



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT  
ARIYALUR  
SAFETY DEPARTMENT MANUAL**



Issue No. 01	Rev. No: 00	Effective Date: 01.11.2010	WI-14(PI-14; AM-7)
Issued By: M.R		Approved By: HOD -SAFETY	
WORK INSTRUICTION FOR SAFETY PRECAUTIONS ( GRINDING OPEARATONS)			

### **1.1. DOs**

- 1.1.1 Always keep the tool rest adjusted so that the distance between the wheel and the tool rest does not exceed 1/16 inch.**
- 1.1.2 Always check the wheel before mounting it on the spindle.**
- 1.1.3 Make a sound test to find out soundness of the wheel before mounting it.**
- 1.1.4 Always see that the RPM of the spindle does not exceed the rated RPM indicated on the grinding wheel.**
- 1.1.5 Allow the wheel to reach its maximum speed before grinding.**
- 1.1.6 Switch on the dust collector system if it is provided for machine.**
- 1.1.7 See that the work rest, fixtures, brackets, etc are securely fastened before grinding.**
- 1.1.8 Use the grinder only for the purpose for which it is designed.**
- 1.1.9 Electrical grinders should be connected with proper earthing and cord with plug in case of portable grinders.**
- 1.1.10 While starting a portable grinder hold it under a work, bench or table or inside a casting for a minute, so as to prevent the broken wheel flying apart, due to any defect or being run above its safe speed.**
- 1.1.11 Always use blotters on both sides of the wheel.**
- 1.1.12 Always use the peripheral phase of the wheel to grind, never use its sides.**
- 1.1.13 Always report any defects that you may notice to your foreman at once.**
- 1.1.14 Always wear protective equipment like goggles, face shields when grinding, to avoid the grinding particles flying into your eyes.**
- 1.1.15 Keep the spark arrestor guards in good condition.**
- 1.1.16 Always dress the wheel before working on it.**
- 1.1.17 Always handle and store the wheel with care.**

### **1.2 DONTs**

- 1.2.1 Do not use worn out wheel.**



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- 1.2.2 Do not use a wheel larger in diameter than for which the machine is designed.
- 1.2.3 Do not adjust the work rest while the machine is in motion.
- 1.2.4 Do not change the wheel unless you have an authorization to do so.
- 1.2.5 Do not mount a wheel which is having a lesser rated RPM than that of the spindle RPM of the machine.
- 1.2.6 Do not grind on the side of the straight wheel.
- 1.2.7 Do not use gloves while grinding unless it is authorized by your foreman for special operations.
- 1.2.8 Do not force the work against a cold wheel. Apply it gradually.
- 1.2.9 When grinding a chisel or a wedge shaped article, never point it downwards as it may stick between the wheel and the work rest which may result in serious damages.
- 1.2.10 Do not stand directly in front of a grinding wheel when a grinder is started.
- 1.2.11 Do not grind the material for which the wheel is not designed.
- 1.2.12 Do not start the machine until the wheel guard is in its place.
- 1.2.13 Do not tighten the mounting nut excessively.
- 1.2.14 Do not use the wheel that has been dropped.

### **1.3. GRINDING WHEELS:**

For safety in grinding wheel operations, the following points are to be observed.

- 1.3.1 Keep the wheels perfectly true either with dressing tool or with the diamond.
- 1.3.2 The work rest is to be adjusted as the diameter of the wheel reduced.
- 1.3.3 While making guards for the machine, remember mild steel is better than cast iron.
- 1.3.4 When a new wheel is mounted, it should be run first as its operating speed for a minute to make certain that the wheel has not been damaged during mounting or storage.
- 1.3.5 Work should never be forced against a cold wheel as the sudden heating may cause the wheel to break.