

安全备份线夹 Secure backup clamp



部件说明 Component description

作为压缩耐张线夹的安全备份部分,用于导线压缩耐张线夹外侧,由两套系统组成。其中提供机械张力的系统是由一套预绞式耐张线夹、一套补强接续条、一条钢绞线填充条、一套心型环和一套U型挂环组成。另外提供电气导流作用的系统是由一套分流条组成。

As a safe backup part of the compression tension clamp, it is used for the outer side of the wire compression tension clamp and consists of two systems. The system for providing mechanical tension is composed of a set of preformed tensile clamps, a set of reinforcing strips, a strand of steel Strand filler strip, a set of heart type shackles and a set of U-shaped loops. In addition, the system that provides electrical diversion is composed of a set of shunt bars.

具体如下 details as follows:

1.U型挂环 U-shaped loop	1套 one set
2.心型环 heart type shackles	1套 one set
3.预绞式耐张线夹 preformed tension clamp	1套 one set
4.补强接续条 reinforced splice	1套 one set
5.分流条 shunt bars	1套 one set
6.填充条 filler strip	1套 one set

用途 Function

分担压缩耐张线夹的机械和电气性能, 增加整体系统安全系数。

Share the mechanical and electrical properties of the compression tension clamp and increase the overall system safety factor.

适用场合 Applications

用于高压输电线路跨越重要设施(如电气化铁路, 高速公路)处, 分担了压缩耐张线夹的机械和电气性能, 增加整体系统安全系数。一旦压缩耐张线夹失效, 此安全备份线夹可以起到防止导线跌落从而引起更大的事故, 给抢修赢得宝贵时间。

It is used for high-voltage transmission lines across important facilities (such as electrified railways and highways), sharing the mechanical and electrical performance of compression-resistant tension clamps and increasing the overall system safety factor. Once the compression tension clamp fails, this safety backup clamp can prevent the wire from falling and cause a larger accident, which will give valuable time for repair.

性能 Performance

电气: 安全备份线夹导电性能不低于导线本身。

Electrical: The safety backup clamp has no lower conductivity than the wire itself.

机械: 备份线夹对导线握力为不低于40%RTS的工作张力。

Mechanical: The backup clamp has a wire grip force of not less than 40% RTS.

特点 Characteristics

- 1.预绞式产品将应力均匀分配到较长的一段导线上，没有应力集中点，有助于减轻微风振动造成的疲劳损坏。
 - 2.此产品对压缩耐张线夹对导线应力集中现象有所缓解，降低压缩耐张线夹的事故概率。
 - 3.此产品减小了压缩耐张线夹引流板螺栓松动的概率，提高了线路安全运行寿命。
 - 4.遇到突发事故可以短期内保证线路顺利运行，便于在时间窗口抢险。
 - 5.操作简单，牢固耐用。
- 1.The preformed product distributes the stress evenly over a long length of wire without stress concentration points, which helps to reduce the fatigue damage caused by the breeze vibration.
 2. This product relieves the stress concentration of the wire by compressing the tensile clamp and reduces the accident probability of compressing the tensile clamp.
 3. This product reduces the probability of loosening the bolts of the compression tension clamp and improves the safe operation life of the line.
 4. In the event of an emergency, the line can be operated smoothly in a short period of time, which is convenient for emergency rescue in the time window.
 5. Simple operation, strong and durable.

设计目标 Design goals

- 1.精确计算预绞式耐张线夹的各相关参数，以保证握紧导线，达到高强度要求，保证握力不低于40%RTS的工作张力。
 - 2.线夹以一定的长度均匀地缠绕导线外面，将导线所受的应力均匀的分布在一个比其他形式耐张线夹的受力区域大得多的区域上，使导线无应力集中点，保证导线的使用寿命。
 - 3.采用性能优异的原材料，耐腐蚀性好，避免电化学腐蚀，又能够满足机械设计要求。
 - 4.安装简单，可快捷简便地手工操作，无需任何专用工具。
 - 5.安装质量易于保证，不需要专门的训练，肉眼即可进行检验，外观简洁美观。
1. Accurately calculate the relevant parameters of the preformed tension clamp to ensure that the wire is tightened to achieve high strength requirements and ensure that the grip strength is not less than 40% RTS working tension.
 2. The wire clamp is evenly wound around the wire with a certain length, and the stress on the wire is evenly distributed in a region much larger than the force receiving region of the other type of tensile clamp, so that the wire has no stress concentration point, Ensure the service life of the wire.
 3. It adopts raw materials with excellent performance, good corrosion resistance, avoids electrochemical corrosion, and can meet mechanical design requirements.
 4. Easy to install, it can be operated quickly and easily without any special tools.
 5. The installation quality is easy to guarantee, no special training is required, the inspection can be carried out with the naked eye, and the appearance is simple and beautiful.

产品选型表 Product selection table

钢芯铝绞线用备份线夹 Steel core aluminum stranded wire backup clamp (GB/T 1179-1983)				
产品编号 Product number	适用导线型号 Applicable cable type	材料表 material list		数量 QTY
DSDG-185/30	LGJ-185/25 LGJ-185/30	分流条shunt bars	CS-O141	1
		耐张线夹tension clamp	NL-70/G-4.04	1
		填充条filler strip	GJ-70	1
		补强接续条 reinforced connection strip	SLS-0141	1
		心形环Heart type shackles	TC-12	1
		U型挂环U type shackles	UL-7	1
DSDG-240/40	LGJ-240/40 LGJ-240/55	分流条shunt bars	CS-0145	1
		耐张线夹tension clamp	BG-100-4.37	1
		填充条filler strip	GJ-100	1
		补强接续条 reinforced connection strip	SLS-0145	1
		心形环Heart type shackles	TC-12	1
		U型挂环U type shackles	UL-10	1
DSDG-300/40	LGJ-300/25 LGJ-300/40 LGJ-300/50	分流条shunt bars	CS-0147	1
		耐张线夹tension clamp	BG-120-4.78	1
		填充条filler strip	GJ-120	1
		补强接续条 reinforced connection strip	SLS-0147	1
		心形环Heart type shackles	TC-12	1
		U型挂环U type shackles	UL-10	1
DSDG-400/35	LGJ-400/35 LGJ-400/50	分流条shunt bars	CS-0150	1
		耐张线夹tension clamp	DG-4549-4.78	1
		填充条filler strip	GJ-185	1
		补强接续条 reinforced connection strip	SLS-0150	1
		心形环Heart type shackles	TC-12	1
		U型挂环U type shackles	UL-10	1
DSDG-630/45	LGJ-630/45	分流条shunt bars	CS-0155	1
		耐张线夹tension clamp	DG-4552-4.78	1
		填充条filler strip	LGJ-300/40	1
		补强接续条 reinforced connection strip	SLS-0155	1
		心形环Heart type shackles	TC-16	1
		U型挂环U type shackles	UL-16	1

钢芯铝绞线用备份线夹 (GB/T 1179-1983)适用于220KV以上 Steel core aluminum stranded wire backup clamp (GB/T 1179-1983)Suitable for 220KV or more				
产品编号 Product number	适用导线型号 Applicable cable type	材料表 material list		数量 QTY
DHSDG-400/35	LGJ-400/35 LGJ-400/50	分流条shunt bars	HCS-0150	1
		耐张线夹tension clamp	DG-4549-4.78	1
		填充条filler strip	GJ-185	1
		补强接续条 reinforced connection strip	HLSLS-0150	1
		心形环Heart type shackles	TC-12	1
		U型挂环U type shackles	UL-10	1
DHSDG-630/45	LGJ-630/45	分流条shunt bars	HCS-0155	1
		耐张线夹tension clamp	DG-4552-4.78	1
		填充条filler strip	LGJ-300/40	1
		补强接续条 reinforced connection strip	HLSLS-0155	1
		心形环Heart type shackles	TC-16	1
		U型挂环U type shackles	UL-166	1

安装注意事项 Installation Precautions

1. 先在线路上安装分流条：
 2. 在地面安装耐张线夹和不强接续条一侧支腿：
 3. 在塔上挂点固定耐张线夹组件：
 4. 安装不强接续条另一侧支腿：
 5. 如果塔上没有DB联板挂点，不可安装在三角挂板上，可以考虑安装在耐张线夹钢锚圆环中：
 6. 安全备份线夹不能适用于间隙型导线。
1. Install the shunt bar on the line first:
 2. Install the tension clamp on the ground and the one leg on the side without the strong connection:
 3. Fix the tension clamp assembly on the tower:
 4. Install the other side of the leg without the strong connection:
 5. If there is no DB joint hanging point on the tower, it can not be installed on the triangle hanging board. It can be considered to be installed in the steel cable anchor ring of the tension clamp:
 6. The safety backup clamp cannot be used for gap type conductors.