BANKSMAN / SLINGER

1. What is the smallest size diameter of synthetic rope allowed for use as a hand held tagline?

   A. 16mm
   B. 10mm
   C. 12mm

2. What is the maximum temperature that a webbing sling can be exposed to before it becomes unsafe for use?

   A. 65°C
   B. 100°C
   C. 80°C

3. Is it safe to use slings to rise or lower loads near or over people?

   A. Yes
   B. No

4. How is the working load limit (WLL) determined for synthetic webbing slings?

   A. Tag / Label
   B. Grey lines on the sling
   C. Length of sling

5. What factors should be considered when inspecting webbing slings for safe use?

   A. Wear and tear
   B. Stretching
   C. No label
   D. Damage to sleeve

6. What requirements are important for safe storage of lifting tackle?

   A. Clean dry and well ventilated area
   B. Never on ground
   C. Never in direct sunlight

7. What is the maximum amount of wear permitted in a link of a chain?

   A. 12%
   B. 8%
   C. 10%

8. What do the markings on a link of a chain indicate?

A. Grade of chain
B. Age of chain
C. Diameter of chain

9. Are you permitted to use wire rope (bulldog) grips to connect two lengths of wire rope for lifting purposes?

A. Yes
B. No

10. What is the minimum temperature that a man made webbing sling can be exposed to before it becomes unsafe for use?

A. -20°C
B. -100°C
C. -40°C

11. What does this hand signal indicate?

LOWER DOWN

12. Explain the use of and advantages of a wire rope thimble?

A. Designed to protect the load bearing area
B. Will stop chaffing
C. Both A and B

13. Name two principle shapes of shackles?

A. "D"
B. Bow
C. Flange

14. What must be clearly marked on a shackle to be used for load handling?

A. Working load limit
B. Grade of shackle
C. Size of pin

15. Which type of shackle should be used for multi-legged slings?

A. Flange
B. "D"
C. Bow

16. **Why is it unsafe to interchange components of a shackle pin?**

A. **Shackle failure could occur**
B. **Shackles could be different grades**
C. **Incorrect fitting**

17. **Name two types of eyebolts?**

A. **Collared**
B. **Ring**
C. **Dynamo**

18. **Is it permissible to reeve a sling through two or more eyebolts?**

A. **No (As it could cause eyebolts to bent and tension is doubled)**
B. **Yes (Eyebolts are designed for this purpose)**

19. **Which type of eyebolt should be used for lifts where the pull on the slings is off centre to the axis of the eyebolt of more than 60°?**

A. **Collared**
B. **Dynamo**
C. **Off centred eyebolt**

20. **What precaution should be taken when using a single eyebolt for lifting?**

A. **Eyebolt must be kept hand tight**
B. **Eyebolt should be turned back a ¼ of a turn to stop it over tightening**
C. **Eyebolt should be tightened up with a scaffold pole**

21. **What does this hand signal indicate?**

INCH LOAD OR TAKE THE STRAIN

22. **If a lifting ring or shackle is placed on a hook and it does not hang freely what does this indicate?**

A. **It is too big for the hook**
B. **It is too small for the hook**

23. **What details are displayed on a spreader-lifting beam?**

A. **Safe working load**
B. **Tare weight of beam**
C. **I.D No.**
D. **None of above**

24. **A sling of 2.0 tonne WLL is reeved around a circular load (choke hitched) what is the sling now capable of lifting?**

A. 1.5 tonne
B. 2.0 tonne
C. 1.6 tonne

25. **A sling of 8 tonne is choke hitched around a circular load and the sling angle is more than 90° what is the sling now capable of lifting?**

A. 6 tonne
B. 4 tonne
C. 2 tonne

26. **A three legged sling arrangement is attached to a rigid load how many sling legs would be assumed to support the load?**

A. 3
B. 2
C. 1

27. **A four legged sling arrangement is attached to a flexible load how many sling legs would be assumed to support the load?**

A. 2
B. 4
C. 1

28. **A sling of 1.5 tonne (WLL) is used in basket hitch around a square load what is the sling now capable of lifting?**

A. 1.5 tonne
B. 0.8 tonne
C. 1 tonne

29. **What does this hand signal indicate?**

JIB HEAD UP

30. **What is the weight of a 2 metre concrete skip filled with concrete if the tare weight of the skip is 700Kgs? (Note concrete weights 2,400Kgs per cubic metre)**

A. 5000Kgs
B. 5500Kgs
C. 5250Kgs

31. What is the recommended maximum angle between two legs of a sling?

A. 45°
B. 60°
C. 90°

32. What is the maximum recommended angle between the vertical and any sling legs?

A. 45°
B. 60°
C. 90°

33. When you fix a shackle to a crane hook does the pin rest on the hook or the crown (bow) rest on the hook?

A. Crown
B. Pin

34. What is the maximum evenly distributed load you can place on a standard lifting pallet?

A. 5 tonne
B. Check with manufacture
C. 1 tonne

35. When lifting a pallet of bricks what should be used to prevent loose bricks falling?

A. Metal banding on bricks
B. Brick forks with a safety net fitted
C. No need to worry nobody will be under load anyway

36. What could happen to formwork shutters if a concrete skip is discharged in one spot?

A. The formwork could be overloaded
B. Skip could hit side of formwork
C. Sides on formwork should hold ok

37. What minimum clearance between stacked loads would you keep for walkways?

A. 6 metres
B. 1 metre
C. 2 metres

38. **Before a round load is released what would you do to stop it from rolling away?**

Place chock under edges of the load

39. **Why would you alternate the sling legs around a load?**

A. Load will be held level
B. Load will be held flat
C. Load will not slip

40. **Would you alternate slings on all loads to be lifted?**

A. Yes
B. No

41. **What type of load would you not alternate the slings on?**

A. Loose loads (i.e. pipes, re-bar etc)
B. Flat loads
C. Heavy loads

42. **What type of sling configuration must be used with a dynamo eyebolt?**

A. Up to 15° from vertical
B. Vertical only
C. Any angle up to 90°

43. **What does this hand signal indicate?**

EXTEND JIB HEAD

44. **On the job what method can you use to determine a 60° included angle between the sling legs?**

A. The distance between the lifting points is equal to the length of one sling leg
B. The distance between the lifting points is equal to the length of two sling legs
C. The distance between the lifting points is equal to the length of three sling legs

45. **Results of all examination must be entered in a register?**

A. Only if the equipment is in good order
B. Only if there is a fault in the equipment
C. When the equipment is faulty or in good order

46. A wire rope sling, which has been doubled round a shackle, has a safe working load (SWL)?

A. Equivalent to a single part of rope
B. Equivalent to a two parts of rope
C. Equivalent to half the SWL of the rope

47. All lifting gear should be inspected?

A. By the safety officer
B. Before and after use
C. Every week

48. Collar eyebolts are not suitable for connecting directly to a hook?

A. True for all lifts
B. Only when used in pairs
C. False

49. What does this hand signal indicate?

JIB HEAD DOWN

50. Before lifting gear is used for the first time it must be?

A. Lubricated
B. Tested and supplied with a certificate
C. Attached to the load

51. Badly corroded slings should be?

A. Lubricated and used
B. Destroyed
C. Put in a skip

52. Two slings with a safe working load of 5 tonnes each can lift a 10 tonne load if used vertically. When used at an angle of 120° they can lift?

A. 10 tonnes
B. 7 tonnes
C. 5 tonnes

53. Beam clamps need not be marked with a safe working load?

A. True
B. False

54. If a knot is put in a chain sling the sling should be?

A. Reduced by 20%
B. Not used
C. Reduced by 50%

55. Tension on multi legged slings increase when?

A. Using four legs
B. The sling angle is increased
C. The sling angle is decreased

56. Suitable packing must be used on all sharp edges to?

A. Increase the safe working load
B. Decrease the safe working load
C. Prevent damage to the sling

57. Chain slings can be joined together with steel bolts?

A. True
B. False

58. All lifting gear used in multi leg slings are affected by the sling angle?

A. True
B. False

59. No wire rope should be used for lifting if the total number of broken wires exceeds?

A. 10% of 5 diameters
B. 5% of 10 diameters
C. 15% of 10 diameters

60. Grade 80 chain slings can be used with acid solutions or in an acid-laden atmospheres?

A. True
B. False

61. To ensure even loading of a multiple leg sling how must the legs be connected to the hook block?

A. With a ring or shackle
B. With a “D” shackle
C. With a safety clip

62. What are the most important considerations when giving hand signals?

A. Crane driver can see you
B. Distinct and clear and conform to a set standard
C. Conform to a set standard

63. What does this hand signal indicate?

SLEW LEFT OR RIGHT

64. How often should lifting gear be inspected by a competent person?

A. Every 6 months
B. Every 4 years
C. Every 14 months

65. What action should be taken with a rejected item of lifting equipment?

A. Carry on to a convenient break and report it
B. Take them out of service and report findings
C. Store them in a locker

66. What does this hand signal indicate?

RETRACT JIB HEAD

67. What minimum information would you find on a correctly identified piece of lifting equipment?

A. Safe working load
B. Identification number
C. Maximum working angle

68. Should there be more than one person directing a load who take responsibility?

A. Every body involved
B. Only one person
C. At least two persons

69. What are the main considerations to be taken when a load has to be estimated?

A. Type of material
B. Size of load
C. Hollow or solid
D. Can weight distribution move during the lift
E. Is material wet or dry
F. Add on a minimum of 25% (check company policy could be 50%)

70. What are the main points of a test lift?

A. Load is secure
B. Lifting level
C. No chaffing of lifting gear taking place
D. Lifting tackle is set correctly
E. Crane can take the weight of the load

71. Eyebolts must be used vertically unless collared, what weight reduction must be taken if the angle of sling is included at?

60° Reduce by 60%

72. What does this hand signal indicate?

STOP

73. What is the likely outcome of lifting a load with the centre of gravity outside the line of lift?

A. Load will swing when lifted
B. Could cause crane to go into overload
C. Both A and B

74. When directing a load where is the correct position for the signaller to stand?

A. Under the load
B. At a safe distance from load within sight of crane operator
C. Below crane operators cab

75. When shackles are used at a 45° angle (side load from vertical) what weight reduction must be taken?

A. 30%
B. 40%
C. 20%

76. What does this hand signal indicate?

EMERGENCY STOP

77. When shackles are used at a 90° angle (side load from vertical) what weight reduction must be taken?

A. 50%
B. 40%
C. 20%

78. What does this hand signal indicate?

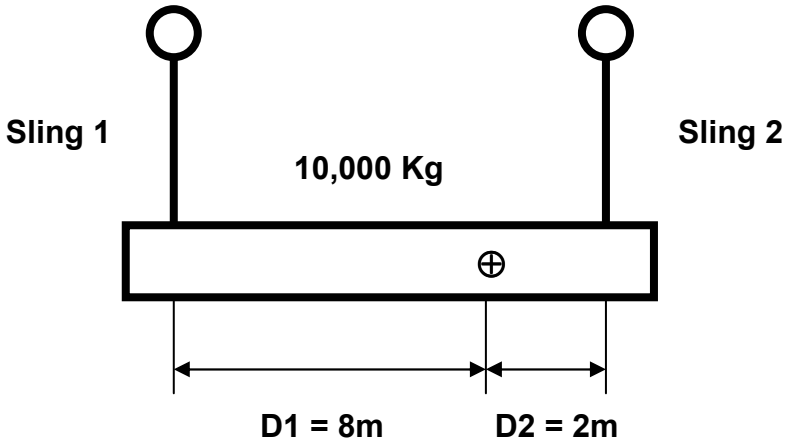
OPERATIONS CEASE

79. What does this hand signal indicate?

HOIST UP

80. When the centre of gravity of a load is not equally spaced the slings and fittings will not carry an equal share of the load, the one closest to anchor point will carry the greatest share of the load.

Work out the load share of each sling leg?



Sling 2 = 10,000 x 8 / (8 + 2) = **8,000Kg.**

Sling 1 = 10,000 x 2 / (8 + 2) = **2,000Kg.**

81. What would be a safer way of working out load / sling share capacity on site?

A. Check with manufacture of sling
B. Get your site agent to check your calculations
C. Ensure each sling used can carry total load bearing weight of lift

82. Point loading of a shackle pin is acceptable?

A. Check with manufacture
B. Yes
C. No

83. Eyebolts must be used vertically unless collared, what weight reduction must be taken if the angle of sling is included at?

30° Reduce by 40%

84. Trapped slings may be dragged from beneath a load?

A. Yes (sometimes)
B. No (always land the load on skids)

85. Colour codes on lifting equipment indicates what?

A. Safe working load
B. Current test period
C. Danger

86. The maximum shim thickness for collard eyebolts is?

A. Half the pitch of thread
B. ¾ pitch of the thread
C. ¼ pitch of the thread

87. Collard eyebolts should be turned back no more than what to align to correct plain of eye?

A. 1 full turn
B. ½ turn
C. ¼ turn

88. Why should synthetic web slings not be twisted when supporting loads?

A. SWL of web sling is reduced by 20%
B. SWL of web sling is reduced by 50%
C. SWL on sling has been based in a straight formation

89. **Eyebolts must be used vertically unless collared, what weight reduction must be taken if the angle of sling is included at?**

90° Reduce by 75%

90. **A polyester webbing sling will resist?**

A. Alkalis / Acids
B. Mildew
C. None of above

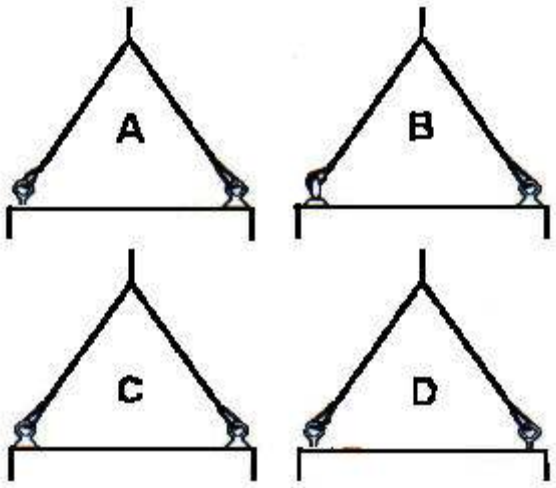
91. **What letter is often used to mark grade 80 chain slings?**

A. L
B. M
C. T

92. **There are usually black lines of stitching on a webbing sling what could this indicate?**

A. Length
B. Safe working load
C. Minimum load limit

93. **Select the correct method of using eyebolts with a two-legged sling?**
94.



CORRECT ANSWER IS C

95. What is the mass (weight) of a cubic metre of concrete?

A. 2600kg
B. 2400kg
C. 2200kg

96. What is the maximum temperature that a grade 80 Chain sling can be subjected to before the SWL is affected?

A. Up to 200°C
B. Up to 300°C
C. Up to 100°C

97. What other precautions should be taken when using a single eyebolt for lifting purposes?

A. Ensure eyebolt and sling are kept at an angle
B. Tighten eyebolt more with a scaffold pole
C. Ensure eyebolt cannot unscrew or use a swivel eyebolt instead

98. A sling of 6.0 tonne WLL is reeved around a circular load (choke hitched) what is the sling now capable of lifting?

A. 3.0 tonne
B. 4.6 tonne
C. 4.8 tonne

99. One, metre beams weighs 125kg. One metre of scaffold plank weighs 7 kg. One square metre of mild steel plate weighs 156kg.

Find the total weight of a load made up of the following?

4 beams each 8 metres long
15 scaffold planks each 4.4 metres long
2 mild steel plates 4 metres long and 0.5 metres wide

$4 \times 8 \times 125 = 4000kg$
$15 \times 4.4 \times 7 = 462kg$
$2 \times 4 \times 0.5 = 4\ m^2$
$4\ m^2 \times 156 = 624kg$ = A. 5086 kg
B. 4890 kg
C. 5020 kg

100. What is the maximum angle allowed out of plain when working with collard eyebolts?

A. 10°
B. 5°
C. 15°

101. A web sling eye should not be forced open more than?

A. 20°
B. 40°
C. 10°

102. When working with a pair of collard eyebolts in a trunnion lift each eyebolt must be de-rated by?

A. 50%
B. 75%
C. 20%

103. When working with swivel eyebolts shims must always be inserted below the collar?

A. True
B. False

104. Shackle pins should be?

A. Turned back a quarter of a turn to stop it over tightening
B. Kept hand tight
C. Either way would be acceptable

104. When using 4 legged chain slings it is important to check the tension on each sling leg. For each slack leg you must reduce SWL of chain sling by?

A. 50%
B. 25%
C. 20%

105. When slewing, because of the weight transfer on the load, or you are not using 2 of a 4- legged chain sling you should reduce SWL of chain sling by?

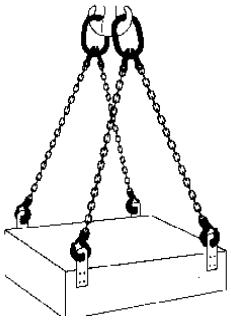
A. 50%
B. 25%
C. 20%

106. Uniformed chain slings will be stamped 0°-45° from the vertical or 0°-90° included angle?

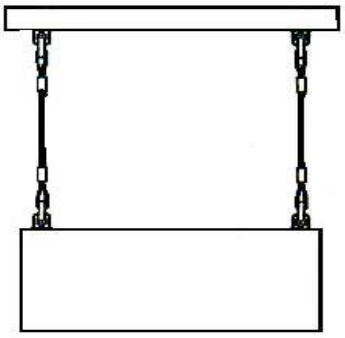
A. True
B. False

107. When using chain slings in this configuration they should be treated as?

A. Two legged sling
B. Four legged sling
C. Does not matter



108. What is the maximum weight of load you can lift in this configuration if each wire rope sling has a WLL of 2 tonne, 4 shackles have a WLL of 1 tonne each?



2 tonne

109. What does this (4) symbol mean when marked on a lifting gear?

A. Only use in areas of high temperature
B. Can be used in areas of higher temperature
C. Maximum grade of steel allowed

110. Alloy shackles and pins are made of what grade?

A. Grade 80
B. Grade 100
C. Grade 60

111. When slinging a load, what action would you take to ensure the load was secure before hoisting the load to the top of a building?

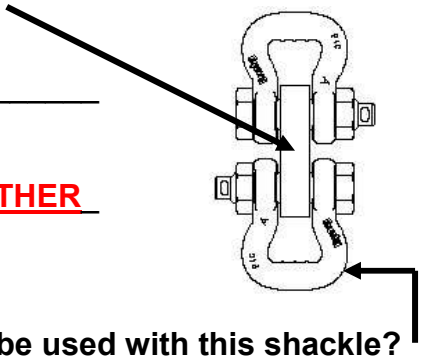
Lift load slightly of the ground and ensure load and slings are tightly secured

112. **Select the correct method when using shackles?**

A

B

113. **Explain what this devise is called and when should it be used?**



LINK PLATE

WHEN JOINING TWO SHACKLES TOGETHER

114. **What type of synthetic web slings should be used with this shackle?**

A. Flat sling
B. Round sling
C. All of above

115. **Point loading of Crosby shackle pins is acceptable as long as the pad eye width of shackle spread is more than what?**

A. 60%
B. 50%
C. 80%

116. **All chain hooks should be fitted with a safety catch apart from the one shown what type of hook is this called?**

A. "D" hook
B. "C" hook
C. Bow hook

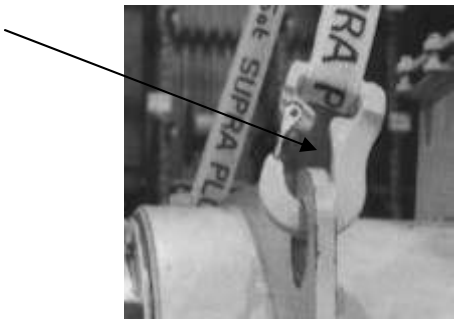
117. **If you are working in "hot work conditions" what type of wire rope should be used?**

A. Fibre core
B. Steel core
C. Any of the two would be acceptable

118. **Grade 8 +10 Chain slings can be subjected to a maximum temperature of 300° before the SWL is affected?**

A. True
B. False (not to be used over200°)

119. **Explain what this devise is called and when should it be used?**



__(JOKER)_ TO STOP DAMAGE TO WEB SLING

OR WHEN JOINING TWO SLINGS TOGETHER

120. **Jokers should be colour coded to match the SWL of web slings used?**

A. True
B. False

121. **What Grade of metal are you using when this symbol (4) is marked on lifting gear?**

A. High tensile steel
B. Mild steel
C. Alloy Steel