材 料 汇 总 表（座板式）

材料	材质	规 格	数 号 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	呼高高(m) 21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0	45.0
角钢	Q345	L125X10						51.3						51.3		51.3		51.3	51.3	496.3	496.2			51.3		51.3	51.3	102.6	547.6	547.5
		L125X8							623.0							651.6	435.9		370.9								370.9	651.6	435.9	623.0	
		L110X10											44.7	44.7										44.7	44.7				44.7	44.7	
		L110X8					362.4	434.9		36.3	550.5	444.0	514.2	676.9	516.5			269.3		36.3	36.3	36.3	550.5	713.3	876.6	1039.3	878.9	797.3	833.6	833.6	
		L100X8	21.1	42.3		32.9			27.0	318.4							27.0					414.7	96.3	96.3	96.3	96.3	96.3	96.3	123.3	123.3
		L100X7				252.3																252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3
		L90X7		185.2	251.6									21.2								436.8	436.8	436.8	436.8	436.8	458.0	436.8	436.8	436.8
		L80X7		136.8	71.2																	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0
		L75X6		130.6																		130.6	130.6	130.6	130.6	130.6	130.6	130.6	130.6	130.6
		L75X5		82.6																		82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
		L70X6	18.4	19.8																		38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
		L70X5	16.4	131.3																		147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7
		L63X5	156.4	105.8																		262.2	262.2	262.2	262.2	262.2	262.2	262.2	262.2	262.2
		小 计	212.3	834.4	322.8	285.2	362.4	486.2	650.0	354.7	550.5	444.0	558.9	772.9	537.7	702.9	462.9	320.6	422.2	532.6	532.5	2009.4	2205.2	2419.3	2576.0	2790.0	2977.0	3206.2	3498.8	3685.8
钢板	Q345	L90X7							697.2																					697.2
		L75X6					115.6															115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6
		L75X5							372.0							350.2	372.0										350.2	372.0	372.0	
		L70X5						310.4	119.3					289.6	466.0		174.2								289.6	466.0	310.4	484.6	429.7	
		L63X5			64.4			258.8		188.0	371.2	109.6	480.0	377.2	234.8	534.5		197.8	243.6	556.3	419.6	252.4	435.6	371.8	544.4	441.6	542.8	857.7	879.5	742.8
	Q235	L56X5	22.0	30.6			89.6														99.8	52.6	52.6	52.6	142.2	142.2	142.2	142.2	142.2	242.0
		L56X4		208.2	220.8		285.8		196.0	138.1	216.0	300.4	141.7	250.8		155.2	128.6	70.1	287.9	164.8	271.1	567.1	645.0	799.5	856.5	965.6	982.7	870.0	1008.2	1181.9
		L50X4	55.8	100.9	18.4	232.4	17.3	151.2	142.5	37.6	52.4		237.5	207.5	101.4	362.2	95.7	230.4	167.7	316.6	259.5	445.1	459.9	637.9	662.3	632.3	693.9	938.2	988.3	976.0
		L45X4	98.6					144.3	74.3	140.9	121.9		42.1	294.5	143.2	126.8	74.3	39.2	150.0	53.5	36.8	239.5	220.5	137.8	140.7	393.1	391.8	369.7	370.7	354.0
		L40X4	74.0	12.4	55.5			25.8		52.9	73.6	15.6	71.4	104.7	54.0	60.0	23.2	61.1	55.9	30.4	32.6	194.8	215.5	218.6	213.3	246.8	251.8	227.7	221.3	200.3
		L40X3	41.7	150.6	91.0	116.7	102.3			68.7	116.8	153.0	167.1	77.7	45.6	75.4		52.4	80.7	78.7	118.0	468.7	516.8	605.4	669.4	580.0	628.6	577.7	581.0	620.3
		小 计	292.1	502.7	450.1	349.1	610.6	890.5	1601.3	626.2	951.9	578.6	1139.8	1602.0	1045.0	1664.3	888.0	651.0	965.8	1200.3	1237.4	2220.2	2545.9	2823.6	3344.4	3806.6	4215.4	4759.4	5163.4	5933.8
钢板	Q345	-6	60.5	70.9						12.3	12.3		12.3	12.3	18.6	11.5		11.5	11.5			143.7	143.7	142.9	143.7	143.7	161.5	142.9	131.4	131.4
		-8	85.8	320.5	96.2					27.6	56.3	56.4		56.4	56.4		57.9	27.6	56.4	57.9	52.2	52.1	558.8	558.9	558.9	558.9	558.9	560.4	560.4	582.3	582.2
		-10	13.3	16.8																72.5	72.5	30.1	30.1	30.1	30.1	30.1	30.1	30.1	102.6	102.6
		-25								80.4	80.4		80.4	80.4		85.5		80.4	85.5	85.5	85.5	80.4	80.4	80.4	80.4	80.4	85.5	85.5	85.5	85.5
		小 计	159.6	408.2	96.2				27.6	149.0	149.1		149.1	149.1	18.6	154.9	27.6	148.3	154.9	210.2	210.1	813.0	813.1	812.3	813.1	813.1	837.5	818.9	901.8	901.7
	Q235	-2																		2.2	2.2									2.2	2.2
		-5	92.8	63.6			43.2			61.8	46.6		41.3	54.9		34.1		46.8	56.3	54.6	39.0	218.2	203.0	203.2	240.9	254.5	255.9	233.7	254.2	238.6
		-6	20.5	25.4	38.7			16.7		16.3	39.0	14.3	44.3	41.3	30.3	64.6	16.9	16.1	27.1	33.7	9.5	100.9	123.6	115.0	128.9	125.9	142.0	165.9	151.9	110.8
		-8	1.9	1.0			23.2								0.9	0.9					23.8	2.9	2.9	2.9	26.1	26.1	27.0	26.1	26.1	49.9
		-10	1.8	3.2	0.8		1.1	1.1			0.8	1.6	0.8	0.8	1.1							5.8	6.6	7.4	7.7	7.7	8.0	8.0	8.0	8.0
		-12		1.0	1.0																	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		小 计	117.0	94.2	40.5		67.5	17.8		78.1	86.4	15.9	86.4	97.0	32.3	99.6	16.9	62.9	83.4	90.5	74.5	329.8	338.1	330.5	405.6	416.2	434.9	436.6	444.4	411.5
螺栓	6.8级	M16X40	76.6	53.9	14.6	6.9	20.8	8.1	9.2	38.1	35.2	10.4	47.9	50.8	9.2	42.7	6.9	36.3	48.5	34.6	39.8	190.1	187.2	198.7	220.7	223.6	230.5	223.6	222.4	229.9
		M16X50	12.8	20.5	12.8	6.4	9.6	7.7	5.1	9.6	10.3	5.1	4.5	12.2	6.4	3.8	3.8	5.1	7.0	11.5	7.0	62.1	62.8	62.7	66.6	74.3	75.5	73.6	85.1	81.9
		M16X50(镀锌)	0.4																			0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		M16X60(镀锌)	2.0	0.8																		2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
		小 计	91.8	75.2	27.4	13.3	30.4	15.8	14.3	47.7	45.5	15.5	52.4	63.0	15.6	46.5	10.7	41.4	55.5	46.1	46.8	255.4	253.2	264.6	290.5	301.1	309.2	300.4	310.7	315.0
		M20X45	39.7	89.6	36.7	17.3	15.1	5.4	4.3	19.4	36.7	15.1	19.4	21.6	10.8	36.7	6.5	10.8	15.1	28.1	19.4	202.7	220.0	209.2	217.8	220.0	224.3	240.5	238.4	227.5
		M20X55	2.3	18.9			18.9	31.9	26.0	26.0	26.0	14.2	39.0	65.0	28.3	39.0	24.8	35.4	35.4	13.0	18.9	47.2	47.2	70.8	79.1	105.1	103.8	111.0	109.8	116.9
		M20X65																		25.6	25.6								25.6	25.6
	6.8级	M20X60(镀锌)	6.5	4.3																		10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
		M20X70(镀锌)	7.7	6.2																		13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
		小 计	56.2	119.0	36.7	17.3	34.0	37.3	30.3	45.4	62.7	29.3	58.4	86.6	39.1	75.7	31.3	46.2	50.5	66.7	63.9	274.6	291.9	304.7	321.6	349.8	352.8	376.2	398.5	394.7
	镀锌合计		148.0	194.2	64.1	30.6	64.4	53.1	44.6	93.1	108.2	44.8	110.8	149.6	54.7	122.2	42.0	87.6	106.0	112.8	110.7	530.0	545.1	569.3	612.1	650.9	662.0	676.6	709.2	709.7
脚钉	6.8级	M16X180		9.8	4.6	3.9	3.6	5.9	6.8	3.9	6.2	5.5	5.9	7.8	6.5	6.8	4.6	2.6	3.6	4.2	3.6	22.2	24.5	26.4	27.8	29.7	32.0	34.6	36.6	38.2
		M20X200		6.2	0.6	0.6	1.9	0.6	1.2	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.9	0.6	0.6	0.6	1.9	8.0	8.0	8.6	10.5	10.5	11.1	11.1	12.4	13.0
		小 计		16.0	5.2	4.5	5.5	6.5	8.0	4.5	6.8	6.1	7.1	9.0	7.7	8.0	6.5	3.2	4.2	4.8	5.5	30.2	32.5	35.0	38.3	40.2	43.1	45.7	49.0	51.2
垫圈	Q235	-3(#17.5)	0.7	0.7	0.2	0.2				0.2	0.2		0.3	0.3		0.2		0.3	0.2	0.3		2.0	2.0	1.8	2.1	2.1	2.1	2.0	2.0	2.1
		-3(#22)		0.5												0.1			0.1			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5
		-4(#22)	0.1					0.3	0.3							0.2	0.2					0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.6	0.7
		小 计	0.8	1.2	0.2	0.2		0.3	0.3	0.2	0.2		0.3	0.3		0.5	0.2		0.3	0.3	0.3	2.6	2.6	2.4	2.7	2.7	2.7	3.2	3.2	3.3
合 计 (kg)			929.8	2050.9	979.1	669.6	1110.4	1454.4	2331.8	1305.8	1853.1	1089.4	2052.4	2779.9	1696.0	2752.4	1424.1	1273.6	1736.8	2151.5	2171.0	5935.2	6482.5	6992.4	7792.2	8519.7	9172.6	9946.6	10769.8	11697.0

材 料 汇 总 表（插入式）

材料	材质	规 格	数 号 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	呼高高(m) 21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0	45.0
角钢	Q345	L125X10						51.3																						
		L125X8							623.0																						
		L110X10								44.7			44.7	44.7																
		L110X8					362.4	434.9		36.3	504.0	444.0	467.7	630.3	516.5	36.3		222.7	36.3	108.9	72.6	36.3	504.0	666.7	830.1	992.7	915.2	833.6	906.2	869.9
		L100X8	21.1	42.3		32.9			27.0	276.1												372.4	96.3	96.3	96.3	96.3	96.3	123.3	123.3	
		L100X7				252.3																252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3
		L90X7		185.2	251.6									21.2								436.8	436.8	436.8	436.8	436.8	458.0	436.8	436.8	436.8
		L80X7		136.8	71.2																	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0
		L75X6		130.6																		130.6	130.6	130.6	130.6	130.6	130.6	130.6	130.6	130.6
		L75X5		82.6																		82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
		L70X6	18.4	19.8																		38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
		L70X5	16.4	131.3																		147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7
		L63X5	156.4	105.8																		262.2	262.2	262.2	262.2	262.2	262.2	262.2	262.2	262.2
		小 计	212.3	834.4	322.8	285.2	362.4	486.2	650.0	357.1	555.3	444.0	563.7	777.6	537.7	685.6	462.9	325.3	405.1	539.3	503.0	2011.8	2210.0	2424.0	2580.8	2794.7	2959.9	3188.9	3505.5	3656.3
钢板	Q345	L90X7							697.2																					697.2
		L75X6					115.6															115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6
		L75X5							372.0							350.2	372.0										350.2	372.0	372.0	
		L70X5						310.4	119.3					289.6	466.0		174.2								289.6	466.0	310.4	484.6	429.7	
		L63X5			64.4			258.8		188.0	371.2	109.6	480.0	377.2	234.8	534.5		197.8	243.6	556.3	419.6	252.4	435.6	371.8	544.4	441.6	542.8	857.7	879.5	742.8
	Q235	L56X5	22.0	30.6			89.6														99.8	52.6	52.6	52.6	142.2	142.2	142.2	142.2	142.2	242.0
		L56X4		208.2	220.8		285.8		196.0	138.1	216.0	300.4	141.7	250.8		155.2	128.6	70.1	287.9	164.8	271.1	567.1	645.0	799.5	856.5	965.6	982.7	870.0	1008.2	1181.9
		L50X4	55.8	100.9	18.4	232.4	17.3	151.2	142.5	37.6	52.4		237.5	207.5	101.4	362.2	95.7	230.4	167.7	316.6	259.5	445.1	459.9	637.9	662.3	632.3	693.9	938.2	988.3	976.0
		L45X4	98.6					144.3	74.3	140.9	121.9		42.1	294.5	143.2	126.8	74.3	39.2	150.0	53.5	36.8	239.5	220.5	137.8	140.7	393.1	391.8	369.7	370.7	354.0
		L40X4	74.0	12.4	55.5			25.8		52.9	73.6	15.6	71.4	104.7	54.0	60.0	23.2	61.1	55.9	30.4	32.6	194.8	215.5	218.6	213.3	246.8	251.8	227.7	221.3	200.3
		L40X3	41.7	150.6	91.0	116.7	102.3			68.7	116.8	153.0	167.1	77.7	45.6	75.3		52.4	80.7	78.7	118.0	468.7	516.8	605.4	669.4	580.0	628.6	577.6	581.0	620.3
		小 计	292.1	502.7	450.1	349.1	610.6	890.5	1601.3	626.2	951.9	578.6	1139.8	1602.0	1045.0	1664.3	888.0	651.0	965.8	1200.3	1237.4	2220.2	2545.9	2823.6	3344.4	3806.6	4215.4	4759.4	5163.4	5933.8
钢板	Q345	-6	60.5	70.9											18.6							131.4	131.4	131.4	131.4	131.4	150.0	131.4	131.4	131.4
		-8	85.8	320.5	96.2					27.6								37.0	27.6			502.5	502.5	502.5	502.5	502.5	539.5	539.5	641.2	604.2
		-10	13.3	16.8																		30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
		小 计	159.6	408.2	96.2				27.6						18.6	37.0	27.6		37.0	111.1	74.1	664.0	664.0	664.0	664.0	664.0	719.6	701.0	802.7	765.7
	Q235	-2																		2.2	2.2								2.2	2.2
		-5	92.8	63.6			43.2			61.8	46.6		41.3	54.9		34.1		46.8	56.3	54.6	39.0	218.2	203.0	203.2	240.9	254.5	255.9	233.7	254.2	238.6
		-6	20.5	25.4	38.7			16.7		16.3	39.0	14.3	44.3	41.3	30.3	64.6	16.9	16.1	27.1	33.7	9.5	100.9	123.6	115.0	128.9	125.9	142.0	165.9	151.9	110.8
		-8	1.9	1.0			23.2								0.9						23.8	2.9	2.9	2.9	26.1	26.1	27.0	26.1	26.1	49.9
		-10	1.8	3.2	0.8		1.1	1.1			0.8	1.6	0.8	0.8	1.1							5.8	6.6	7.4	7.7	7.7	8.0	8.0	8.0	8.0
		-12		1.0	1.0																	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		小 计	117.0	94.2	40.5		67.5	17.8		104.9	113.2	15.9	113.0	119.8	32.3	127.9	16.9	85.7	112.6	119.7	97.3	356.6	364.9	353.3	432.2	439.0	464.1	464.9	473.6	434.3
螺栓	6.8级	M16X40	76.6	53.9	14.6	6.9	20.8	8.1	9.2	38.1	35.2	10.4	47.9	50.8	9.2	42.7	6.9	36.3	48.5	34.6	39.8	190.1	187.2	198.7	220.7	223.6	230.5	223.6	222.4	229.9
		M16X50	12.8	20.5	12.8	6.4	9.6	7.7	5.1	9.6	10.3	5.1	4.5	12.2	6.4	3.8	3.8	5.1	7.0	11.5	7.0	62.1	62.8	62.7	66.6	74.3	75.5	73.6	85.1	81.9
		M16X50(镀锌)	0.4																			0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		M16X60(镀锌)	2.0	0.8																		2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
		小 计	91.8	75.2	27.4	13.3	30.4	15.8	14.3	47.7	45.5	15.5	52.4	63.0	15.6	46.5	10.7	41.4	55.5	46.1	46.8	255.4	253.2	264.6	290.5	301.1	309.2	300.4	310.7	315.0
		M20X45	39.7	89.6	36.7	17.3	15.1	5.4	4.3	25.9	43.2	15.1	25.9	23.8	10.8	43.2	6.5	17.3	21.6	41.1	25.9	209.2	226.5	215.7	224.3	222.2	230.8	247.0	251.4	234.0
		M20X55	2.3	18.9			18.9	31.9	26.0	37.8	37.8	14.2	50.8	76.8	28.3	27.2	24.8	47.2	42.5	1.2	7.1	59.0	59.0	82.6	90.9	116.9	110.9	99.2	98.0	105.1
		M20X65																		51.2	51.3								51.2	51.3
	6.8级	M20X60(镀锌)	6.5	4.3																		10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
		M20X70(镀锌)	7.7	6.2																		13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
		小 计	56.2	119.0	36.7	17.3	34.0	37.3	30.3	63.7	81.0	29.3	76.7	100.6	39.1	70.4	31.3	64.5	64.1	93.5	84.3	292.9	310.2	323.0	339.9	363.8	366.4	370.9	425.3	415.1
	镀锌合计		148.0	194.2	64.1	30.6	64.4	53.1	44.6	111.4	126.5	44.8	129.1	163.6	54.7	116.9	42.0	105.9	119.6	139.6	131.1	548.3	563.4	587.6	630.4	664.9	675.6	671.3	736.0	730.1
脚钉	6.8级	M16X180		9.8	4.6	3.9	3.6	5.9	6.8	3.9	6.2	5.5	5.9	7.8	6.5	6.8	4.6	2.6	3.6	4.2	3.6	22.2	24.5	26.4	27.8	29.7	32.0	34.6	36.6	38.2
		M20X200		6.2	0.6	0.6	1.9	0.6	1.2	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.9	0.6	0.6	0.6	1.9	8.0	8.0	8.6	10.5	10.5	11.1	11.1	12.4	13.0
		小 计		16.0	5.2	4.5	5.5	6.5	8.0	4.5	6.8	6.1	7.1	9.0	7.7	8.0	6.5	3.2	4.2	4.8	5.5	30.2	32.5	35.0	38.3	40.2	43.1	45.7	49.0	51.2
垫圈	Q235	-3(#17.5)	0.7	0.7	0.2	0.2				0.2	0.2		0.3	0.3		0.2		0.3	0.2	0.3		2.0	2.0	1.8	2.1	2.1	2.1	2.0	2.0	2.1
		-3(#22)		0.5																		0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5
		-4(#22)	0.1													0.3	0.3					0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.6	0.7
		小 计	0.8	1.2	0.2	0.2				0.3	0.3	0.2	0.2			0.5	0.2		0.3	0.3	0.3	2.6	2.6	2.4	2.7	2.7	2.7	3.2	3.2	3.3
合 计 (kg)			929.8	2050.9	979.1	669.6	1110.4	1454.4	2331.8	1204.3	1753.9	1089.4	1953.0	2672.3	1696.0	2640.1	1424.1	1171.1	1644.6	2115.1	2048.7	5833.7	6383.3	6889.9	7692.8	8412.1	9080.4	9834.3	10733.4	11574.7

国家电网公司 STATE GRID CORPORATION OF CHINA			
110~500kV输电线路通用设计		施工图	版次
批 准			
审 核			
校 核		2B3-ZM2直线塔 材料汇总表	
设 计			
CAD制图			
	比 例	图 号	2B3-ZM2-01(2/2)