

# Products

## ▣ Selection Criteria of Rope by Traits



Trait	Selection Method of Rope	Typical Usage
Flexibility (Bending Trait)	<ul style="list-style-type: none"> <li>The rope with fiber core as the center is flexible.</li> <li>The one having fiber core at the center of strand has better flexibility</li> <li>Cross Laid Rope is more flexible than parallel Laid Rope</li> <li>The one having more wire is flexible</li> </ul>	Sling Lashing
	<ul style="list-style-type: none"> <li>The one having more wire within strand is more flexible</li> <li>The one having more strands is flexible But except for multilayer strand ropes</li> <li>The early cutoff can occur if the number of wire gets larger than required.</li> <li>The rotational property gets higher if there are many strands. But except for multilayer strand ropes</li> </ul>	
Breaking Load (Safety Ratio)	<ul style="list-style-type: none"> <li>The breaking load of parallel Laid Rope is higher than the Cross Laid Rope.</li> <li>The breaking load is higher as the tensile strength is higher</li> <li>IWRC has higher breaking load than fiber core.</li> <li>The Compact rope has higher breaking load than regular ropes of the same structure</li> </ul>	
Elongation	<ul style="list-style-type: none"> <li>Elongation is lower as the number of wire are fewer</li> <li>The elongation of parallel Laid Rope is higher than Cross Laid Rope.</li> <li>The elongation is lower in the order of Fiber Core &gt; IWRC &gt; .</li> </ul>	Various PENDENT BRIDGE HANGER Cable and Elevator
Wear Resistance	<ul style="list-style-type: none"> <li>The wear resistance is better as the number of wire is fewer.</li> <li>The flat type, swaging and compact ropes have good wear resistance.</li> <li>The parallel Laid Rope has better wear resistance than Cross Laid Rope..</li> </ul>	Cable, Timbering, Rope Rails, Mine Field Incline Shaft Hoist
Form Stability	<ul style="list-style-type: none"> <li>The parallel Laid Rope has better form stability than Cross Laid Rope..</li> <li>The rope with IWRC has better form stability than fiber core.</li> <li>The one with fewer wire and strands is more stable.</li> <li>Compact and flat type ropes have better form stability</li> </ul>	

<p>Rotational Property</p>	<ul style="list-style-type: none"> <li>▪ Must use rope with no rotational property The rotation gets higher as the coiling head gets longer</li> <li>▪ The rotation can be prevented by using Z-Laid and S-Laid side by side.</li> <li>▪ Ordinary Lay has lower rotational property than Lang ' s lay.</li> <li>▪ The rotational property gets higher as the curve radius of sheave is lower.</li> <li>▪ Rotational property gets lower as the number of strands gets fewer.</li> <li>▪ But except for multi strand ropes</li> </ul>	<p>High Head Crane Power Line Withdrawal</p>
<p>Corrosion Resistance</p>	<ul style="list-style-type: none"> <li>▪ The galvanized rope must be used in environments where corrosion is concerned.</li> <li>▪ The one with few wire (think wires) have strong wear resistance</li> <li>▪ Rope grease has good anti corrosion ability to improve corrosion resistance</li> <li>▪ Fiber core has better corrosion resistance than steel core.</li> <li>▪ Corrosion resistance must be considered for long period of usage even if the environment is satisfactory.</li> </ul>	<p>Fishery Various PENDENT HANGER ANCHOR</p>
<p>Temperature Resistance</p>	<ul style="list-style-type: none"> <li>▪ The steel core rope must be used because fiber core is weak to high temperature.</li> <li>▪ The black grease is used for rope grease in case of high temperature environment and high temperature grease must be applied if necessary</li> <li>▪ The red grease is appropriate in case of low temperature environment.</li> </ul>	<p>Ladle Crane (Charter Crane)</p>