

International Design Standards - Lifting Machines, Tackle, Clamps, Attachments & Accessories

LIFTING MACHINES:

Electric Chain Hoist	JIS 8815/1987 and or DIN VDE 0100
Pneumatic Chain Hoists	SABS 1638 : 1995
Chain Block - Hand Operated	JIS B8801/12, SANS 1594:2006, BS 3243
Lever Hoist - Hand Operated	JIS 8819 and or SANS 1636:2006
Jib Cranes	SANS 1599-1:1994

SLINGS:

Chain -	EN 818 - 1 & 2 SANS 189 ISO 3076
Chain Slings - Welded Assy. Grade 8	ISO 4778 / SANS 4778
Chain Slings - Instant Assy. (MAX•A•LOK) Gr. 8	ISO 7593 / SANS 7593 - EN 818 - 1 & 4
Components for chain sling - Grade 8	EN 1677 - 1 & 4 ISO 4778
Polyester Sling - Endless Type	EN 1492-2 / SANS 94-2 2003
Polyester Sling - Flat Woven Type	EN 1492-1 / SANS 94-1 2003
Steel Wire Rope Sling	SABS ISO 7531:1987

CLAMPS AND ATTACHMENTS:

Steel Plate / Section Lifting Clamps	EN 13155
Steel Coil 'C' Hooks	EN 13155/DIN 15018
Palletforks and Grabs	EEC 89 / EEC 91 / 36B/EEC
Lifting Beams and Frames	DIN 15018

ACCESSORIES:

Shackle Lifting : Bow and Dee	FED SPEC RR -C- 271
Shackle Pulling : Bow and Dee	BS 3032
Steel Wire Rope Clip (Crosby Clamps)	FF -C- 450
Steel Wire Rope Thimbles	BS 464 / FF -T- 276

IMPORTANT!

Always specify design standard on drawings/specifications/tenders and purchase orders.

All equipment must be individually certified and have traceability info.

Legal Requirements as of 2006/07/01 (South Africa)

It is the USERS responsibility to comply with the following:

1. Mine Health & Safety Act, Chapter 8: Machinery and Equipment:
Lifting Equipment Regulations.
Effective December 15, 2005
These new regulations cover definitions, factors of safety, operating procedures, adherence to safe lifting practice etc.
2. Mine Health and Safety Act - Act No 29 of 1996
Section 9: Code of Practice.
Section 10: Employer to provide Health and Safety Training.
Section 11: Employer to assess and respond to risk.
Section 21: Manufacturers and suppliers duty for health and safety.
Section 22: Employees duty for Health and Safety.
3. OHS Act - Act 85 of 1993
Section 8: General duties of employers: sub Par (e) (f) and (i).
Section 14: General duties of employees: sub Par (a) (c) and (d).
Section 15: Duty not to interfere with ----- or damage -----
Section 16: Appointments of Competent Persons
4. OHS Act - Driven Machinery Regulations
Regulation 18: Covers Lifting Equipment
Regulation 18 (1-9): Covers Lifting Machinery
Regulation 18 (10): Covers Lifting Tackle
Also see Definitions, which detail the different types
5. Summary of the important clauses of the OHS-Act, pertaining to lifting tackle.
Regulation 18: Sub Regulation 10 (summary)
 - a) Design parameters, implies manufacturers test or compliance certificates.
 - b) "all lifting assemblies" must be conspicuously and clearly marked with identification particulars, and the M.M.L. (trace ability)
 - c) Design factors of safety for different types
4:1 = alloy chain for lifting
6:1 = steel wire rope and mad made textile slings (webbing)
 - d) Wire rope discard criteria
 - e) Mandatory three monthly minimum inspection periods for lifting tackle (single shift operation) by a competent person, which should be recorded in a register.
 - f) Lifting tackle to be stored or protected when not in use.

NOTE: It is important to note that the D.O.L. is currently reviewing DMR 18 and that updated Regulations should become effective in 2006

WARNING!!

Lifting Operations are potentially dangerous tasks - Avoid risks by using the correct equipment that is in safe working order and by trained operators. Accidents will always result in injury and or death and equipment damage.

ALWAYS PERFORM A "TASK" RISK ASSESMENT PRIOR TO LIFT!