



**双威管桩(珠海)有限公司**  
SUNWAY SPUN PILE(ZHUHAI) CO.,LTD

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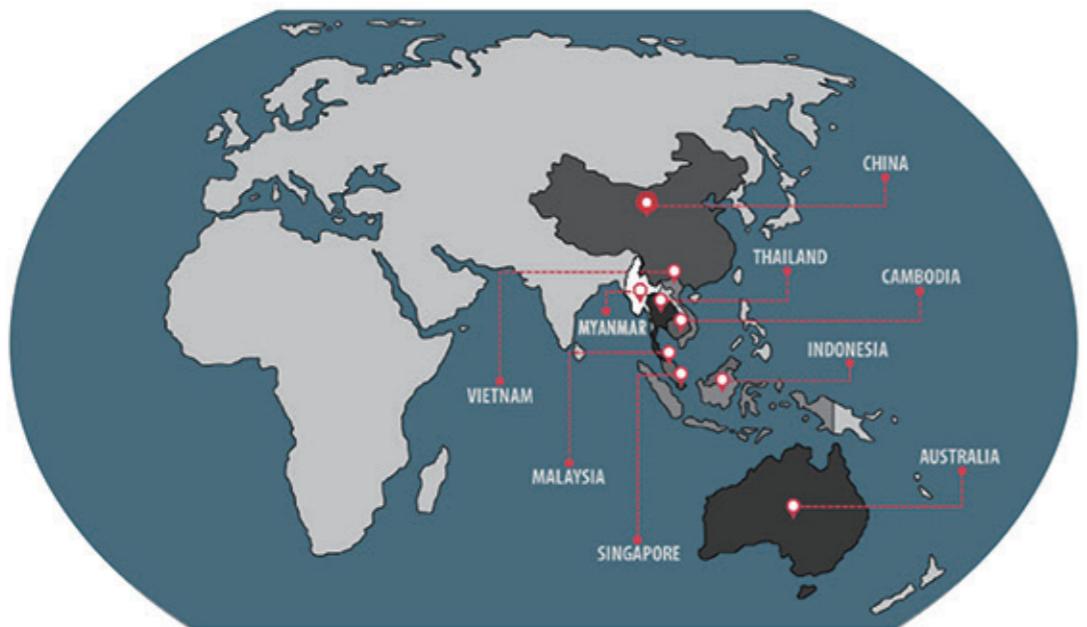


**SUNWAY®**  
双威

核心价值观:诚信、谦逊和卓越

**双威管桩(珠海)有限公司**  
**SUNWAY SPUN PILE(ZHUHAI)CO.,LTD**  
专业生产700mm~1200mm直径PHC管桩(含900mm)





双威集团国际分支 (Global Presence)

## 集团简介

**双威集团**于1974年成立,初期为一家采矿公司,随后拓展成为马来西亚最强大的房地产建筑集团之一,旗下的12个业务部门覆盖全球50个地点,员工人数高达16,000名。我们致力于推进联合国可持续发展目标(SDG),并继续根据可持续发展目标议程调整我们的商业战略,以满足我们社会的需求。

双威集团旗下有三家上市公司(双威有限公司、双威建设集团和信托基金)12个业务部门为房地产、建筑、零售、酒店、休闲、医疗、教育、贸易和制造、采石、建材、商业和房地产投资信托。

## 核心价值

我们的宗旨、愿景和使命贯穿整个集团,自1974年成立以来,双威一直秉承三个核心价值观:**诚信、谦逊和卓越**。

## Group Profile

Established in 1974, Sunway Group is one of Malaysia's largest conglomerates with 12 business divisions that operate across 50 locations worldwide. Our core interests are focused on real estate, construction, education, healthcare, retail and hospitality. Powered by our 16,000 strong team, we are committed to advancing the United Nations Sustainable Development Goals (SDG) and continue to align our business strategies to meet the needs of our communities in line with the SDG agenda.

Our three public-listed companies — Sunway Berhad, Sunway Construction Group, and Sunway REIT, with a combined market capitalisation of RM 17 billion .

## 公司简介

双威管桩(珠海)有限公司是由双威集团在2006年创立,投资1.8亿元建成可生产直径700~1200毫米的超大型预应力混凝土管桩,管桩单节长度可达56米,年生产能力50万米。厂址位于广东省珠海市斗门区白蕉镇新港工业区,并建有两个3000吨级的管桩出运专业码头。

## Company Profile

SUNWAY SPUN PILE (ZHUHAI) CO.,LTD. was established by SUNWAY GROUP with an investment of 180 million in 2006 . Factory can produce ultra-large Prestressed High-strength Concrete spun pile which the diameter is from 700mm to 1200mm, and the single length of spun pile can reach 56m. The factory annual production capacity is 500,000 m .The factory is located in Xingang industrial zone, Baijiao town, Doumen district, Zhuhai city, Guangdong province.

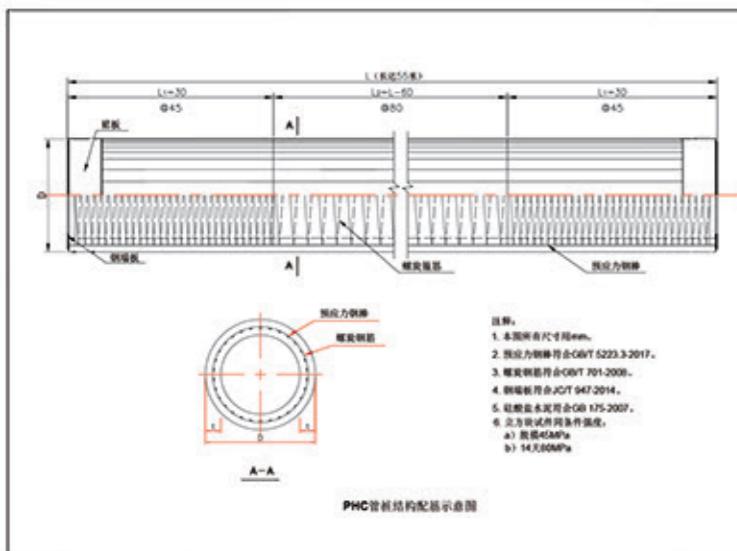


## PHC管桩技术参数表

(参考依据: GB13476-2009、10G409设计图集和JTS167-8-2013)

外径 Outer Diameter (mm)	型号 Type	壁厚 Wall Thickness (mm)	单位重量 Nominal Weight (t/m)	PC钢棒PC Bar			横截面积 Cross Sectional Area(m <sup>2</sup> )	混凝土有效预 应力Effective Prestress (Mpa)	抗裂弯矩 Cracking Moment (KN*m)	极限弯矩 Ultimate Bending Moment (KN*m)	桩身轴心受压 承载力设计值 Loading Capacity(KN)	节长Single Length (m)
				Φ9.0	Φ10.7	Φ12.6						
700	AB	110	0.558	24			0.2039	6.33	319	534	5124	7-56
	B				24			8.52	373	671		
	C					24		11.16	441	883		
	AB	130	0.628	26			0.2327	6.04	332	556	5850	7-56
	B				26			8.14	388	698		
	C					26		10.7	459	918		
800	AB	110	0.656		15		0.2384	6.58	471	771	5992	7-56
	B				30			9.01	540	971		
	C					30		11.76	638	1275		
	AB	130	0.741		16		0.2736	6.16	484	811	6876	7-56
	B				32			8.47	560	1010		
	C					32		11.1	663	1326		
900	AB	130	0.847		28		0.3143	6.6	715	1120	7898	7-55
1000	AB	130	0.968		32		0.3553	6.75	883	1457	8929	7-55
	B					32		8.97	1030	1854		
	C					40		10.65	1177	2354		
1200	AB	150	1.338		30		0.4948	6.36	1412	2330	12434	7-55
	B					45		9.04	1668	3002		
	C					52		10.73	1962	3924		

备注:以上数据可根据需要调整,设计或使用前请咨询。

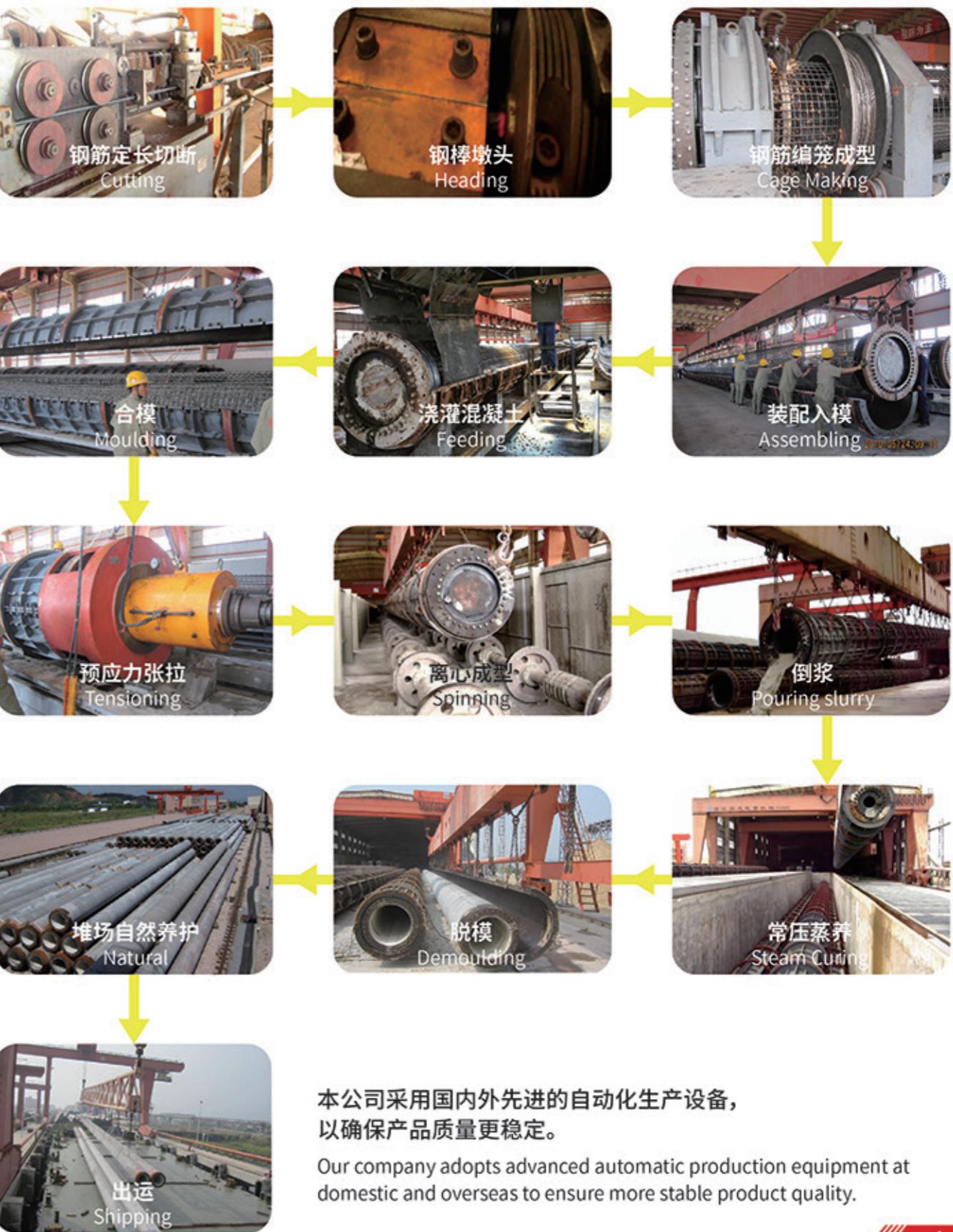


**桩尖:**根据工程地质条件及设计需要选择适合桩尖,常规使用开口型钢桩尖和十字型钢桩尖,开口型钢桩尖长度宜大于桩径。

**The pile Shoe** According to the engineering geological conditions and the design needs to choose suitable pile shoe. Open steel pile shoe and cross steel pile shoe will be choosed in conventional projects, and the length of open steel pile shoe should be larger than the pile diameter.



## 生产工艺流程 Production Process



本公司采用国内外先进的自动化生产设备,  
以确保产品质量更稳定。

Our company adopts advanced automatic production equipment at  
domestic and overseas to ensure more stable product quality.

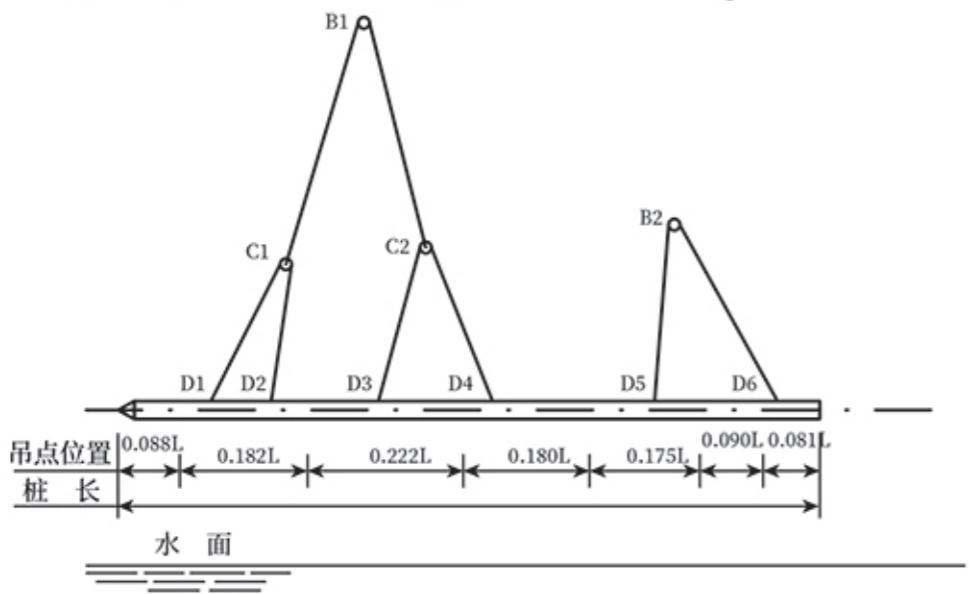
## 施工注意事项 Precautions for construction

### 1. 管桩吊点分布

长度少于60米PHC管桩宜采用4点吊(吊点分布为:0.1L、0.23L、0.34L、0.23L、0.1L);长度大于60米PHC管桩宜采用6点吊(吊分布为:0.088L、0.182L、0.222L、0.180L、0.157L、0.090L、0.081L),如图示:

#### 1. Distribution of spun pile lifting points

If the length of spun pile is less than 60m, it should be hoisted at 4 points (the distribution of lifting points is: 0.1l, 0.23l, 0.34l, 0.23l, and 0.1l). If the length of spun pile is greater than 60m, it should be lifted by 6-point cranes (the hoisting distribution is 0.088l, 0.182l, 0.222l, 0.180l, 0.157l, 0.090l and 0.081l), as shown in the figure:



### 2. 桩锤选择 The selection of pile hammer

常用锤型参考 Common Hammer Reference						
桩锤参数 Hammer Parameters	柴油锤 Diesel Hammer			液压锤 Hydraulic Hammer		
	D80	D100	D128	HHK16	HHK20	HHK25
锤芯质量(t) Hammer Core Weight	8.0	10.0	12.8	16.0	20.0	25.0
最大行程(m) Maximum Stroke	3.2	3.2	3.2	1.5	1.5	1.5
最大打击能量(kj) Maximum Strike Energy	272	340	435	235	294	375
对应管桩直径(mm) Corresponding Spun Pile Diameter	700~800	800~1000	1000~1200	800~1000	1000~1200	1200

注:本表供施工参考选择合适锤型,宜重锤低击,根据实际地质条件及时调整打击能量。

Note: this table is for the construction reference to choose the appropriate hammer type, the construction should use heavy hammer to low strike, according to the actual geological conditions to adjust the strike energy in time.

### 3. 桩垫

锤击施工时需采用合格桩垫保护桩顶,桩垫应具有一定弹性和韧性,桩垫厚薄均匀,尺寸宜与桩顶截面相适应,材料可采用麻绳盘桩垫、厚实纸质桩或多层木夹板桩垫(图示)。

#### 3. Precautions for construction

Qualified pile cushion should be used to protect the pile top during hammer construction. The pile cushion should have certain elasticity and toughness. The thickness of the pile cushion should be even, and the size should be compatible with the section of the pile top, the material can be hemp rope pile cushion, thick paper pile cushion or multi-layer wood plywood pile cushion (as shown in the figure)



### 4. 其它注意事项

- a. 锤击沉桩时必需保持桩锤、替打和桩身的中心在同一轴线上;
- b. 桩垫使用建议一桩一垫,若产生燃烧应停锤及时更换;
- c. PHC管桩锤击次数不宜超过2500击,且最后10米锤击次数不宜大于1500击,最后一阵10击贯入度为5~10mm可停锤,平均贯入度不得低于3mm。

### 4. The other precautions

- a. When hammer piling the pile, it is necessary to keep the pile hammer, displacement and the center of the pile body on the same axis;
- b. Pile Cushions are recommended to be used one by one. If burning occurs, the hammer should be stopped and replaced in time;
- c. The number of hammer strikes of PHC spun pile shall not exceed 2500, and the last 10 meters shall not exceed 1500. The penetration of the last 10 hammer strikes shall be 5~10mm, and the average penetration shall not be less than 3mm.

## 资质&认证 Qualification & Certification



新加坡SCI证书



新加坡RMC认证



马来西亚SIRIM认证

## 品质检验 Quality Test



芯样和试块强度检测  
Core and Cube Strength Testing



标准养护  
Standard Curing



钢筋抗拉试验  
Rebar Tensile Test

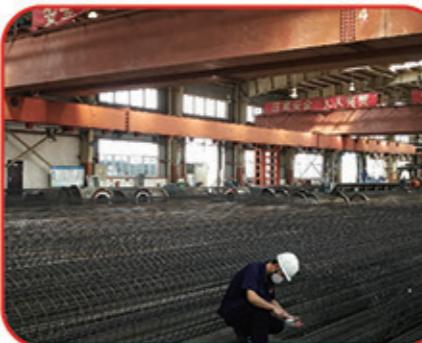


管桩抗弯试验  
Spun Pile Bending Test

## 双威管桩一览 Company introduction



原材料堆放区  
Raw material Stacking Area



整洁有序生产车间  
Producing Department



加强开口型钢桩尖  
Open Type Pile Shoe



试验室一角  
Test Room



超长管桩校准拼接平台  
Spun Pile Stitching Platform



混凝土保护层加厚, 管桩防腐性提高  
The thickened Concrete Protective Cover



管桩内壁凿毛  
Spun Pile Inner Wall Roughen



双威管桩厂区  
Factory Layout



双威管桩 出运码头  
Factory Shipment Port



70米超长管桩集港  
70m Spun Pile Congregation



浅滩区域施工  
Construction in Shoal Area



淤泥沼泽地吊锤法施工  
Drop-Hammer Construction Method in Mud Swamp

