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MAGNETIC FLUX DENSITY IN THE WELDING EQUIPMENT SURROUNDING

ABSTRACT

In technological high-current applications attention has to be paid to the exposure of the operators to magnetic fields. This is especially the case when using resistance welding machines without any exceptions for the different types of procedures and technologies. In this paper, we turn our attention to the numerical calculations and measurements of the magnetic flux density around the welding equipment with special interests on the resistance welding machines. Our goal includes knowing the magnetic flux density around these types of equipment and, in the cases when there are no definite indicators about their influence to the operator's health, making an effort to plead with the operators to avoid the unnecessary presence in the space with significantly high magnetic flux density values. This is even more important when considering the fact that, while working with this equipment, the operator can not rely on his senses to anticipate the health hazards that can occur because of the influence of the surrounding magnetic field.

Keywords: magnetic field, calculations, resistance welding equipment.