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Advanced Shoe Cleaning Machine

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Abstract:*Inthiswork,itisproposedtodesignacompleteshoecaremachine,incorporatingshoedustcleanin,&shoepolishingfacilitywiththismachine.Alltheemployees,faculty,travelers,guests,nurses,etc. arerequiredtowearcleanshoesbeforeenteringtheirlaboratories,offices,workshops,luxuriousrooms,factoriesastheseplacesrequirehighmaintenanceofcleanedfloorsandsurfaces,andtheairinsidethefacilitiesshouldbeveryclean.Thus, completeshoecaremachineisdesigned,consideringalltheaboveparameterswithrespecttocustomersneedinterms,portabilityandalsoeconomicallyavailabletothematcheaperprice,thusprovidingnotonlycleanenvironmentbutalsoprovidethestylequotienttothepersonwithpolishingeffect.*

Keywords-*Cleaning,Polishing.*

I. Introduction

There is a famous proverb "Cleanlinessisnexttogodliness". The machine which we have designedandfabricatedimplicates this,called as "advanced shoe cleaningmachine",herethe shoes canbecleanedandpolishedin360 degreessandinmuchlesstimewith noeffort.Mostoftheindustries, hospitals and educational institutions having the most preserved laboratories like computer labs, instrumentation labs, operational theatre and variousproduction,assemblysites in chemical, pharmaceutical industries,etc.havetobefreefrom dust and dirt which would be carried through the shoe ofthe employees to the work area, causing untidy environmentand alsosometimeshazardousto the workingenvironment.Ashoeisan item of footwear intended to protectandcomfortthe human footwhiledoingvariousactivities. Shoe is generally made from leatherwhichrequiresextremecare andregularpolishingtomaintain itsshinyappearance .This requires awaxypasteor cream knownas theshoepolishingwaxwhichis firstapplied to the shoe evenly usingaclothorabrush.Inorderto proposethenewdesignofcanvas shoes cleaner machine, some researchontheinventionofthe regular washing machine since earlystage of century asbeen made.

II. Problem statement

1. Existing shoe cleaning machinesarenotefficient
2. Shoe cleaners may not be availableeverywhere.

OBJECT
1.Toreducescost.
2.Toreduceshumanefforts.
3.Tomakethingsconvenientandcomfortable.

III. Methodology

A Concept development process is the sequence of steps oractivities which an enterpriseemploys to conceive,design,and commercializeaproduct.Manyofthessteps andactivitiesareintellectualandorganizational ratherthanphysical.Someorganizationsdefine and followapreciseanddetaileddevelopment process,whileothersmaynotevenbeableto describe the processes. Furthermore, every organizationemployaprocessatleastslightly differentfrom thatofeveryotherorganization. Infact,thesameenterprisemayfollowdifferent processesforeachofseveraldifferenttypesof developmentprojects.

IV. Block diagram

V. Working and specification

Stepper Motor	5 volt
Dc Motor	12 volt
Power supply	12V, 5V

Generally, Every electrical and electronic productthatweuseinourdaytodaylifeso needtorequireapowersupply.Ingeneral, we canuseanACsupplyof230V50Hz,butthis powerhastobeconvertedintotherequired form withrequiredvaluesforprovidingpower supply.Inoursystem hasonly5VDCforthe arduinoboard.So we go fora step-down transformer.It'susedfor convertingthehigh voltageintolowvoltage.230VACisconverted into12V AC usingastepdowntransformer. Then 12V AC rectified into 5V DC using electroniccomponentslikerectifier,filterandregulator.

VI. Conclusion

The rotation ofthebasehelpsincleaningthe shoesurfaceeffectivelyandthefixedbrush attached helpsinpolishingtheshoe,where polish is applied to the shoe.Hence the machineisextremelyusefulinplaceswherethe dustduetothefoot wearing amajorproblem. The Advanced shoe cleaning with polishing machineisacompletesetupproducedfor cleaningtheshoeinordertomaintaindustfree environmentandalsopolishingtheshoetogive anelegantlook to the shoeaswellastothe user.Thuswecanconcludefrom theabove thattheusageofshoemachineisamustforall theindustries(chemical,foodprocessingetc) andinstitutionswherecleanlinessanddustfree environmentisaprimaryrequirement.
Thismachineisabletogriptheshoeperfectly and applya layer ofpolish. Themachine assuresminimaldamagetotheshoebeing polished.Itreduceshumaninvolvementtoa considerablelevel.This machine iseconomical when compared to the available semi- automaticmachines.

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