

金属钢卷装箱要求

Steel Coils Stowage and Securing Requirement

为了适应海上运输需要，根据钢卷体积小重量大和易滚动的特性，兼顾货物与集装箱的安全，也从为客户节约成本的角度出发制定如下绑扎加固要求：

In order to meet the requirement of maritime transport, according to steel coil characteristics of volume/size/weight and rollability, considering safety of both cargo and containers, also from the perspective of cost savings for the customer, we need to formulate the following lashing reinforcement requirements for steel coil:

1. 钢卷不能直接接触箱内地板，必须要有足够的纵向木条或者货物托盘来分散货物在整个地板上的重量。
纵向木条要固定在地板上不会移动，货物托盘四周要用三角木加以固定防止移动；

Steel coil can't directly be loaded on the floorboard of container, there must be enough lengthways batten or cargo pallets to spread the weight of the goods on the floorboard. Lengthways batten on the floorboard and pallets of goods with a triangular wood around should be fixed to prevent them moving;

2. 钢卷在箱子内的积载必须是均匀的，要保持箱体的平衡，整个重心保持在中线上，货物之间不能有缝隙，以免绑扎不牢固造成货物移动；对于带托盘的、超重的卷，钢卷间的缝隙要均匀且用木架子支撑。

Stowage of steel coil in the container must be well-proportioned, to maintain the balance of the container and keep the center of gravity in the centerline, the goods do not allow to have a gap with the wall of container to avoid cargo moving in case of improper lashing; For steel coil with pallet/tray or overweight, the gaps between coils be supported by wooden shelf evenly.

3. 箱子内所有的钢卷先用钢丝绳整体绑扎，然后每个钢卷必须要用钢丝绳固定在箱子两侧下面的固定环上，并在钢丝绳的末端用 2 个钢丝绳夹扣固定，确保钢丝绳不会松动；

All the steel coils in the container must be secured by steel wire firstly, then each coil must use steel wire lashed on the both sides retaining ring of container, and use two wire rope clamps to fix the wire to ensure that the wire rope would not loosen;

4. 在每个钢卷下面的前后方向需各用 3 个三角木塞住，防止钢卷前后滚动；

Each coil should be chocked with 3 pieces wooden wedges fore and aft to prevent the steel coil rolling lengthways.

5. 在货物和箱壁之间必须要有木质的支架来支撑，支架必须是牢固的。

Between the cargo and the walls of container must be chocked with strong timberwork.

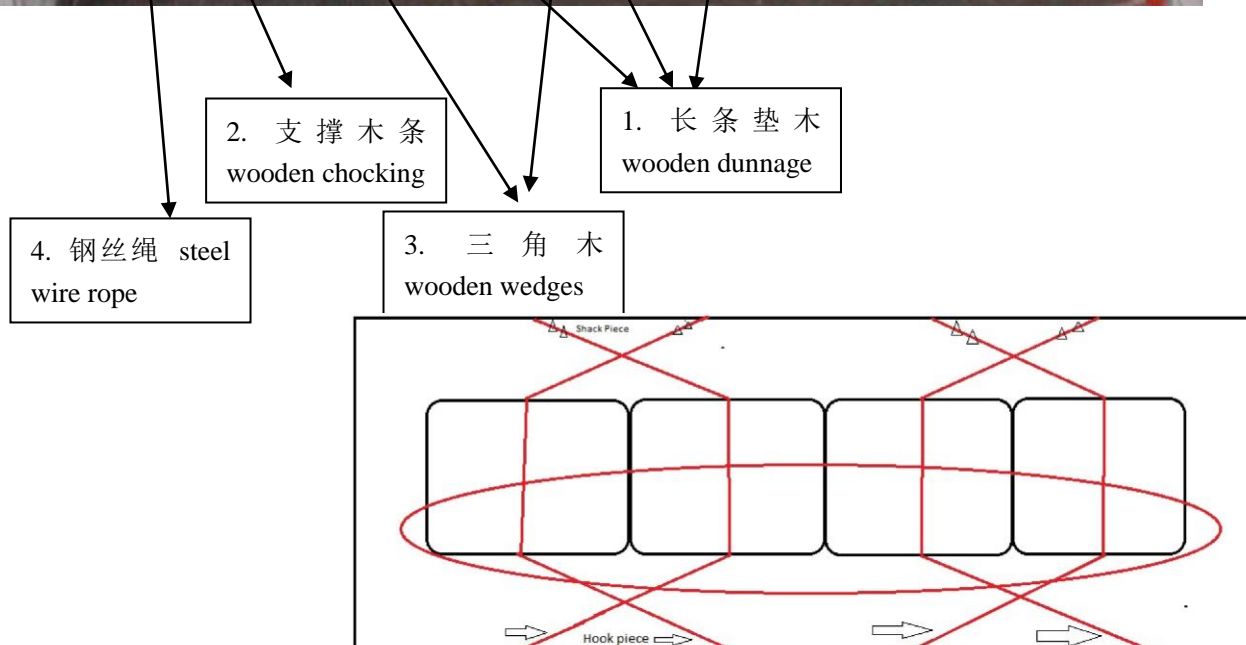
以下列出适运货物装箱实例谨供您参考：

Listed below are for coils lashing instance for your reference:

1) 单卷重量 coils weight <5MT

序号	品名	规格	说明
1	长条垫木 dunnage	10cm * 10cm * 400cm	每一卷下面垫放三根垫木 3 pcs dunnage
2	支撑木条 chocking wooden bar	10cm * 10cm * L	每个卷左右两侧用支撑木条和三角木固定。Both sides of each coil chocked with a pc of wooden bar, which to be nailed on the floor.
3.	三角木 wooden wedges	10cm * 10cm * 15cm	每个卷左右两侧各需一个三角木固定，下面各需 3 个三角木，最后一个卷除三角木外，再加一根木条固定。Wooden wedge should be nailed on the chocking bar against each side of the coil; each oil should be chocked with 3 pcs of wooden wedge separately at fore and aft, and nailed on the dunnage; a pc of wooden bar should be nailed on

			the dunnage against the wooden wedge as chocking for the last coil.
4.	钢丝绳 Steel wire rope	直径 Dia: 12mm	所有卷先用一根钢丝绳整体绑扎, 然后每个卷再用两根钢丝绳交叉绑扎加以固定。 All coils should be group lashed by a pc of steel wire rope firstly, then each coil was cross lashed by 2 pcs of steel wire rope, which should be connected to the lashing rings at fore and aft and tightened by turnbuckle
5.	卡扣 Clips	6 号	
6.	松紧螺丝 Turnbuckle	标准 Style:16 号	全新 (turnbuckle should be new, rust or second hand is prohibited)



2) 5MT <单卷重量 coils weight < 9MT

2.1 卷眼朝两侧 Coil eye to both sides



序号	品名	规格	说明
1	长条垫木 dunnage	10cm * 10cm * 400cm	每一卷下面垫放三根垫木 3 pcs wooden dunnage
2	支撑木条 chocking wooden bar	10cm * 10cm * L	每个卷左右两侧及靠近门口的空挡用木架子支撑。Both sides of each coil and the space near the door to be chocked by timberwork.
3.	三角木 wooden wedges	10cm * 10cm * 15cm	每个卷前后各需 3 个三角木塞住。each oil should be chocked with 3 pcs of wooden wedges separately at fore and aft, and nailed on the dunnage
4.	钢丝绳 Steel wire rope	直径 Dia: 12mm	所有卷先用一根钢丝绳整体绑扎，然后每个卷再用两根钢丝绳交叉加以固定。All coils should be group lashed by a pc of steel wire rope firstly, then each coil was cross lashed by 2 pcs of steel wire rope, which should be connected to the lashing rings at fore and aft and tightened by turnbuckle
5.	卡扣 Clips (each end need 2 pcs at least)	6 号	
6.	松紧螺丝 Turnbuckle	标准 Style:16 号	全新 (turnbuckle should be new, rust or second hand is prohibited)

2.2 卷眼朝前后 Coils with eyes to fore and aft



序号	品名	规格	说明
1	长条垫木 dunnage	10cm * 10cm * L	每一卷下面垫放两根垫木 2 pcs wooden dunnage
2	支撑木条 chocking wooden bar	10cm * 10cm * L	每个卷左右两侧用木架子支撑。Both sides of each coil to be chocked by 2 sets of timberwork.
3.	三角木 wooden wedges	10cm * 10cm * 15cm	见视图, as above picture

4.	钢丝绳 Steel wire rope	直径 Dia: 12mm	所有卷用两根钢丝绳整体绑扎，并固定在底板上的令环上。All coils should be group lashed by 2 lines of steel wire rope, and be connected to the lashing rings on the floor and tightened by turnbuckle
5.	卡扣 Clips (each end need 2 pcs at least)	6 号	
6.	松紧螺丝 Turnbuckle	标准 Style:16 号	

2.3 钢卷带托盘 coil with pallet



序号	品名	规格	说明
1	支撑木条 Wooden bars	10cm * 10cm * L	每个卷左右两侧用 1 组支架固定 both sides of each coil were separately chocked with a set of timberwork.
3.	三角木 wooden wedges	10cm * 10cm * 15cm	每个卷前后各需三个三角木固定，两侧各需两个三角木固定，三角木靠紧托盘钉在箱底板上。Fore and aft side of each coil were separately chocked with 3 pcs of wooden wedges; both sides of each coil were separately chocked with 2 pcs of wooden wedges, all wooden wedges should be nailed on the floor against the pallet.
4.	钢丝绳 steel wire	直径 dia: 12mm	所有卷先用钢丝绳整体绑扎，每个卷各再用两

	rope		根钢丝绳加以固定，方向分别向前和向后，对称绑扎。钢丝绳卡扣在每端不低于 2 个。Each coil was cross lashed by 2 pcs of steel wire rope, which should be connected to the lashing rings at fore and aft and tightened by turnbuckle 全新（turnbuckle should be new, rust or second hand is prohibited）
5.	卡扣 clips	6 号	
6.	松紧螺丝 turnbuckle	标准 16 号	

2.4 卷眼朝上 eye up coil



序号	品名	规格	说明
1	支撑木条 Wooden bars	10cm * 10cm * L	每个卷左右两侧用 1 组木架子横向支撑 both sides of each coil were separately chocked with a set of timberwork. Top side of the coils was group covered by a set of timberwork.
3.	三角木 wooden wedges	10cm * 10cm * 15cm	第一个卷和最后一个卷的两侧底部各需 4 个三角木固定，当中的卷两侧底部各需 2 个三角木固定,所有三角木均需钉在箱底板上；The first and last coil each should be chocked with 4 pcs of wooden wedges at each side, the coils at middle part each should be chocked with 2 pcs of wooden wedges at each side; all wooden wedges

			should be nailed on the floor against the pallet.
4.	钢丝绳 steel wire rope	直径 dia: 12mm	所有卷先用 2 跟钢丝绳整体绑扎成一组，每个卷各用一根钢丝绳通过顶部的木架加以垂直固定，对称绑扎，两头固定在箱底板上的令环上。钢丝绳卡扣在每端不低于 2 个。All coils should group lashed by 2 lines of steel wire rope firstly, then each coil should be further tie up lashed by a line of steel wire rope through the top side timberwork and connected to the lashing rings at both sides on the floor, and tightened by turnbuckles. Clips at each end should be not less than 2 pcs.
5.	卡扣 clips	6 号	
6.	松紧螺丝 turnbuckle	标准 16 号	全新 (turnbuckle should be new, rust or second hand is prohibited)

3) 单卷重量 coil weight > 9 tons





Chocking

序号	品名	规格	说明
1	长条垫木 dunnage	10cm * 10cm * 400cm	每一卷下面垫放四根垫木 4 pcs wooden dunnage
2	支撑木条 chocking wooden bar	10cm * 10cm * L	每个卷左右两侧各用 2 组木架子支撑,卷与卷之间的空挡用 2 组木架支撑。靠近门口的空挡用木架子支撑。Both sides of each coil to be chocked by 2 sets of timberwork; the space between coils should be chocked with 2 sets of timberwork, which should be connected as a group. he space near the door to be chocked by timberwork.T
3.	三角木 wooden wedges	10cm * 10cm * 15cm	每个卷前后各需 4 个三角木塞住。each oil should be chocked with 4 pcs of wooden wedges separately at fore and aft, and nailed on the dunnage
4.	钢丝绳 Steel wire rope	直径 Dia: 12mm	每个卷用四跟钢丝绳绑扎加固,其中两根钢丝绳向上绑扎并固定在集装箱顶部的令环上;另外两根向下绑扎并固定底板上的令环上。Each coil to be lashed by 4 pcs of steel wire rope, in which, 2 pcs should be up cross lashed and connected to the topside rings of container, another 2 pcs should be down cross lashed and connected to the rings on the floor, all steel wire rope should be tightened by turnbuckle
5.	卡扣 Clips (each end need 2 pcs at least)	6 号	
6.	松紧螺丝 Turnbuckle	标准 Style:16 号	全新 (turnbuckle should be new, rust or second hand is prohibited)