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Manus cript. Id.	0000	Volume 1 Issue 2, December 2020, ISSN: (Online)	Page No.
10.		Ms. Vaishali V. Lute I, Mr. Pranav G. Charkha2 LEAN MANUFACTURING IMPLEMENTATION USING VSN OF JUNCTION BOX POST-PROCESSING PHASE oday's world, competition is very intense in business. Customers ds the quality of the product with timely receipt of products.	
TAME 001	The aim of t manufacturing goal is to iden value to the fin lead time. In on had visited firs the activities be the production Current State I & to improve results as a pla VSM technique Keywords: - Time. Reference	his study is to develop a value stream map for a discrete company in India which is manufacturer of Junction Box. The tify & eliminate waste which is any activity that does not add al product, in the production process which leads to reduction of rder to collect the information needed to complete the project, we at company where the production taken place to be familiar with eing performed at the shop floor. It helped us in getting an idea of flow. Based on all the information gathered, we had started with Mapping (CSM) & looking for opportunities to eliminate wastes the process flow from CSM, the company would utilized these an to map the Future State Mapping & like wise implemented e for lead time reduction. VSM, Current state map, Future state map, Lead Time, Takt	1-8

	Mar-Apr 2012 • R.M. Beloki Industry: A Ca • Ramnath B.V system for im I/July-Sept. 20 • Maria Elena Manufacturing Study in the F 10.5772/59027 • Taho Yanga,	ar & Vikas Kumar, " An Application of VSM In Automotive ase Study," 2012. IJITEE, July-2012, pp 152-157. V., Elanchezhian C. & Kesavan R.(2010), Application of Kanban plementing lean manufacturing (a case study),JERS/Vol.I/Issue 10/138-151. A Nennil,Luca Giustiniano2 & Luca Pirolo2. Improvement of g Operations through a Lean Management Approach: A Case Pharmaceutical Industry. Int J Eng Bus Manag, 2014, 6:24 doi:	
	analysisvia V Feb'15,Bali In • D. Rajendral	Rohani,Seyed Mojib Zahraee Procedia Mfg Production line SM:alean Mfg.process of color industry.2nd,MIMEC2015,4-6 donesia,PP-6-10. kumar & R. Gowtham Shankar, "Analyzing the Benefits of Lean nsumar Durables Manufacturing Company Case study," IJ of	
	Engineering, 2 • K. P. Paran Lean Strategy,		
	Inventory & (IJMVSC) vol Rumbidzayi "Application O Of Tile Manu	x production lead time in a bearing industry using VSM tool 6, no. 2, june 2015, PP27-35. Muvunzi, Catherine Maware, Simon Chinguwa, Mwodzacaspah, Of Lean VSM To Reduce Waste & Improve Productivity: A Case ifacturing Company In Zimbabwe", IJOAI in Engineering & Volume 2, Issue 7, July 2013	
	Author	Mr. Roshan P Ghodkhande1*, Mr. Nilesh D Dhote2	
	Paper Title	Modification and Development Of Two Wheel Pesticide SprayPump To Overcome the Limitation In Traditional PesticideSpray Pump	
PRO TAME 002	Abstract : - The main aim of this paper is to make modification in traditional spray pump which is run by manual power i.e, hand operated spary pump. In hand operated spay pump found lot of limitation and we have try to overcome these limitation by making some modification in spray pump . Small scale farmers are very interested in manually lever operated knapsacksprayer because of its versatility, cost and design. But this sprayer has certain limitations like it cannot maintain required pressure; it lead to problem of back pain. We have proposed equipment that is wheel driven spray, it is a portable device and no need of any fuel to operate, which is easy to move and sprays the pesticide by moving the wheel. This wheel operated pesticide spray equipment consumes less time and avoids the pesticide coming from front of the nozzles which will in contact of the person who sprays pesticides. The mechanism involved in this spray is reciprocating pump, which is driven by the wheel		SE 09-14
		ocating pump, which is driven by the wheel Manual operated spray pump, Two wheel operated, reduced	

	back pain, was	tage of pesticide.	
	 pesticides spra Paul E. S Pesticides"May Shivaraja kur and Pedal Ope Joginder Sin India"volume 3 David McAu and opportunit Flow Valves." Joe Evan,Ph. Displacement" Robert N. I Kruger(Extenss) By Billjjon Herbicide Use 	nar & Parameswaramurthy "Design and Development of Wheel rated Sprayer"Volume 2, Issue 6, June 2014. gh "Scope, Progress and Constraints of Farm Mechanization in 3,Issue, sept 2002 uliffe and Vanessa P. Gray "Application technology: Problems ies with Knapsack sprayer, Including the CF valves or Constant in 2000. D "Pump ED-101, Positive Displacement pump-Part I Positive Kelin,(Extension western Nebraska Crops Specialist) Creg R. ion cropping system specialist) "Nozzle- Selection And Size" tes of Forest Research "Mechanised Spraying Systems for in Forestry" Sept 2006 walkar, "Design Data For Machine Elements" Nagpur:Denett	
	Author	Bhushan Kate, Suraj Andre, Zaid Shaikh, Kiran Fukate	
	Paper Title	Prototype of a Solenoid Actuator Operated Electromagnetic Engine	
TAME 003	human comfor made every we Combustion" t Engine work of type of resource get an alterna Electromagnet actuator, which the rotation of Keywords: So Reference • "A research planar Magle	day to day life the automobile is becoming very important for the t. It is the long lasting technology of this 21th Century. It has ork easy of human. In this century the Invention of the "Internal took place, which was also known as IC Engine. This types of on the Fuel such as petrol, diesel and other crude oils. But this ces may remain for few years, and get declined after a time. So to ative engine we are going to introduce "Solenoid Operated ic Engine". This type of an engine works with the help solenoid h is of pull type. This helps to move piston linearly. This makes the flywheel olenoid Actuator, Electromagnetic, Engine in the application of permanent magnets and solenoids to the ev system design": Conference Paper • May 2003, Magnetic 2003California.	15-18

	Electronics M • Vishal Electromagne Research in Volume-2, Is • Sherman S. I • Leland W. G	 M. ;"When Cars Went Electric, Part One [Historical]," Industrial Magazine, IEEE, vol.5, no.1, pp.61-62, March2011. AbasahebMisal, UmeshDattatrayHajare&ArshadAshakAtar. etic Engine. International Journal on Theoretical and Applied Mechanical Engineering (IJTARME). ISSN: 2319 – 3182, ssue-4,2013. Blalock, Electro-magnetic reciprocating engine; US 4317058A Bifford; Reciprocating Electromagnetic engine; US 5457349A aSheshaIyengarTogare; Magnetic Piston Engine; 	
	Aution	Waman, Viresh Naik	
	Paper Title	A Review paper on 360° Rotating Belt Conveyor with Up and	
	6	Down Mechanism.	
TAME 004	diverse route advances have analysis and in non-tradit: drives have of complex com ensure reliab new develops the new tren conveyor sys the design, fa system is pre Keywords: - Conveyor belt Reference • "Design of Todkar, Pr • "STRUCT MINE CO	eyor industry to carry higher tonnages, larger distances and more es. In order to keep up these criteria significant technology we been incorporated in the field of the belt conveyor design, numerical simulation. The application of traditional components ional applications requiring horizontal curves and intermediate changed and expanded belt conveyor possibilities. Examples of aveying applications along with the numerical tools required to weying applications along with the numerical tools required to will y and availability will be reviewed. This work indicates the ments in belt conveyor technology. The present work deals with and in the field of belt conveyor system. A 360° rotating belt tem has been designed for prototype operation and the details of abrication, modeling and economies of the rotating belt conveyor sented in this work. Conveyor Belt System, Modification in conveyor belt, 3600 system of Conveyor Belt System" IJSETR, July 2018 by Ms Sayali of. Milind Ramgiri, JSPMs RSCOE URAL AND DISCRETE ELEMENT ANALYSIS OF COAL INVEYOR SYSTEM" Acta Technica Napocensis Vol. 61, Issue nber, 2018 by Ismail BOGREKCI, Hilmi Saygin SUCUOGLU,	19-22 SE

	 Material Handling."Science direct, Energy procedia 142(2017) 2754-2760, Date - 21-24 August 2017, "PORTABLE LOW PROFILE DRIVE OVER TRUCK DUMP CONVEYOR SYSTEM"Patent No – US 8, 684,161 B2, Date of patent – Apr, . 1,2014. "A Review of Automatic Conveyor System" IJARSE, Volume No.7, March2018 by Avinash Nadivale, Omkar Kumbhar, Aniket Kherade, Amar Kolekar. "Study and Performance of Belt Conveyor System with Different Type Parameter" IJIRST, Volume 2, November 2015 by Deepak Gupta and Dheerav Dave. "Design & Fabrication of 90° conveyor system for material handing in Industries"IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e- ISSN: 2278-1684,p-ISSN: 2320-334X PP. 12-17 TRUCK MOUNTED EXTENSIBLE CONVEYOR SYSTEM United States Patent James H. Esch (10) Patent No. : US 9, 783, 093 B1 (45) Date of Patent : Oct . 10, 2017. 	
	Author Pranjal D.Parwate, Akash T.Shinde, Vaibhav B.Thorat ,Aditya S.Wagh	
0	Paper TitleDesign And Manufacturing Of Horizontal Tumbling MachineAbstract: - The paper presents an analysis of the applicability of tumbling	
tame 005	machining for smoothing sharp edges and deburring. The basic conditions for the formation of burrs in machining and shapes of burrs on the edges of objects machined, at the exit of the tool have been defined. Possible ways of removing burrs are quoted. The results of research of deburring and smoothing, rounding sharp edges using tumbling machining are presented. To illustrate the surface taper ratio and edge the optical microscope Nikon Eclipse MA 200 with the image analysis system NIS 4.20 was used. The effect of treatment time on the final effect of removing burrs from aluminum tube after cutting with band saw was defined. vibro-abrasive machining operators are exposed to loud occupational noises when loading and unloading the metal products in vibro-abrasive machining. The increase in the number of hearing loss injuries in the metal stamping industry initiated OSHA's Special Emphasis Programs in designated industries and locations across the United States. Because occupational hearing loss injuries do not manifest themselves until years later, it is critical that employers install engineering controls immediately in order to protect worker's hearing and prevent hearing loss injuries. The sound level and noise exposure results indicate that the noise cover is an effective control in reducing the sound levels produced by the vibro-abrasive	23-26 SE

machining and reducing noise exposures for thevibro-abrasive machining. Sound levels and operator's noise exposures can be further reduced through the combination of machine configuration, hearing protection, use of absorption material to cover the walls, ceilings, and floors, enclosing the machines in a separate room, and the use of noise covers over the vibroabrasive machining.

Keywords: - Fine Machining; Tumbling Machine; Tumbling; Burrs Removing **Reference**

- Anna Krœning, (2016) REDUCING NOISE EXPOSURES PRODUCED BY VIBRATORY FINISHING MACHINES
- Spadło S., Bańkowski D., (2015), Analysis of the effect of processing vibroabrasive finishing on the ammunition scales topography surface and sharp edges.
- Spadło S., Młynarczyk P., Bańkowski D., (2014) Investigations of influence of vibration smoothing conditions of geometrical structure on machined surfaces.
- D Bakowski and S Spado.(2017) Research on the use of zeolite for smoothing surfaces in tumbler machining
- Bankowski Damian,Krajcarz Daniel(2017) Deburring and smoothing the edges using vibro-abrasive machining. The paper presents an analysis of applicability of vibro abrasive machining for smoothing sharp edges and deburring the work.
- S.sapdlo, R,pierzynowski, applications of vibro abrasive polishing for the aummunition surfaces elements
- machineengg .Electrical machining technology ,Wroclaw NOT FSNT council publishing 12/1(2009) 70- 772)M.Rodziewics, Smoothing by loose abrasive in containers, WNT ,Warsaw,1968 (in polish)
- F. orynski, R. synajewski, research of the surface roughness conventionally and vibration machined on grinder to the planes, mechanics 83/3 (2010) 190-192 (in polish)
- J.harasymowicz, E.wanatuch, deburring, cracow university of the technology publishing cracow, 1994.

• Bankowski D &spadlo S 2016 influence of the smoothing conditions in vibro-abrasive for technically dry friction the parts made of steel X160CRMOV121, in: 25 th Int. conf. Metall Mater Metal 2016. Pp 1019-24

- Bankowski d &sapdlo S 2017 investigations of influence of vibration smoothing condions of geometrical structure on machined surfaces, IOP conference Series- Materials science &engg .volume :179,article number :UNSP012002
- davidson D A 2002 mass finishing processes , metal finishing guidebook & directory , new york, Tam surfaces are elsevier science
- LK gillespie, the battle of the burr : new strategies and new tricks

• LK gillespie ,Deburring and edge finishing handbook, Society Manufacturing engg (1999).	manufacturing engg ,116(2),(1996) pp 69-78		
Manufacturing engg (1999)	of	of	
Manufacturing cingg (1779).			



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