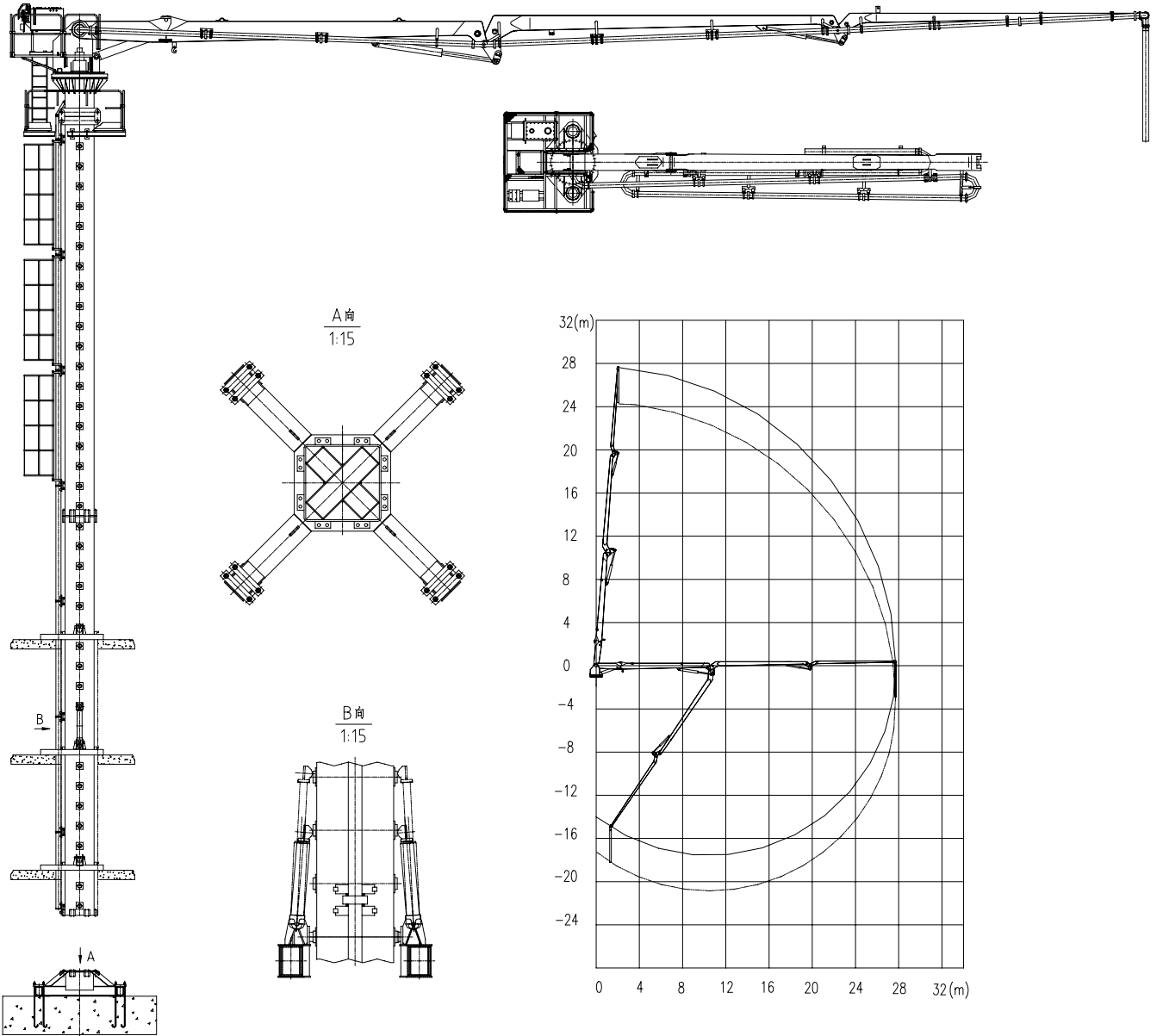


Zoomlion Concrete Placing Boom (without counterweight)

HG28G

HG28E (proportional control)



The history of HG28G & HG28E

Zoomlion used to manufacture and sell HG28D separate placing boom in China market, with counterweight.

In 2003, Zoomlion sold one HG28D to Australia.

At the request of our Australian customers, Zoomlion designed HG28G placing boom without counterweight.

In the second half of 2004, 2 HG28G placing booms were sent to Australia.

In February, 2005, Zoomlion engineer went to Australia worksite to make the final modification on HG28G. One of the modifications is the slewing brake system is close when machine does not work.

Up till now Zoomlion HG28G are working in UAE, Qatar, Indonesia, South Korea, Australia and so on.

On basis HG28G, Zoomlion design a HG28E with higher efficiency. The special feature of HG28E is those 3-section boom could operate simultaneously.



Unpainted HG28G in factory



HG28G assembly in Australia

Applications

Perfect for Walls and Columns

Pumps concrete faster and more uniformly

Places concrete accurately and eliminates waste

Allows convenient placement in normally inaccessible areas

Features

3-section boom, without counterweight on boom

2 pcs of 10-meter column.

Only Zoomlion towers in column can free stand up to 20m height without counterweight which horizontal reach 27.7 meter, reach depth 17 meter

Inner climbing in elevator hole by shaft frame OR on floor by floor frame is available

Adopt international-brand key components.

Easy control system: Radio-Cable-Manual



Emergency stop

Multi-protection devices such as boom articulation limiter

Can be self-jacked or placed on cruciform base template with anchor bolt

Smooth slewing and unfold of the placing boom powered by slewing reducer from Italy and electric-hydro proportional distributor from Germany (ONLY in HG28E)

3-section booms and slewing could move simultaneously with high efficiency, speed adjustable (ONLY in HG28E)

Boom oil alarm (ONLY in HG28E)

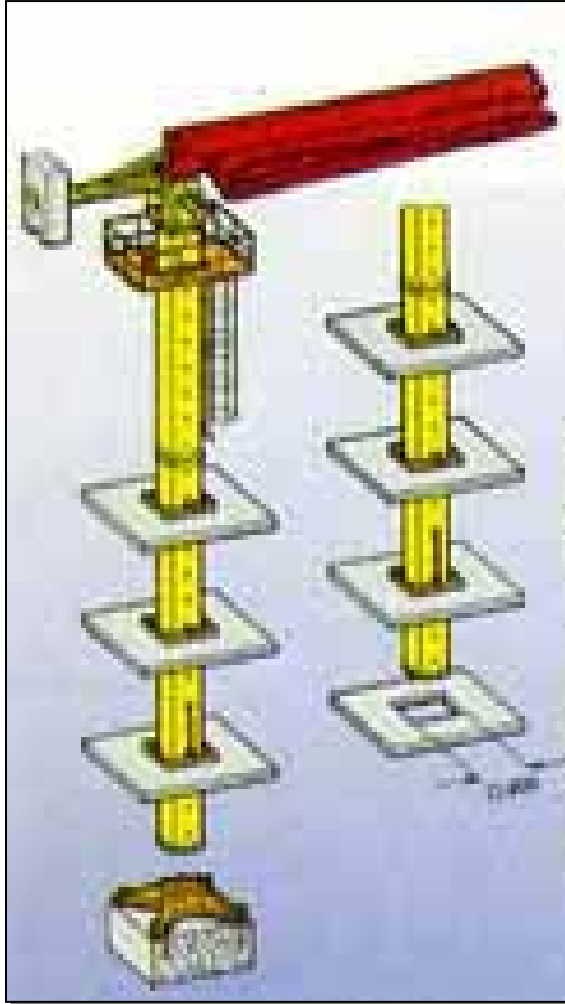
HG28E 主要配置
Key components of HG28E

序号	名 称	公 司	国 家
1	油泵 Hydraulic Pump	REXROTH	德国 Germany
2	电液比例阀 Electric-hydro Proportional Distributor	HAWE	德国 Germany
3	平衡阀 Balance Valve	Oil-control	意大利 Italy
4	有线遥控器 Cable Remote Control	HBC	德国 Germany
5	无线遥控器 Radio Remote Control	HBC	德国 Germany
6	回转减速机 Slewing Reducer	BREVINI	意大利 Italy
7	回转支承 Slewing Bearing	Rothe Erde	中德合资 China-Germany joint venture
8	回转缓冲制动阀 slewing safety valve	Oil-control	意大利 Italy

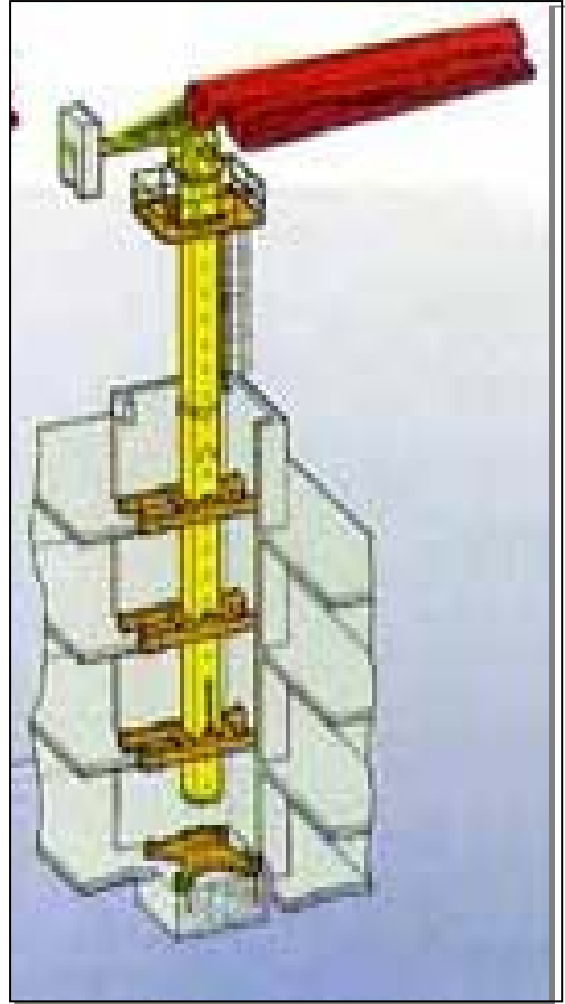
HG28G 主要配置
Key components of HG28G

序号	名 称	公 司	国 家
1	油泵 Hydraulic Pump	中国 China	中国 China
2	平衡阀 Balance Valve	Oil-control	意大利 Italy
3	有线遥控器 Cable Remote Control	HBC	德国 Germany
4	无线遥控器 Radio Remote Control	HBC	德国 Germany
6	回转减速机 Slewing Reducer	中国 China	中国 China
7	回转支承 Slewing Bearing	中国 China	中国 China
8	叠加式溢流阀 Pressure relief valve	Rexroth	德国 Germany
9	叠加式双单向节流阀 Twin throttle check valve	Rexroth	德国 Germany
10	叠加式双直动型溢流阀 Twin pressure relief valve	Rexroth	德国 Germany
11	液压胶管 Hydraulic hose	Parker	德国 Germany

Climbing System

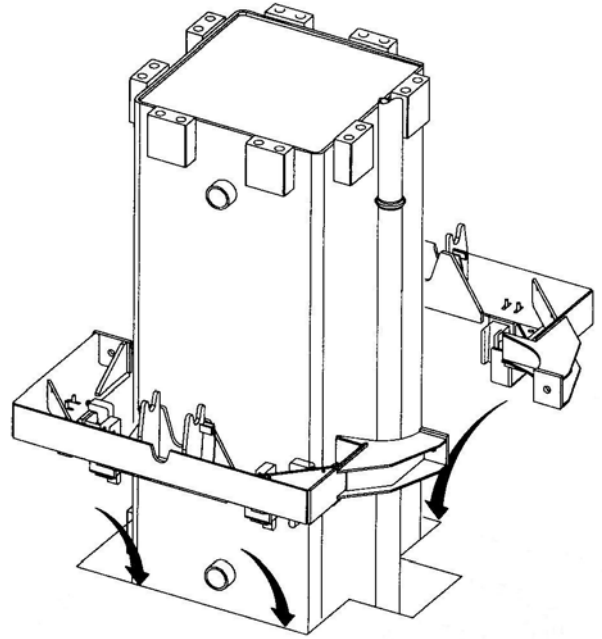
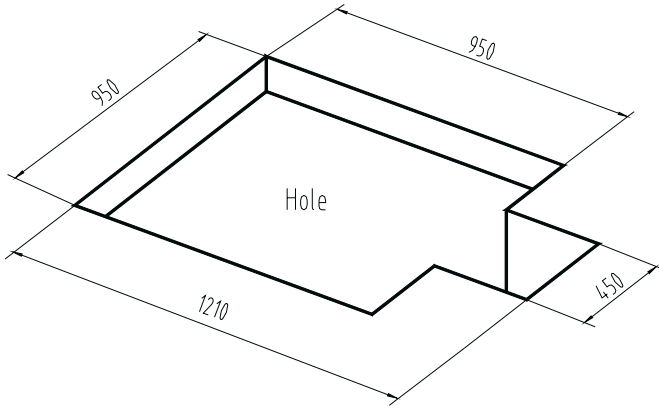


Floor Frame



Shaft Frame

楼面内爬 Floor frame



楼面预留孔 hole in floor
内爬装置组成 Climbing device

楼面内爬框 floor frame

内爬装置由三套内爬框架、两根顶升油缸、两根长销轴等部件组成。

Climbing device consists of 3 sets of Climbing frames, 2 sets of hydraulic cylinders and 2 locating bolts etc.

整机通过内爬长轴、内爬框架、顶升装置爬升后与底架分离。

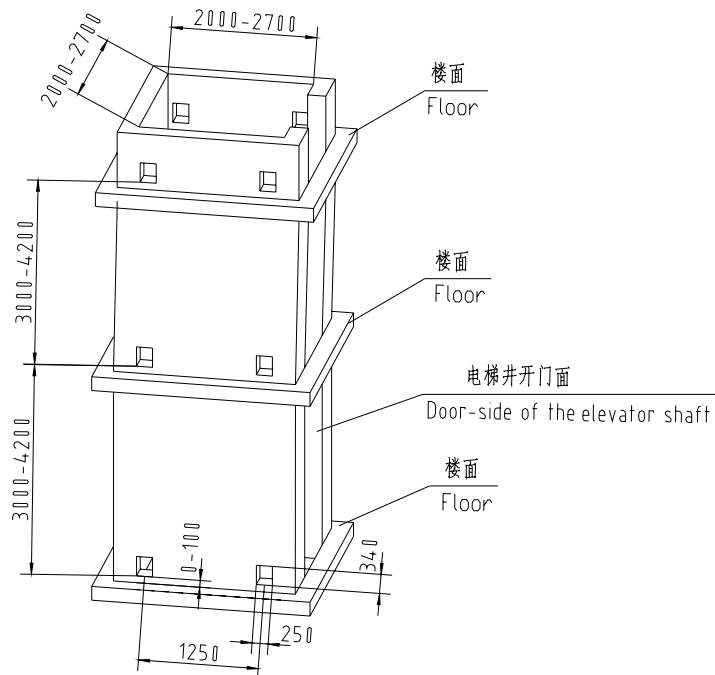
The floor frame with its climbing bolt carries the boom once this is no longer standing on the cruciform base. In addition the climbing system is located on the floor frame.

电梯井内爬 Shaft frame

Notes: 该装置只适用于 2.0m~2.7m 的电梯井,特殊电梯井时需特殊设计内爬框架。

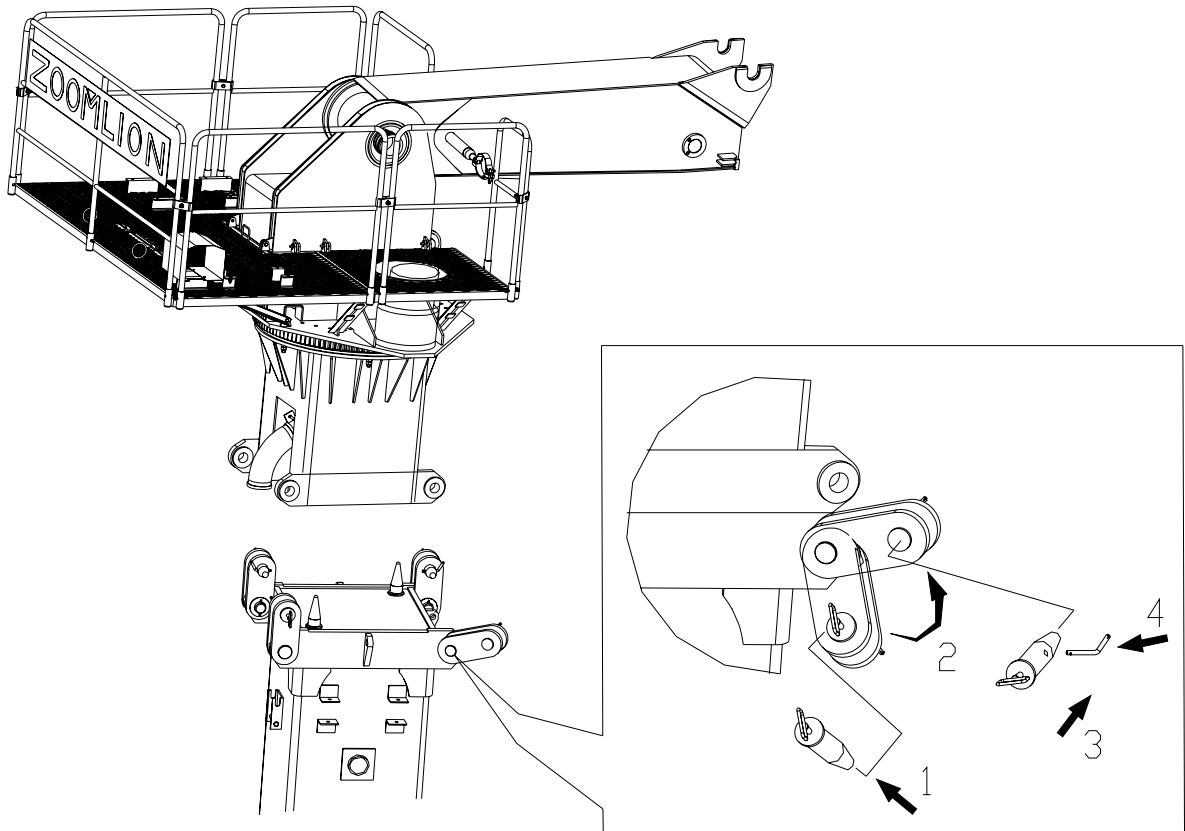
This device can be only used in 2.0 ~ 2.7m elevator shaft well. For any other dimensions it needs special design.

布料机工作时伸缩支腿伸出到建筑物墙体的预留孔处,用铁块楔紧固定内爬框架。
When working, the extension legs can reach out to the holes prepared in the wall , fix the climbing frame together with iron plate .



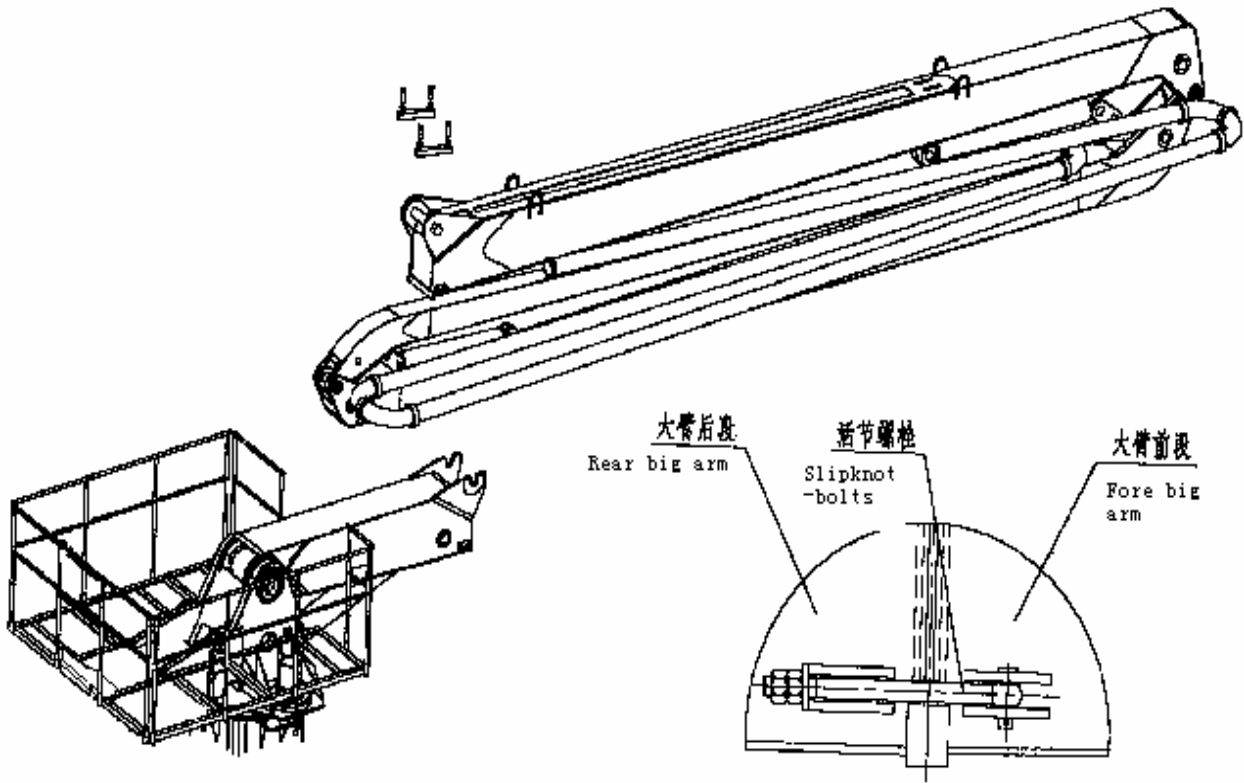
电梯井预留孔 The holes prepared in the wall around the elevator

快装 Quick Mounting



Quick mounting adapter Connect tubular column with lower-support frame

- 1, Pin out
- 2, Turn adapter upward
- 3, Pin in
- 4, Safety pin in



Quick mount Slipknot-bolt Connect big arm front section with rear section

- 1, Front section Pin into U groove
- 2, Lock pin with slipknot-bolt

主要技术参数 Main technical data

型 号 Model		HG28E/HG28G
砼输送管规格(外径×壁厚) Delivery pipe dimension (outside diameter×thickness) JJ83 (mm×mm)		Φ133×4
砼软管规格(内径×长度) Delivery hose dimension (inside diameter×length) ("×mm)		5"×3000
布料半径 Radius of placing boom(m)		27.7
独立高度(至臂根铰点) Stationary height(to the join between the end of the boom and Swivel table (m)		22.7
三节液压卷折式 3-section hydraulic foldable arms	一节臂 1stP ^P section	10.5m
	二节臂 2ndP ^P section	9.2m
	三节臂 3rdP ^P section	8.0m
臂架转角 Boom articulation	一节臂 1stP ^P section	-4.2°~+82.5°
	二节臂 2ndP ^P section	0°~180°
	三节臂 3rdP ^P section	0°~180°
回转范围 Slewing range(°)		360
电机功率 Power of motor(kW)		15(HG28E)/11(HG28G)
液压系统压力 Pressure of hydraulic system (MPa)		28
液压油牌号 Type of hydraulic oil	环境温度 Condition temperature 5°C~48°C	CALTEX HD46 (ESSO NUTO H46)
	环境温度 Condition temperature -20°C~5°C	CALTEX HD32 (ESSO NUTO H32)
内爬框间距 (m) Interval of climbing frame	爬升 Climbing	3.0
	布料 Placing concrete	6.0
	待机 Resting	
操作方式 Control system		1. 手动控制 manual control (only in HG28E) 2. 有线遥控 cable remote control 3. 无线遥控 radio remote control
电源 power		380V/50Hz
有线遥控电缆长度 Remote Control Cable (m)		25
风速 wind speed	布料 Placing concrete	≤60 km/h
	爬升 Climbing	≤28 km/h
工作温度 working temperature		-20~48°C
部 件 重 量 Assembly Weight	下节立柱 the lower- tubular column	3,950kg
	上节立柱 the upper-tubular column	4,300kg
	大臂后段+上下转台+回转支承 the rear section of big arm, swivel table ,lower-support and slewing ring support	3,500kg
	大臂前+中臂+小臂 the fore section of big arm, mid arm and small arm	3,000kg

