

Manuscript ID : 00000-18069

International Journal of Management

Volume 10, Issue 2, March–April 2019, Pages 122-126, Page Count - 5



Source ID : 00000011

INTERACTIVE TRAINING SIMULATOR AS MEANS OF INCREASING ECONOMIC EFFICIENCY OF ENTERPRISES

Gubin Vladimir Viacheslavovich ⁽¹⁾ Darin Aleksey Aleksandrovich ⁽²⁾

⁽¹⁾ PhD in Engineering Science, Assistant lecturer, Department of technological process automation and production, Saint Petersburg Mining University, Vasilyevsky Island, Russia.

⁽²⁾ PhD in Engineering Science, Associate professor, Department of technological process automation and production, Saint Petersburg Mining University, Vasilyevsky Island, Russia.

Abstract

Computer training of technological process operators is recognized worldwide as an effective means of reducing accidents and increasing production efficiency by improving operator's skills

The use of computer simulators for training operators of potentially dangerous industries is fixed in regulatory documents of many countries, including Russia. Most enterprises in the oil and gas industry have already equipped their training centers with computer simulators; however, the metallurgical sector and other representatives of the chemical engineering industries do not use and often do not consider a computer simulator as a tool for improving efficiency and production safety

World statistics shows that among the causes of industrial accidents, operator mistakes are firmly in second place. They account for an average of 40% of all emergency incidents

Computer training is the most powerful and effective means of dealing with the operators mistakes. With the help of a specialized simulator, with a high degree of accuracy, imitating the work of a dangerous technological installation, relating to the oil refining or metallurgical industry, it is possible not only to familiarize operators with potential emergencies and develop a strategy for preventing accidents, mitigating or eliminating its consequences, but also working out actions operators to automatism. A good full-scale simulator allows to work out detailed measures to prevent accidents, as well as plans for the localization and liquidation of emergencies

The article presents an overview of the current state of the industry of technological simulators, examines existing technical solutions, global manufacturers and simulators using aspects

Author Keywords

industrial simulator, operator training simulator (OTS), production efficiency, production safety

ISSN Print: 0976-6502

Source Type: Journals

Publication Language: English

Abbreviated Journal Title: IJM

Publisher Name: IAEME Publication

Major Subject: Social Sciences and Humanities

Subject area: Industrial Relations

ISSN Online: 0976-6510

Document Type: Journal Article

DOI: 10.34218/IJM.10.2.2019.011

Access Type: Open Access

Resource Licence: CC BY-NC

Subject Area classification: Business, Management and Accounting

Source: SCOPEDATABASE

Reference

References (16)

1. Popov A. N., Ivashova N. S., Deulin A. A., Kalinogorsky D. I., Kunnikov E. U
Risk-based approach in industrial safety
(2015) Industrial and ecological safety, labor safety, Volume 2, Issue 99, Page No 20-22,
2. Sizyakov V.M., Bazhin V.Yu., Selishcheva T. A., Vlasov A. A
The Role of the state in the sphere of innovative activity of nonferrous metallurgy enterprises of Russia
(2014) Metallurgist, Page No 1-7,
3. Development strategy of the mineral resource base of the Russian Federation to 2035: the RF Government decree of 22 December 2018
4. Beloglazov I. I., Petrov P. A., Martynov S. A
Application of Production Processes Control Algorithm Using Adaptive Control Systemg
(2018) International Russian Automation Conference, Page No 1 - 4,
5. Petuhov A.A., Darin A.A., Telyakov A.A
Processing of ferromanganese nodules of the Pacific Ocean
(2017) Metallurgist, Volume 61, Issue 5-6, Page No 439-443,
6. Boduen, A.Y., Fokina, S.B., Polezhaev, S.Y
The hydrometallurgical pretreatment of a refractory gold sulfide concentrate
(2018) Innovation-Based Development of the Mineral Resources Sector: Challenges and Prospects - 11th conference of the Russian-German Raw Materials, Page No 331-340,
7. Katuntsov E.V., Kultan J, Makhovikov A.B
Application of Electronic Learning Tools for Training of Specialists in the Field of Information Technologies for Enterprises of Mineral Resources Sector
(2017) Journal of Mining Institute, Volume 226, Page No 503-508,
8. Wisnu Mawardi, Achma Hendra Setiawan, Dul Mu'id, Banatul Hayati and Darwanto
ANALYSIS OF SAVINGS AND LOAN AND SHARIAH FINANCING COOPERATIVE (KSPPS) ROLE IN DEVELOPING MICRO, SMALL, AND MEDIUM ENTERPRISES (MSMES) USING STRUCTURAL EQUATION MODELLINGPARTIAL LEAST SQUARE (SEM-PLS)
(2018) International Journal of Mechanical Engineering and Technology, Volume 9, Issue 11, Page No 629-642,
9. Chistov V. P., Zakharova G. B., Kononenko I. A., Titov V. G
Computer simulator for operators of technological processes of blast furnace production
(2002) Software products and systems, Page No 42 - 45,

10. Dozortsev V. M., Kneller D. V
Technological computer simulators: everything you always wanted to know
(2004) Industrial ACS and controllers, Page No 1-13,

11. Taneyev V. V
Application of mathematical models for forecasting of emergency situations in automated process control systems
(1984) Mathematical models in automated process control systems: collection of scientific works, Page No 33-35,

12. K. S. Suresh, K.S.Ravichandran, S.Ananthakrishnan, and S. Venugopal
Adaptive strategy to improve the efficiency of robot path planning using population based Algorithm
(2017) International Journal of Mechanical Engineering and Technology, Volume 8, Issue 8, Page No 1441–1448,

13. Koteleva H. I., Shablovsky I. E., Koshkin A.V
Computer simulators for training operators of technological processes in the oil and gas industry: analysis of existing solutions and ways to improve them
(2011) Journal of Mining Institute, Volume 192, Page No 212-215,

14. Eben Priya A.R.P, Dr.K.Karthikeyan
A LITERATURE SURVEY ON “IMPACT OF ECONOMIC GROWTH: A COMPARISON BETWEEN INDIA AND CHINA”
(2018) International Journal of Civil Engineering and Technology, Volume 9, Issue 7, Page No 747–754,

15. Dozortsev V. M., Shestakov N. M
Computer simulators for production of chemical and technological type: efficiency, payback
(1997) Safety problems in emergency situations, Page No 247-255,

16. Omer Gul
An Assessment Of Technical And Economical Problems Based On Reactive Power In Restructured Turkish Power Systems
(2013) International Journal of Electrical Engineering and Technology, Volume 4, Issue 5, Page No 206-220,

About Scope Database

What is Scope Database

Content Coverage Guide

Scope Database Blog

Content Coverage API

Scope Database App

© Copyright 2021 Scope Database, All rights reserved.

Customer Service

Help

Scope Database Key Persons

Contact us