

BUILDING AND OTHER CONSTRUCTION WORKERS' (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE)CENTRAL RULES 1998

(iii) safe working pressure at such plant and equipment; a suitable stop valve or valves by which the pressure plant or the system of the pressure plant may be isolated from the source of supply of pressure or otherwise. every pressure plant or equipment shall be thoroughly examined by the competent person— (ii) (iii) externally, once in every period of six months; internally, once in every period of twelve months and; by hydraulic test once in every period of four years

CHAPTER XX Safe Workin Up to 20 tonnes U to 50 tonnes Over 50 tonnes load TABLE Test load 25 per cent in excess of safe working load 5 tonnes in excess of safe workin load 10 er cent in excess of safe workin load (2) Lifting Gear— Every ring, hook, chain, shackle, swivel, eye-bolt, plate clamp, (a) triangular plate or pulley block (except single sheave block) shall be subjected to a test load which shall not be less than the load as specified in the following table: In the case of a multi sheave block, the test load shall than the load as specified in the following table:- not be less Safe Workin U to 25 25 to 160 above 160 (d) load in tonnes TABLE Test load in tonnes 2 x safe workin load 0.9933 x safe workin load + 27 1.1 x safe workin load In the case of hand-operated pulley blocks used with pitched chains and rings, hooks, shackles or swivels, permanently attached thereto, a test load not less than 50 per cent in excess of the safe working load shall be applied. In the case of a pulley block fitted with a bucket, the bucket shall be tested and the load applied to the bucket when testing that block will be accepted as test load of the bucket. In the case of a sling having two legs, the safe working load shall (a) (b) Item 1 Wire Rope forming part of Sling. Safe working load of the Sling: Safe working load upto and equal to IO tonnes. Safe working load above 10 tonnes and upto and equal to 160 tonnes. Safe workin load above 160 tonnes. Wire Rope as integral part of a Lifting Appliance: SWL of the lifting appliance: Safe working load upto and equal to 160 tonnes. Safe workin load above 160 tonnes. Co-efficient of utilisation 2 5 10 (8.85 x SWL) + 1910 3 10 (8.85 x SWL) + 1910 3 0) Before any test is carried out, a visual inspection of the lifting appliance, or lifting gear involved shall be conducted and any visible defective gear shall be replaced or renewed. After being tested, all the lifting gears shall be examined to see whether any parts have been injured or permanently deformed by the test. SEE RULE 3 Total time of exposure (continuous or a number of short-term ex osures er da in hours Sound pressure level (in dBA 90 92 95 97 100 102 105 107 110 115 Sr. No. 1 1 2 3 4 5 6 7 8 9 IO 11 12 13 14 15 16 17 18 19 20 21 Substance 2 Acetaldehyde Acetic Acid Acetone Aorolein Ac lonitrile-skin Aldrin-skin All Ichloride Ammonia Aniline-skin ENVIRONMENT Permissible limits of exposure Time Weighted average Concentration TWA 8 hrs. Short-term exposure limit (STEL) (15 Anisidine o-P, isomers -skin Arsenic & soluble compounds as As Benzene SC Beryllium & Compound (As Be) Boron trifluoride-C Bromine Butane 2-Butanone Ketone-MBK n-Bu I acetate (Methyl-ethyl 3 100 10 750 0.1 .2 1 25 2 0.1 10 1 0.1 800 200 150 50 200 0.5 mg/ m3 4 180 25 1780 0.25 4.5 0.25 3 18 10 0.5 0.2 30 0.002 3 0.7 1900 590 710 150 950 1.5 5 150 15 1 000 0.3 2 35 0.3 300 200 mg/ m3 6 270 37 2375 0.8 6 27 2 835 950 n-Bu I alcohol-skin C sec tert.But I acetate But I merca tan Sr. No. 1 22 23 24 25 26 27 28 s.c 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 0.1 46 47 48 49 0.2 50 51 52 Substance 2 Cadmium Dust and salts (as Cd) Permissible limits of exposure Time Weighted average Concentration TWA 8 hrs. Short-term exposure limit (STEL) (15 Calcium oxide Carbaryl (sevin) Carbofuran (Furadan Carbon-disulphide-skin Carbon monoxide Carbon tetrachloride-skin Chlordane-skin Chlorine Chlorobenzene monochlorobenzene Chloroform (S.C. bis-Chloromethyl ether (H.C. Chromic acid and chromates ater Soluble Cr Chromous Salts as Cr Co er fume Cotton dust, raw Cresol, all isomers-skin C anides as CN -skin 3 10 50 5 1 75 10 0.001 5 10 0.01 0.15 400 m /m3 4 0.05 2 5 0.1 30 55 30 0.5 3 350 50 0.005 0.05 0.05 0.2 22 1 20 1 0.1 0.1 5 1 0.25 1 1.5 1.5 0.1 0.1 1400 5 400 m /m3 6 440 (as C ano en DDT (Dichorodiphenly- trichoroethane Demeton-skin Diazinon-skin Dibutyl Phthalate Dicholorvas DDVP -skin Dieldrin-skin Dinitrobenzene all isomers -skin Dinitrotoluene-skin Di hen I Bi hen I Endosulfan Thiadon -Skin Endrin skin Eth I acetate Sr. No. 1 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 Substance 2 Ethyl alcohol Eth lamine Fluorides as F Flourine Formaldehyde S.C. Formic acid Gasoline Hydrazine-skin (S. C. H dro en Chloride-C H drogen C anide-skin -c Hydrogen Flourine as F —C Permissible limits of exposure Time Weighted average Concentration TWA 8 hrs. Short-term exposure limit (STEL) (15 H dro en Peroxide Hydrogen Sulphide Iodine-C Iron

Oxide Fume Feo Isoam I acetate Isoam I alcohol Isobu I alcohol Lead,inorg fumes Lindane-skin Malathion-skin and as Fe dust (as Manganese dust and compounds as Mn -C Man anese Fume as Mn Mercury (as Hg)-Skin- i Al I com ounds ii All forms exce t al (iii) Atyl and com ounds I va our inorganic Meth I alcohol Methanol -Skin 3 1 000 10 1 1.0 5 300 0.1 5 10 3 1 10 0.1 100 100 50 200 m /m3 4 1900 18 2.5 2 1.5 9 900 0.1 7 10 2.5 1.5 14 1 5 525 360 150 0.15 0.5 10 5 1 0.01 0.05 0.1 260 5 2 2 500 15 125 250 m /m3 6 4 3 1500 21 0.03 310 Sr. No. 1 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 0.1 93 0.3 94 96 0.1 97 0.2 98 99 100 101 102 103 104 105 106 107 Substance 2 Permissible limits of exposure Time Weighted average Concentration TWA 8 hrs. Short-term exposure limit (STEL) (15 Methyl Collosolve- (2 ethanol Skin Methyl isobutyl Ketone Methyl Isocyanate-Skin Na hthylene Nickel carbon I as Ni Nitric acid Nitric oxide Nitrobenzene-skin Nitrogen dioxide Oil mist, minerals Ozone Parathion-skin Phenol-skin Phorate Thimet -skin Methoxy Phos Phos Phos Phos Phos Phos ene Carbon I Chloride hine horic acid horus elbow horus entachloride horus trichloride Picie acid-skin ridine Silane silicon tetrah dride Sodium h droxide —C Styrene, monomer Phen leth lene Sul hur dioxide Sul hur hexafluoride Sul huric acid Tetraeth I lead as Pb -Skin Toluene Toluol 3 5 50 0.02 10 0.05 2 25 1 3 0.1 5 5 5 50 2 1000 100 m /m3 4 16 205 0.05 50 0.35 5 30 5 6 5 0.2 0.1 19 0.05 0.4 0.4 1 0.1 1 1.5 0.1 15 7 2 215 5 6000 1 0.1 375 5 75 15 4 5 0.3 1 0.5 100 5 150 m /m3 6 300 75 10 10 10 0.6 0.2 1 3 3 0.3 425 10 560 Sr. No. 1 108 109 110 111 112 113 1 14 115 116 Substance 2 O-Toluidine-skin (S.C.) Tribu I hos hate Trichloroeth lene Uranium, natural as U Vin 1 chloride H.C. Welding fumes Xylene (o-,m, P-isomers) Zinc oxide i Fume ii Dust Total dust Ziroconium com ounds Permissible limits of exposure Time Weighted average Concentration TWA 8 hrs. Short-term exposure limit (STEL) (15 3 2 0.2 50 5 100 5 200 150 as Zr m /m3 4 9 2.5 270 0.2 10 5 435 5.0 10.0 5 m /m3 6 1080 0.6 655 10 10 samples counted by light-field techniques. *As determined by the membrane-filter method at 400-450 x magnification (4 mm objective) phase contrast illumination. Respirable Dust: Fraction assin a size-selector with the followin characteristics: Aerodynamic Diameter (um) Unit densit s here 2.5 3.5 5.0 10 % passing sector 90 75 50 25 [SEE RULE 25 REGISTER OF ESTABLISHMENTS Sr. No. 1 Registration No. and date 2 Name and Address location of the establishment registered where a building or other construction work is to be carried on 3 Name of the Employer and his address 4 Nature of building or other construction work 5 Name and permanent address of the establishment 6 Probable date of commencement of work 7 Maximum number of building workers to be employed on any day 8 Probable duration of building or other construction work & probable date of com letion 9 Remarks 10 (a) In case of construction site, name of the construction site where lifting appliances are fitted/ installed/ located: Situation and Description of lifting appliances and Gear with distinguishing number or marks (if any), which have been tested, thoroughl examined 1 Angle to the horizontal of derrick boom at which test load applied 2 De rees Test load applied 3 Tonnes Safe working load at the angle shown in column (2) 4 Tonnes (a) Name of the fitted installed construction site where loose Distinguishing Description, Number or Mark 1 dimension and material of ear/ device 2 located: Number tested 3 Date of test 4 Test load applied (tonnes) 5 gears are Safe Working load (SWL) tonnes 6 Name and address of manufacturer or suppliers 7 Initial test and examination certificate No. and date (only in case of periodical test and examination) 8 Name and address of public service, association, company or firm or testing establishment making the test and examination 9 Name and position of the Competent Person of public service, association, company or firm or testing establishment 10 Distinguishing Number or Mark 1 Description of gear 2 Number of the certificate of test & examination 3 Number annealed 4 Date of annealing 5 Defects found at careful inspection after annealin 6 (a) Name of the Construction site where loose gears are fitted / installed/ located: Distinguishing number or mark 1 Description of Gear 2 Number of certificate of initial and periodical test and examination 3 Remarks 4 (In respect of persons employed in Building and other construction work involving hazardous processes) Name of the Construction Medical Officer/ Medical Inspector. . . .From.....to... Sr. No. 1 1. 2 3. 4. 5. (a) (b) Works No. 2 Mr. . Mr. . Mr. . Name of building worker 3 From.....to..... From. to..... Age (Last birthday) 5 Sex 4 Date of employment of present work 6 Date of leaving or transfer to other work 7 Reasons for leaving transfer or discharge 8 1. 2 Nature of job or occupation 9 Raw Material or bye product handled 10 Date of medical examina tion by certi&ing surgeon Medical Inspector /CMO 11 Results of medical examination 12 If suspended from work, state period of suspension with detailed reasons 13 Certified fit to resume duty on with signature of Medical Ins ector/C.M.O. 14 1. 2 3. 4

5. If certificate of unfitness or suspension issued to worker 15 Sr.No. 1 1. 2. 3

4. Name and Surname of workman 2 Age and Sex 3 Father's / Husband's name 4 Nature of Employment/ Designation 5 Permanent Home address of workman (village and Taluka and Distt.6 Local Address 7 1. 2. 3

4. Date of commencement of employment 8 Signature or thumb impression of workman 9 Date of termination of em Io ment 10 Reasons for termination 11 If the building worker is/was beneficiary, the date of registration as a beneficiary, the registration No.and the name of Welfare Board 12 1. 2 3

4. Remarks 13 Sr.No. 1 1. 2. 3. 4

5. Name of the building worker 2 Father's / Husband's name 3 Sex 4 Dates 5 Remarks 6 Daily rate of wages/ price rate 7 Basic wages 8 Amount of wa Dearness allowances 9 es earned Overtime 10 Other cash payments (nature of payment to be indicated 11 Total 12 Sr.No. 1 1. 2. 3. 4

5. Serial No.in register of building workers 2 Name of employee 3 Designation /nature of work done 4 Daily attendance/ units worked 5 Total attendance/ units of work done 6 Daily rate of wages/ price rate 7 Amount of wages earned Basic wages 8) Dearness allowances 9 Overtime 10 Other cash payments (nature of payment to be indicated 11 Total 12 Sr. No. 1 Name of work 2 Father's / Husband's name 3 Designation/ nature of employment 4 Particulars of damage or loss 5 Date of damage or loss 6 Whether building worker showed cause against de- duction 7 Date of recover Name of person in whose presence building worker's explanation was heard 8 Amount of deduction imposed 9 No. of instalments 10 First instalment 11 Last instalments 12 Whether building worker showed cause against fine 7 Name of person in whose presence building worker's explanation was heard 8 Wages period and wages payable 9 Amount of the fine imposed 10 Date on which fine realised 11 Remarks 12 Purpose(s) for which advance given 7 No. of instalments by which advance to be re aid 8 Date and amount of each instalment re aid 9 Date on which last instalment was repaid 10 Remarks 11 Sr. No. 1 Name of the building worker 2 Father's / Husband's name 3 Sex 4 Designation/ nature of employment Date on which overtime worked 6 Total overtime worked or production in case of Piece rated 7 Normal rates of wages 8 Overtime rates of wages 9 Overtime earnings 10 Date on which overtime wages paid 11 Remarks 12 Sr. No. 1 Total period for which employed Nature of work done 4 Rate of wages with particulars of unit in case of iece work From 2 To 3 If the building worker was a beneficiary, his registration No. date and the name of the Board 6 Situation and description of lifting appliances tested with distinguishing number of marks if any 1 1. 2. No. of certificate of test and examination of competent person 2 I certify that on the date on which I have appended by signature the lifting appliance shown in column (1) was tested and no defects affecting its safe working condition were found other than those shown in column 5 Date and signature with seal 3 (B) Date and signature with seal 4 Remarks (to be signed and dated) 5 Distinguishing No. or marks 1 1. 2. 3. 4

5. Initial Test and Description of loose gear tested and examined 2 No.of certificates of test and examination of competent person 3 eriodical load test of loose ears I certify that on the date on which I have appended my signature the loose gears shown in column (1) and (2) were tested and no defects affecting its safe working condition were found other than those shown in column 6 Date and signature with seal 4 Date and signature with seal 5 ANNUAL THOROUGH EXAMINATION OF LOOSE GEARS Remarks (to I certify that on the date on which I have appended my be signed signature the loose gears shown in column (1) and (2) were and dated) 6 1. 2. thoroughly examined by me and no defect affecting their safe working condition were found other than those shown in column 10 Date and signature with seal 7 Date and signature with seal 8 Date and signature with seal 9 Remarks (to be signed and dated 10 Remarks (to be signed and dated) 6 3. 4

5. I certify that on the date on which I have appended my signature the loose gears shown in column (1) and (2) were thoroughly examined by me and no defect affecting their safe working condition were found other than those shown in column 10 Date and signature with seal 7 Date and signature with seal 8 PART 111 Date and signature with seal 9 Remarks (to be signed and dated 10 ANNEALING OF CHAINS, RINGS, HOOKS, SHACKLES AND SWIVELS (OTHER THAN THOSE EXEMPTED) SEE PART 1 12.5 mm and smaller If used with lifting appliance driven by power, must be chains, rings, hooks, annealed once at least in every six months. If used shackles and swivels in solely with lifting appliance worked by hand, must be eneral use. annealed once at least in eve twelve months. Other chains, rings, If used with lifting appliance driven by power, must be hooks, shackles and annealed once at least in twelve months. swivels in general use. If used solely with lifting

appliance worked by hand, must be annealed once at least in eve two months. Note: It is recommended though not required by rules that annealing should be carried out least in a suitably constructed furnace heated to temperature between 1100 degree and 1300 degree Fahrenheit or 600 degree and 700 degree centi rade, for a eriod between 30 and 60 minutes. Disting uishing No. or marks Descrip tion of gear anneale d No. of the certificate of test and examinati on I certify that on the date to which I have appended my signature, the gear described in Cols. 1 and 2 was effectually annealed under my supervision; that after being so annealed every article was carefully inspected and that no defects affecting its safe working condition were found other than those shown in col. 7 Remarks (to be signed and dated) Date and Date and signature with signature seal with seal Date and signatu re with seal Stages 1st Year 2nd Year 3rd Year 4th Year Total Cost Amount Challan No. and date Advance—A Deduction at Source—D Final—F Signature of Employer Name of Employer

