Products

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Selection Criteria of Rope by Traits

Trait	Selection Method of Rope	Typical Usage
Flexibility (BendingTrait)	▪ The rope with fiber core as the center is flexible. ▪ The one having fiber core at the center of strand has better flexibility ▪ Cross Laid Rope is more flexible than parallel Laid Rope ▪ The one having more wire is flexible	Sling Lashing
	▪ The one having more wire within strand is more flexible ▪ The one having more strands is flexible But except for multilayer strand ropes ▪ The early cutoff can occur if the number of wire gets larger than required. ▪ The rotational property gets higher if there are many strands. But except for multilayer strand ropes	
Breaking Load (Safety Ratio)	▪ The breaking load of parallel Laid Rope is higher than the Cross Laid Rope. ▪ The breaking load is higher as the tensile strength is higher ▪ IWRC has higher breaking load than fiber core. ▪ The Compact rope has higher breaking load than regular ropes of the same structure	
Elongation	▪ Elongation is lower as the number of wire are fewer ▪ The elongation of parallel Laid Rope is higher than Cross Laid Rope. ▪ The elongation is lower in the order of Fiber Core 〉 IWRC 〉 .	Various PENDENT BRIDGE HANGER Cable and Elevator
Wear Resistance	▪ The wear resistance is better as the number of wire is fewer. ▪ The flat type, swaging and compact ropes have good wear resistance. ▪ The parallel Laid Rope has better wear resistance than Cross Laid Rope..	Cable, Timbering, Rope Rails, Mine Field Incline Shaft Hoist
Form Stability	▪ The parallel Laid Rope has better form stability than Cross Laid Rope.. ▪ The rope with IWRC has better form stability than fiber core. ▪ The one with fewer wire and strands is more stable. ▪ Compact and flat type ropes have better form stability	

Rotational Property	▪ Must use rope with no rotational property The rotation gets higher as the coiling head gets longer ▪ The rotation can be prevented by using Z-Laid and S-Laid side by side. ▪ Ordinary Lay has lower rotational property than Lang ' s lay. ▪ The rotational property gets higher as the curve radius of sheave is lower. ▪ Rotational property gets lower as the number of strands gets fewer. ▪ But except for multi strand ropes	High Head Crane Power Line Withdrawal
Corrosion Resistance	▪ The galvanized rope must be used in environments where corrosion is concerned. ▪ The one with few wire (think wires) have strong wear resistance ▪ Rope grease has good anti corrosion ability to improve corrosion resistance ▪ Fiber core has better corrosion resistance than steel core. ▪ Corrosion resistance must be considered for long period of usage even if the environment is satisfactory.	Fishery Various PENDENT HANGER ANCHOR
Temperature Resistance	▪ The steel core rope must be used because fiber core is weak to high temperature. ▪ The black grease is used for rope grease in case of high temperature environment and high temperature grease must be applied if necessary ▪ The red grease is appropriate in case of low temperature environment.	Ladle Crane (Charter Crane)