	S
18.23.3 - Skydiver seat belt longer than 2 meters?	4	S
18.23.3.1 - Does seat belt have a fall arrest device?	4	S
18.23.3.4 – Has the seat belt steel carabiners and steel buckle?	3	S

Table 1. Types of infractions verified in the checklist.
Source: Adapted - NR (REGULATORY RULE) 28 (2019).

NUMBER OF EMPLOYEES	GRADATION OF FINES (IN BTN)			
	INFRACTION TYPE			
	1	2	3	4
1-10	630-729	1129-1393	1691-2091	2252-2792
11-25	730-830	1394-1664	2092-2495	2793-3334
26-50	831-936	1665-1935	2496-2898	3335-3876
51-100	964-1104	1936-2200	2899-3302	3877-4418
101-250	1105-1241	2201-2471	3303-3717	4419-4948
251-500	1242-1374	2472-2748	3719-4121	4949-5490
501-1000	1375-1507	2749-3020	4122-4525	5491-6033
> 1000	1508-1646	3021-3284	4 4526-4929	6034-6304

Table 2. Grading of fines from NR (REGULATORY RULE)-28 for work safety.
Source: Adapted NR (REGULATORY RULE)-28 (2015)

Of these, only 20 received training in the use of Personal Protective Equipment. In other words, only 35% of the employees were instructed on the importance and correct use of the equipment. And yet, in none of the works was the requirement and registration verified, through files or cards, of the use of Personal Protective Equipment inside the construction sites.

Continuing now to analyze the results, Figure 1 shows the results of the fine estimates and the respective values for regularization of the works. The average value of the fines for all works would be R\$ 19,992.84. The values for adequacy of items for all works showed an average of R\$ 406.85. That is, of the total amount applied in fines, around 2.0% of this would be responsible for the regularization of the situation and purchase of the personal protective equipment necessary for the identified phase of the work.

Now in terms of the Personal Protective Equipment that were verified, Figure 2 shows the total amount of equipment required, plus all the works, whose estimate was made according to the activities being carried out at the jobsite, and the number of Personal Protective Equipment actually used in each case.

Among the equipment presented in the previous figure, the use of safety shoes, equipment necessary to protect against shock against an obstacle, fall of some tool or material on the foot, among others, has the most widespread use within the construction sites, however, Employees with flip-flops and sneakers were also identified.

Now the use of goggles, especially when handling the mortar, protecting the worker's eyes against splashes; the protective mask, to protect the face against splinters of wood when using circular saw, for example; and the parachutist-type safety belt to be used in activities more than 2.00 m (two meters)

above the floor, in which there is a risk of the worker falling; although their needs were verified, no use was found in any work.

The use of helmets, which is mandatory at all stages of the work and serves as protection for the skull, was observed in only about 30% of the total number of employees. The ear protector, on the other hand, despite being identified in some cases, was either thrown at work or kept in a pocket. The main reason for not using it, according to the employees, was the discomfort caused by such equipment.

Likewise, gloves, despite being used in 35% of cases, in certain situations were found in insufficient numbers, thrown on the floor or kept in the pockets of employees' clothing. Finally, the respirator and air purifier was identified in only one case, but it was not being used.

CONCLUSION

The present work consisted of verifying the use of Personal Protective Equipment in twenty works in progress in the municipality of Santa Helena in the state of Paraná. From the checklist and visits to the works, disagreements were identified in the use of protective equipment in all the works analyzed. In none of the works was the requirement and registration of the use of safety equipment verified and a small percentage, 35% of the employees, knew the importance of using them.

There is a lack of attention on the part of the companies responsible for the works visited in relation to the health and safety of their employees, given the relatively small cost for the regularization of the works compared to the cost they would have for regularization after a possible inspection by the Ministry of Labor.

Finally, the lack of information, the provision of equipment without proper training, or the provision of inappropriate

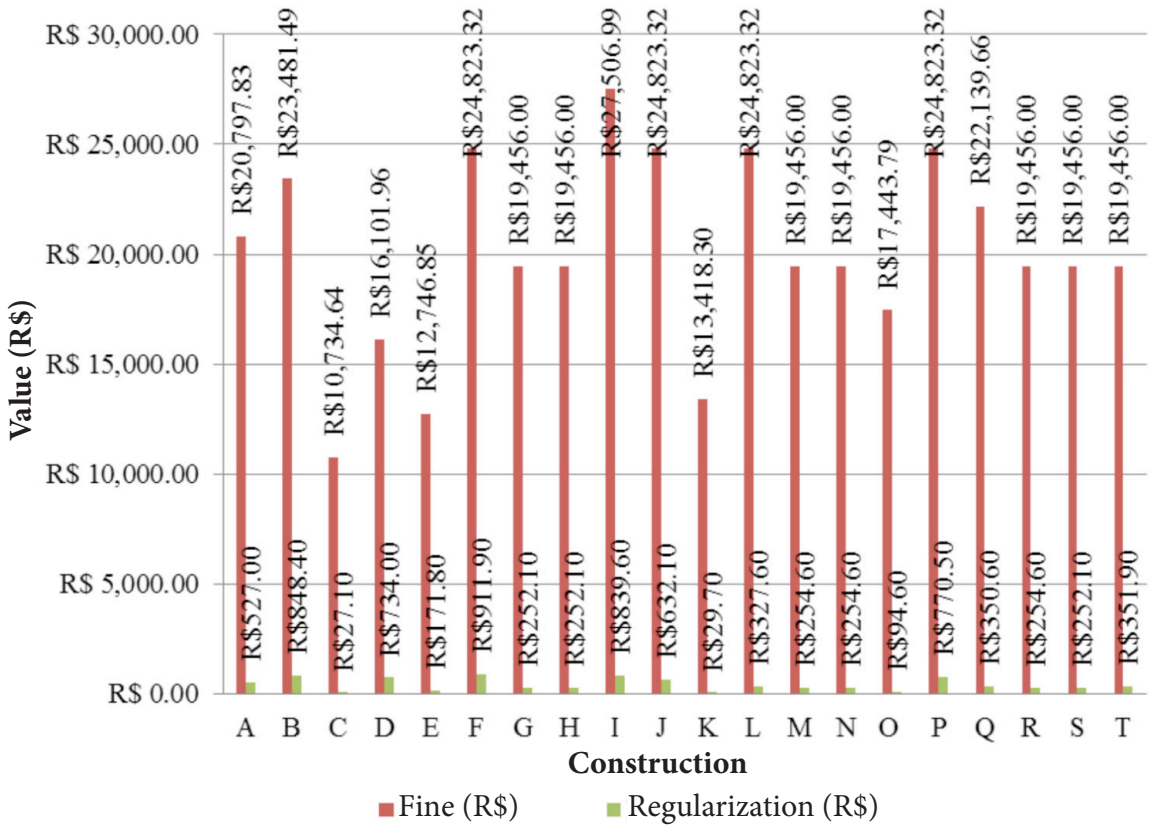


Figure 1. Estimated values of fines according to NR (REGULATORY RULE) 28 regularization cost.

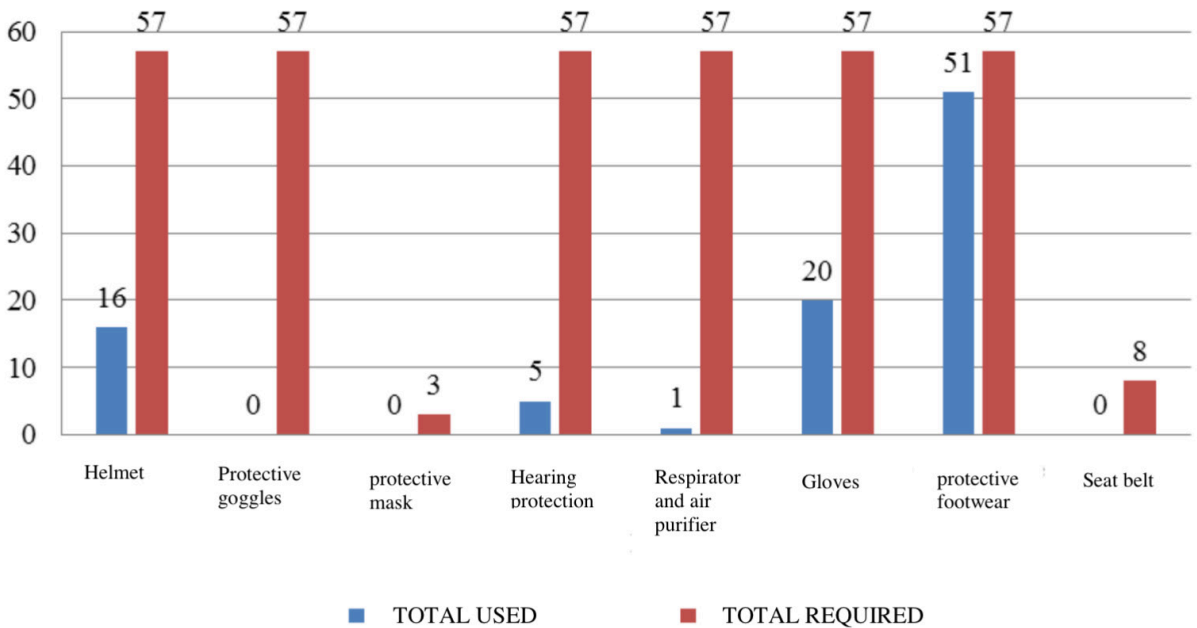


Figure 2. Quantity of Personal Protective Equipment that are needed x used in the visited works.

equipment and/or that cause discomfort to the employee, are similarly inefficient for the effectiveness of safety within the construction sites.

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