

ROYAL GROUP

PORT PROJECT PRODUCT SHOWCASE



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Part 01

COMPANY & PRODUCT OVERVIEW

COMPANY & PRODUCT OVERVIEW

Royal Group is a leader in comprehensive port engineering solutions, backed by decades of hands-on experience on major global infrastructure projects.

We deliver end-to-end solutions by combining **high-quality materials, specialized equipment, and professional engineering services**, covering the entire project lifecycle—from planning and material selection to installation, commissioning, and ongoing support.



COMPANY & PRODUCT OVERVIEW

Our core offerings include port-dedicated steel products such as **steel sheet piles, steel pipe piles, and H beam**, supported by matched construction equipment and an experienced technical team to ensure efficiency, safety, and project quality.

With subsidiaries in the **United States and Guatemala**, and offices in **Mexico, Saudi Arabia, Malaysia, the Philippines**, and other regions, Royal Steel Group provides integrated “**Materials + Equipment + Services**” solutions worldwide. We are committed to being a reliable long-term partner for port engineering projects and to creating lasting value for our clients.





Part 02

PRODUCT & SPECS

STEEL PRODUCTS - STEEL PIPE

LSAW PIPE

LSAW steel pipes are used for marine pile foundation casings, wharf structure support, fluid transport, and coastal structures.



SSAW PIPE

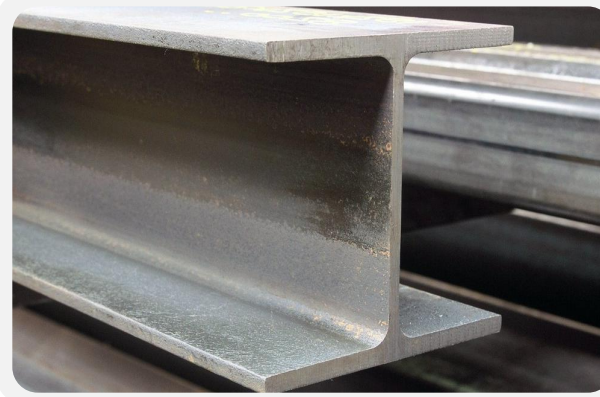
SSAW steel pipes are used for large-diameter pile casings, dredging pipelines, fluid transport, and marine structural applications.



STEEL PRODUCTS - H BEAM & STEEL REBAR

H BEAM

Hot-rolled H-beams are used for heavy-duty offshore beams, trestle bridges, breakwaters, and platform structures.



STEEL REBAR

Hot-rolled steel bars used in reinforced concrete for ports and offshore applications, suitable for underwater and high-salinity environments.



OFFSHORE OPERATION PLATFORM



OFFSHORE JACKUP PLATFORM

Stable offshore work platform supporting personnel, equipment, and materials. Movable, wave- and wind-resistant, modular, and corrosion-resistant. Adaptable to various water depths and construction scenarios, enhancing efficiency and safety.



STEEL PONTOON

The pontoon platform features outstanding buoyancy, with a single pontoon supporting up to **200 tons**. Multiple pontoons can be combined to provide greater buoyancy, ensuring stable offshore flotation.

MECHANICAL PRODUCTS



CRAWLER CRANE



HYDRAULIC IMPACT HAMMER



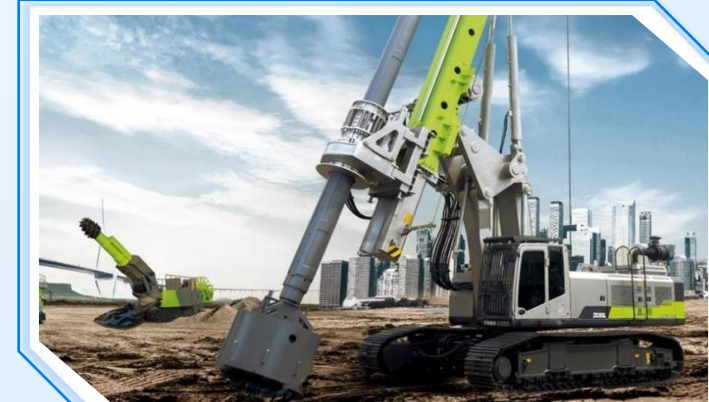
HYDRAULIC VIBRO HAMMER



CASING OSCILLATOR

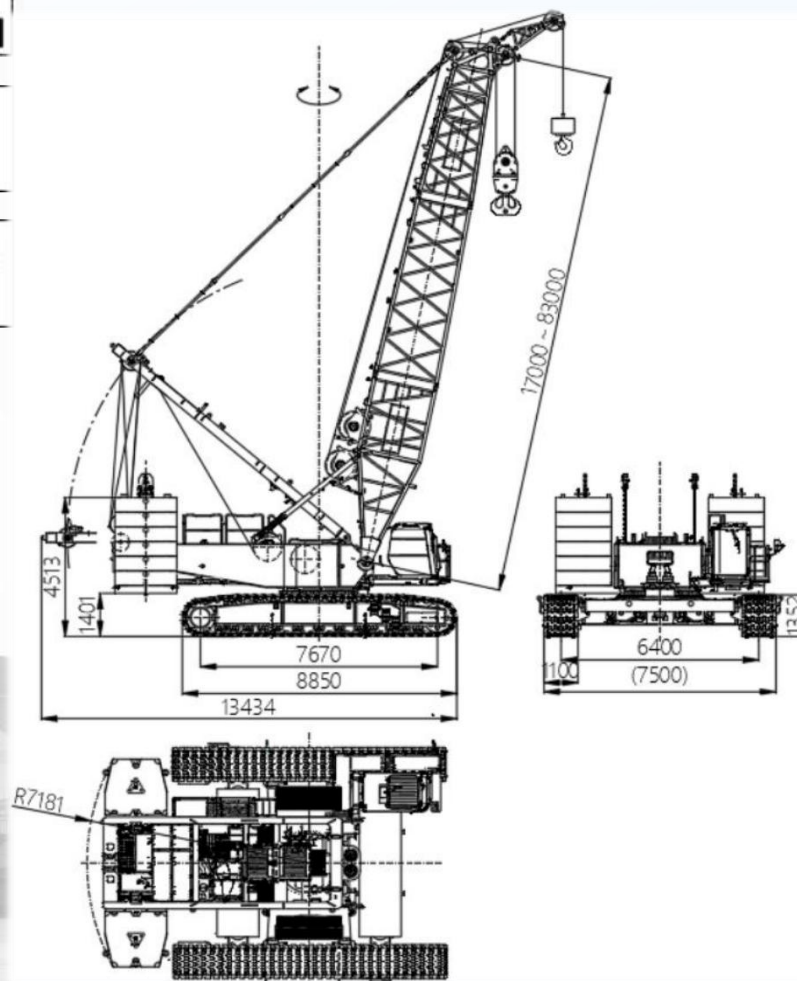
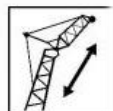


RCD RIG



ROTARY DRILLING RIG

TECHNICAL SPECIFICATION - CRAWLER CRANE



CRAWLER CRANE

Tracked Crane Model: XLC200M

Maximum Rated Lifting Capacity: 200t

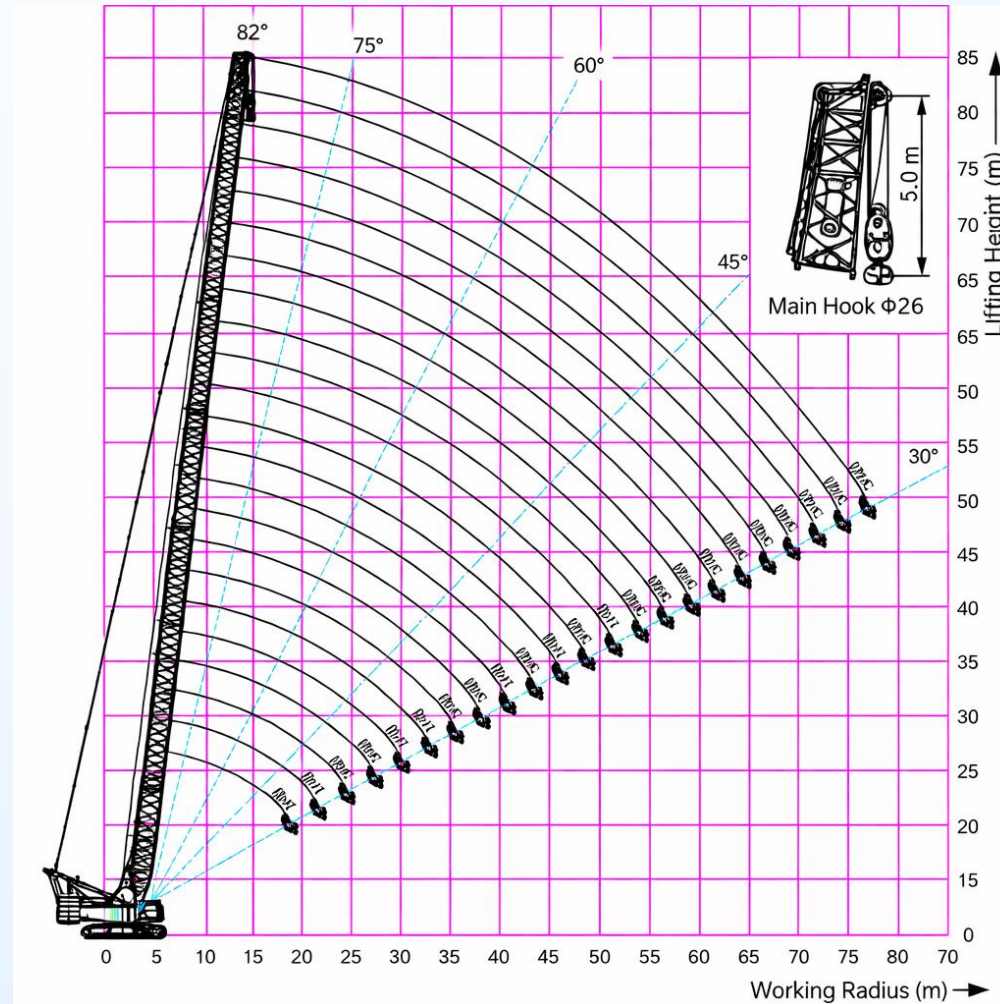
Maximum Lifting Moment: 1071t.m

Hook Type	80T	13.5T	160T (Optional)	32T (Optional)
Self Weight (t)	0.95	0.5	2.18	0.7
Quantity	1	1	1	1
Number of Sheaves	3	0	7	1

TECHNICAL SPECIFICATION - CRAWLER CRANE



MAIN BOOM AND MAIN HOOK WORKING RANGE DIAGRAM



TECHNICAL SPECIFICATION - HYDRAULIC IMPACT HAMMER



Model	YC-3	YC-5	YC-8	YC-12	YC-14	YC-16	YC-17	YC-110	YC-120	YC-130	YC-150	YC-180	YC-200	YC-210
Blow Energy (kNm)	36	60	120	180	210	240	255	1870	2040	2210	2550	3060	3400	3600
Maximum Stroke(mm)	1200	1200	1500	1500	1500	1500	1500	1700	1700	1700	1700	1700	1700	1700
Hydraulic Impact Hammer	Blow Rate(bpm)	80/35	80/35	70/30	70/32	70/30	70/30	70/30	60/22	60/22	55/20	55/20	55/20	55/20
	Ram Weight(kg)	3000	5000	8000	12000	14000	16000	17000	110000	120000	130000	150000	180000	200000
Lifting Method		Single Hydraulic Cylinder Lifting							Double Hydraulic Cylinder Lifting					
Dimension (Without pile sleeve)	Length(mm)	4845	5425	6800	7100	7510	7760	7960	11830	12410	12550	14000	14000	15400
	Width(mm)	960	960	1075	1185	1185	1185	1185	3230	3200	3260	3420	3420	3420
	Height(mm)	1075	1075	1185	1300	1300	1300	1300	2500	2500	2845	2950	2950	3100
	Weight(kg)	5800	8500	12500	18000	20000	22000	23000	165000	177200	200000	244500	287000	310000

ROYAL PROJECT - HYDRAULIC IMPACT HAMMER



**Israeli Port
Construction Site**



Offshore Wind Farm



Nigerian Oil Refinery

TECHNICAL SPECIFICATION - HYDRAULIC VIBRO HAMMER

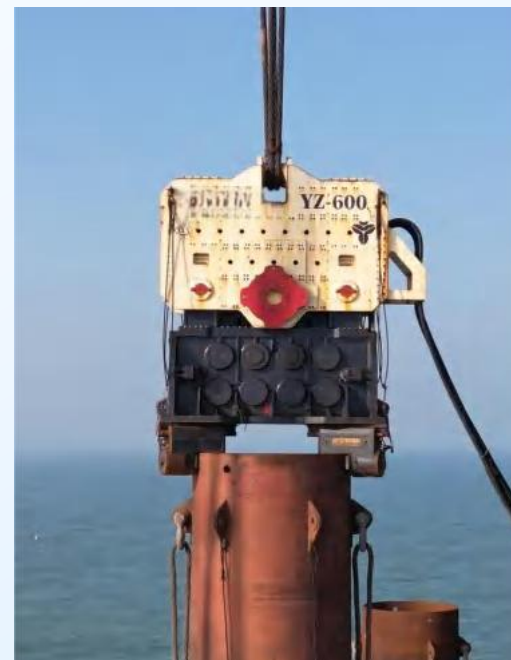


Models		YZ-280L	YZ-300	YZ-300F	YZ-300L	YZ-360B
Vibro Pile Driver & Extrater Technical Parameter	Eccentric Moment(kg·m)	92	137	52	150	102
	Max. Frequency(rpm)	1700	1410	2300	1400	1800
	Excitng Force(kN)	2920	3000	3020	3230	3630
	Max. Line Pull Force(kN)	800	2000	800	1600	1000
	Max. Amplitude(mm)	30	37	16	30	29
	Max. Oil Flow(L/min)	890	1015	1200	1220	1200
Size & Weight W/O Clamp	Length(mm)	3855	2650	3855	3460	3150
	Width(mm)	705	1150	705	850	650
	Height(mm)	2035	4300	2035	2480	2430
	Weight(kg)	9600	16000	9600	14800	10300

ROYAL PROJECT - HYDRAULIC VIBRO HAMMER



**Cross-sea Bridge
Project**



**Offshore Wind Power
Project**

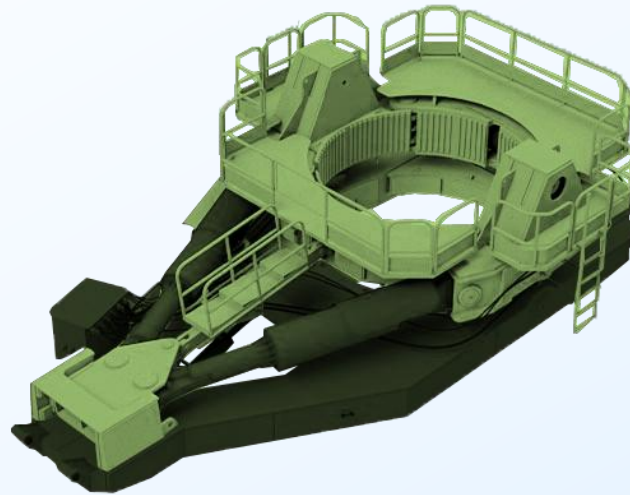


Light Rail Project

TECHNICAL SPECIFICATION - CASING OSCILLATOR

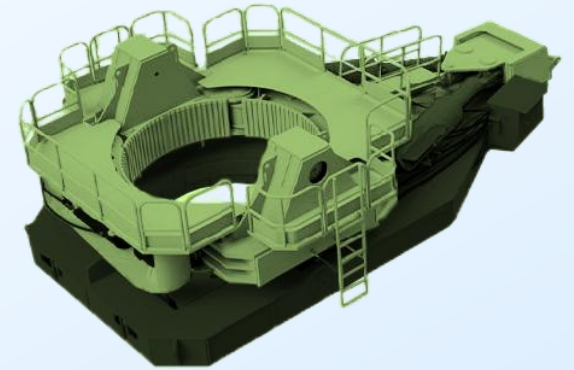


GENERAL / HEAVY TYPE



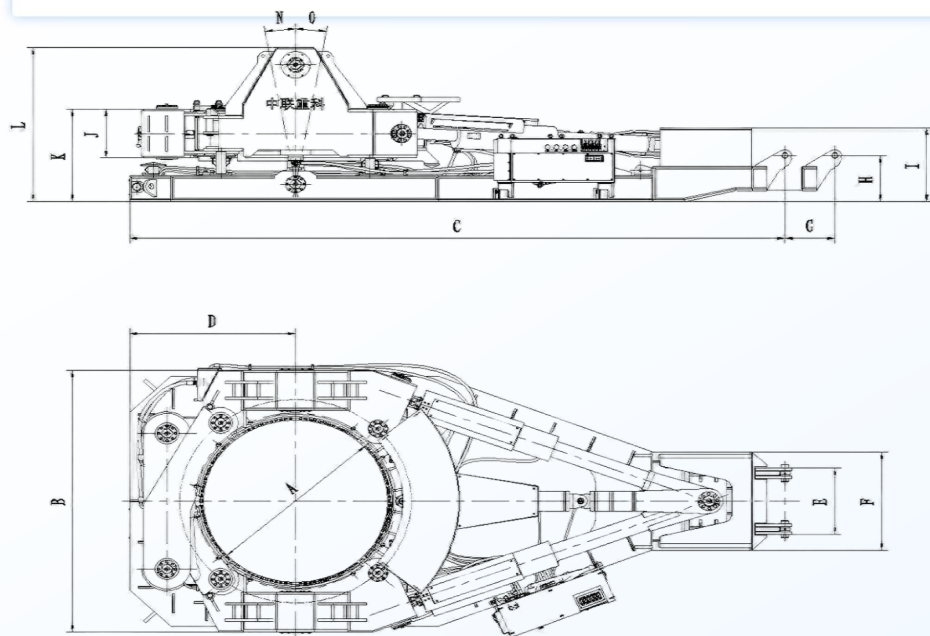
- Matching Equipment: Crawler Crane
- Soil Extraction Equipment: Grab Bucket
- Power Unit: Standard Configuration

LIGHT-DUTY TYPE



- Matching Equipment: Rotary Drilling Rig
- Soil Extraction Equipment: Kelley Drill Tool
- Power Unit: Optional Configuration

TECHNICAL SPECIFICATION - CASING OSCILLATOR



TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M
ZM120L	1200	2050	3270	1000	800	1000	400	630	1000	400	810	1485	2270
ZM150L	1500	2500	4070	1420	800	1250	450	630	1100	500	1020	1600	2800
ZM180L	1800	3020	5300	2015	800	1350	450	630	1050	500	1050	1705	3200
ZM200L	2000	3220	5560	800	800	1400	450	630	1050	500	1050	1685	3545

Model	ZM200H	ZM200HH	ZM250G	ZM300G	ZM330G	ZM400G
Casing diameter (mm)	Max. φ2000	Max. φ2000	Max.φ2500	Max.φ3000	Max.φ3300	Max. φ4000
Maximum torque (kN·m)	4320	7050	9500	13500	16600	28000
Maximum lifting force (kN)	3140	4450	5150	7250	10200	13300
Lifting stroke (mm)	550	600	600	650	650	550
Main clamping force (kN)	2570	3955	3780	4780	6300	6700
Rotation angle (°)	24	24	22	22	24	24
Total machine weight (kg)	38500	38500	48000	57000	57000	100000

ROYAL PROJECT - CASING OSCILLATOR



**Bored Pile
Construction**



**Railway Expansion
Project**



**River Bank Drilling
Construction**

TECHNICAL SPECIFICATION - RCD RIG



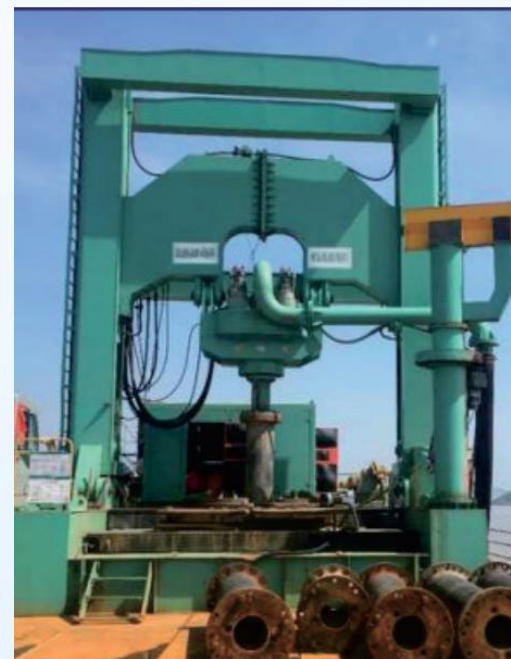
ZJD5000/450

Serial number	Description	Unit	Parameter
1	rock strength	Mpa	C=200Mpa ϕ 5.0m
2	Max.diameter	M	5
2	Speed/Torque	RPM	0-13
		T·M(28Mpa)	25
		RPM	0-6
		T·M(28Mpa)	45
3	bottom of hole drilling pressure	KN	1580
4	MAX.DEEP	M	200
5	MAX.PULL-UP	T(25Mpa)	350
6	plate of bearing capacity		300
7	Drilling Tool		ϕ 55922- ϕ 35114*3500
8	Total Power	kw	355
9	Dimension	M	107.111
10	WORK Dimension	M	147.17.6
11	AC		3PH-380-50HZ
12	Frame Inclining	DEG	30
13	Swive Inclining	DEG	58
14	Jib crane	T	5
15	Drilling system		Automatic drilling+constant pressure drilling
16	Hydraulic power	KW	3110+115
17	Hydraulic Pressure	Mpa	MAIN28Mpa AID16MPA
18	Cylinder	m	4.2
19	Weight	T	113

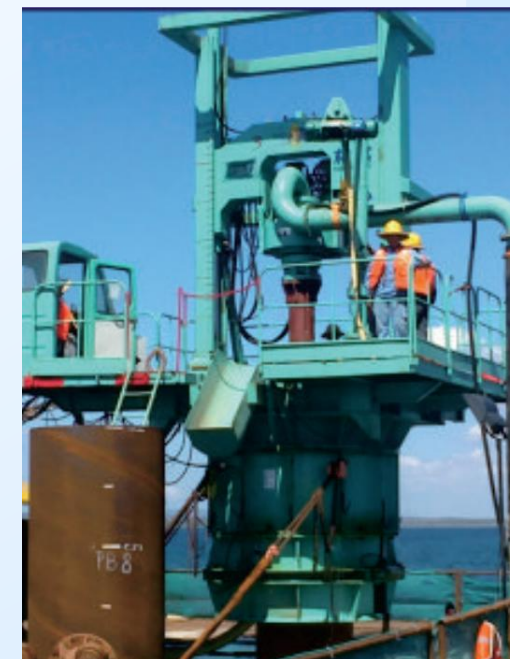
ROYAL PROJECT - RCD RIG



**Strait Highway-Railway
Dual-Use Bridge Project**



**Mozambique Inclined
Pile Project**



Bridge Project

TECHNICAL SPECIFICATION - ROTARY DRILLING RIG



Combined Technical Parameter Table

Main Parameters	Unit	Value
Drilling Diameter	mm	φ800-φ1600
Max. Torque	kN.m	1530, 1745 (instantaneous)
Rotation Speed	rpm	1.3/2.2/3.9
Max. Downforce	kN	380+180 (self-weight)
Max. Pull-out Force	kN	2450, 2690 (instantaneous)
Press/Pull Stroke	mm	500
Main Unit Weight	t	28
Power Station Weight	t	6
Engine Model (China IV)	-	Cummins L9plus (L9H)
Engine Power	kW/rpm	219/1700
Engine Displacement	L	9
Control Method	-	Wireless Remote Control (with wired interface)

ROYAL PROJECT - ROTARY DRILLING RIG



**Bridge
Reconstruction**



**Subway Station
Construction**



Part 03

ADVANTAGES & SERVICES

ADVANTAGES & SERVICES

01

Rapid and timely response to after-sales issues

02

Rapid response to customization needs based on operating conditions

03

Free provision of construction method and technical support

04

Provision of comprehensive construction and supporting solutions



WELCOME TO CONTACT US

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