



# ***PEDESTAL ROCK BREAKER BOOM SYSTEMS***



 **OKADA**  
Pedestal Rock Breaker Systems



Expert Support



Safety First



Reliability



# OKADA

**Pedestal Rock Breaker Systems**



Okada America operates three warehouses across multiple time zones for optimal parts availability. Our goal is to deliver top-tier products, exceptional customer support, all while maintaining competitive pricing.

**Okada America Inc.** [WWW.OKADAAMERICA.COM](http://WWW.OKADAAMERICA.COM)

Ohio - Oregon - Texas USA

# SELECTING A ROCK BREAKER BOOM SYSTEM



A boom system, when specified correctly, is a valued component within an aggregate production plant or mining operation. The boom system will aid in increasing production, reduce down time, and increase safety.

The core factors that determines a functional boom system are: the type of crushing plant, the tonnage capacity of the plant, and the size and hardness of materials being processed.

## KEY COMPONENTS OF A BOOM SYSTEM

- Pedestal boom
- Hydraulic breaker
- Hydraulic power unit
- Operating controls
- Support structure



## SELECTING EQUIPMENT

To fully understand requirements for the supply of a rock breaker boom system the following technical parameters need taken into consideration:

- Type of crushing operation
- Material tonnage per hour throughput (TPH)
- Type and hardness of material
- The size of boulders/ over-size
- Work area, proposed boom coverage
- Proposed pedestal mount in relation to the work area
- The size of hydraulic breaker required to suit the application
- Proposed hours of boom operation per shift
- Number of shifts per working day
- Location: surface or underground
- Housed within building or exposed to the elements
- Climate and altitude at site

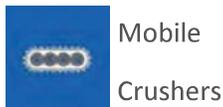
# ROCK BREAKER BOOM SYSTEM BY APPLICATION



Our experienced team is available to consult with, advise and offer technical support to assist in selecting the boom system to best meet the technical requirements of your application.

They endeavor to understand production requirements, and specifying equipment that will increase material production and offer personnel safety at site.

## SYSTEM APPLICATION OVERVIEW



Mobile  
Crushers

1



Jaw & Impactor  
Crushers

2



Grizzly

3



Gyrotory  
Crushers

4

MODEL	Mobile Crushers	Jaw & Impactor Crushers	Grizzly	Gyrotory Crushers	Horizontal Reach (A)	Maximum Reach (B)	Vertical Reach (C)	Swing	Suitable Breaker Models	Power Pack
	1	2	3	4	FT (M)	FT (M)	FT (M)			
ORB7T	o				6.5 (2.0)	10.6 (3.2)	6.5 (2.0)	320	ORV550H, ORV800SH	OPP30
ORB9T	o				9.2 (2.8)	13.8 (4.2)	9.5 (2.9)	320	ORV550H, ORV800SH	OPP30
ORB10T	o	o			9.8 (3.0)	15.1 (4.6)	8.2 (2.5)	320	ORV550H, ORV800SH	OPP30
ORB13T	o	o	o		12.5 (3.8)	25.6 (7.8)	13.8 (4.2)	320	ORV550H - ORV1100H	OPP30
ORB13HDT	o	o	o		12.5 (3.8)	25.6 (7.8)	13.8 (4.2)	320	ORV1500H, ORV2500H	OPP40, 50
ORB14	o	o	o		13.5 (4.1)	19.7 (6.0)	13.8 (4.2)	170	ORV550H - ORV1100H	OPP30
ORB14HD	o	o	o		13.5 (4.1)	19.7 (6.0)	13.8 (4.2)	170	ORV1500H, ORV2500H	OPP40, 50
ORB18T		o	o		17.7 (5.4)	24.0 (7.3)	19.4 (5.9)	320	ORV800SH - ORV1500H,	OPP30, 40
ORB19		o	o		18.7 (5.7)	23.3 (7.1)	18.3 (5.6)	170	ORV800SH - ORV1500H	OPP30, 40
ORB20		o	o		20.3 (6.2)	25.5 (7.8)	20.7 (6.3)	170	ORV800SH - ORV1500H	OPP30, 40
ORB14XT		o	o		14.0 (4.3)	19.4 (5.9)	13.1 (4.0)	320	ORV1500H - ORV3000H	OPP40 - 60
ORB14XHDT		o	o		14.0 (4.3)	19.4 (5.9)	13.1 (4.0)	320	ORV4000, ORV5000H	OPP75
ORB17X		o	o		17.4 (5.3)	22.6 (6.9)	13.1 (4.0)	170	ORV1500H - ORV3000H	OPP40 - 60
ORB17XHD		o	o		17.4 (5.3)	22.6 (6.9)	13.1 (4.0)	170	ORV4000, ORV5000H	OPP75
ORB17XT		o	o		16.4 (5.0)	22.3 (6.8)	13.8 (4.2)	320	ORV1500H - ORV3000H	OPP40 - 60
ORB17XHDT		o	o		16.4 (5.0)	22.3 (6.8)	13.8 (4.2)	320	ORV3000H, ORV4000H	OPP60, 75
ORB20X		o	o		19.7 (6.0)	25.6 (7.8)	13.8 (4.2)	170	ORV1500H - ORV3000H	OPP40 - 60
ORB20XHD		o	o		19.7 (6.0)	25.6 (7.8)	14.8 (4.5)	170	ORV3000H, ORV4000H	OPP60, 75
ORB21XT		o	o		21.3 (6.5)	27.2 (8.3)	19.0 (5.8)	320	ORV1500H, ORV2500H	OPP40, 50
ORB21XHDT		o	o		21.3 (6.5)	27.2 (8.3)	19.0 (5.8)	320	ORV3000H, ORV4000H	OPP60, 75
ORB24X		o	o		24.6 (7.5)	30.5 (9.3)	19.5 (5.8)	170	ORV1500H, ORV2500H	OPP40, 50
ORB24XHD		o	o		24.6 (7.5)	30.5 (9.3)	19.5 (5.8)	170	ORV3000H, ORV4000H	OPP60, 75
ORB25XT			o	o	25.6 (7.8)	32.2 (9.8)	25.3 ( 7.7)	320	ORV2500H - ORV3000H	OPP50, 60
ORB25XHDT			o	o	25.6 (7.8)	32.2 (9.8)	25.3 ( 7.7)	320	ORV3000H - ORV5000H	OPP60, 75
ORB28X			o	o	28.5 (8.7)	35.4 (10.5)	25.3 ( 7.7)	170	ORV2500H - ORV3000H	OPP 50 - 60
ORB28XHD			o	o	28.5 (8.7)	35.4 (10.5)	25.3 ( 7.7)	170	ORV4000H - ORV5000H	OPP75
ORB29XT			o	o	28.9 (8.8)	37.7 (11.5)	30.2 (9.2)	320	ORV3000H - ORV7500H	OPP60 - 100
ORB32X			o	o	32.2 (9.8)	41.0 (12.5)	30.2 (9.2)	170	ORV3000H - ORV7500H	OPP60 - 100
ORB36XT			o	o	37.7 (11.5)	35.4 (10.5)	34.4 (10.5)	320	ORV3000H - ORV5000H	OPP60, 75
ORB40X			o	o	40 (12.2)	49.2 (15.0)	30.2 (9.2)	170	ORV3000H - ORV5000H	OPP60, 75

**HORIZONTAL REACH (A):** the maximum nominal horizontal reach with the breaker in the vertical position.

**MAXIMUM REACH (B):** the maximum horizontal reach with the breaker outstretched.

**VERTICAL REACH (C):** the maximum vertical reach depth with the breaker vertical.

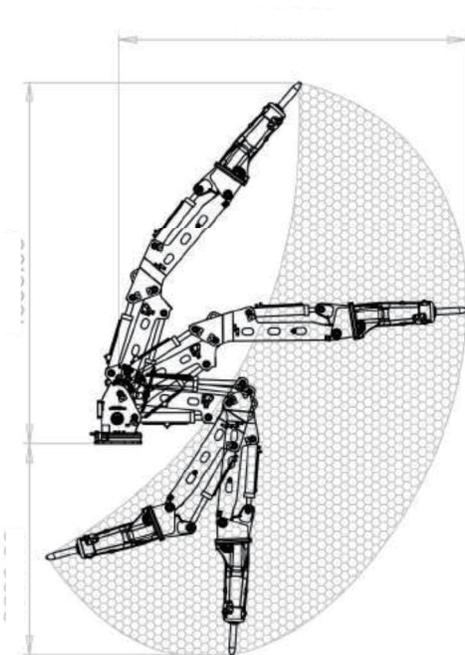
# MOBILE BOOM SYSTEMS



Our compact booms are typically used on portable crushing plants and are fitted directly to the structure of the mobile crusher. These multi-purpose boom systems have been shown to aid in increasing productivity by up to 30% by removing bridged rock and breaking oversize in the hopper without the need to stop a plant or reposition equipment. Featuring a low-profile design and low transportation height, these heavy duty, rock breaker booms are stable and easy to install as they travel within transport dimensions.



## RANGE OF MOTION



### FEATURES:

- Compact design to integrate onto the mobile crusher
- Parks within the transport dimensions
- Built to exact tolerances from premium materials
- Turntable mounted base
- Heat treated conical pins
- Low height/ width design
- Optimal space usage
- Stable and easy to install

### BENEFITS:

- Reduce down time and increase productivity
- Enhance safety
- Eliminate bridging and maintain an uninterrupted flow of material through the crusher
- Compact and multi-purpose
- Can be easily transported yet is still large enough to handle the raking and breaking
- Hand held remote control allows the operator flexibility to operate the boom from a safe distance and viewpoint
- Maximum productivity with maximum cost efficiency

We fit holding valves to all booms as a standard. That is the main lift and the jib.  
The hammer tilt and the slew cylinders generally do not need the load hold / anti-burst valves.

## SPECIFICATIONS

MODEL	Horizontal Reach (A)	Maximum Reach (B)	Vertical Reach (C)	Swing	Suitable Breaker Models	Power Pack
	FT (M)	FT (M)	FT (M)			
ORB7T	6.5 (2.0)	10.6 (3.2)	6.5 (2.0)	320	ORV550H, ORV800SH	OPP30
ORB9T	9.2 (2.8)	13.8 (4.2)	9.5 (2.9)	320	ORV550H, ORV800SH	OPP30
ORB10T	9.8 (3.0)	15.1 (4.6)	8.2 (2.5)	320	ORV550H, ORV800SH	OPP30

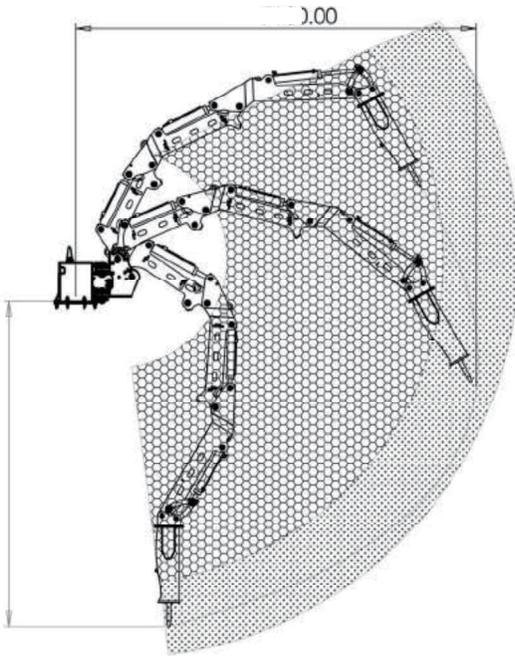
# MID RANGE BOOM SYSTEMS

Our medium duty range of booms are typically mounted over the mouth of a primary crusher. The boom system enables the breaker to reach into the mouth of the crusher, reducing oversized boulders as well as clearing any blockages in the hopper.

The design of our mid-range booms optimally combines light weight with high capacity. The larger footprint of the boom pedestal effectively optimizes the stress distribution and foundation structures.



## RANGE OF MOTION



### FEATURES:

- Optimally combines light weight and a high capacity
- User friendly remote controls allow for smooth and agile operation
- Shock absorbing pedestal mounting
- Heat treated conical pins
- Breaker anti-lunge cushioning within the hydraulic system
- Unlimited visibility from the cabin or operator stand
- Simple assembly, safe, quick and easy operation

### BENEFITS:

- Long term plant production is vastly improved
- Bridging is eliminated, maintaining uninterrupted flow of material through the crusher
- Downtime due to build ups is considerably reduced, ensuring a steady flow of material
- Payback time on the investment is usually very short due to the vast economic benefit as a result of increased productivity
- The safest way to clear the crusher cavity

We fit holding valves to all booms as a standard. That is the main lift and the jib. The hammer tilt and the slew cylinders generally do not need the load hold / anti-burst valves.

## SPECIFICATIONS

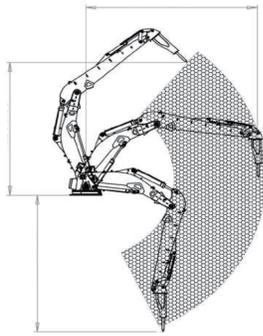
MODEL	Horizontal Reach (A)	Maximum Reach (B)	Vertical Reach (C)	Swing	Suitable Breaker Models	Power Pack
	FT (M)	FT (M)	FT (M)			
ORB13T	12.5 (3.8)	25.6 (7.8)	13.8 (4.2)	320	ORV550H - ORV1100H	OPP30
ORB13HDT	12.5 (3.8)	25.6 (7.8)	13.8 (4.2)	320	ORV1500H, ORV2500H	OPP40, 50
ORB14	13.5 (4.1)	19.7 (6.0)	13.8 (4.2)	170	ORV550H - ORV1100H	OPP30
ORB14HD	13.5 (4.1)	19.7 (6.0)	13.8 (4.2)	170	ORV1500H, ORV2500H	OPP40, 50
ORB18T	17.7 (5.4)	24.0 (7.3)	19.4 (5.9)	320	ORV800SH - ORV1500H,	OPP30, 40
ORB19	18.7 (5.7)	23.3 (7.1)	18.3 (5.6)	170	ORV800SH - ORV1500H	OPP30, 40
ORB20	20.3 (6.2)	25.5 (7.8)	20.7 (6.3)	170	ORV800SH - ORV1500H	OPP30, 40

# HEAVY DUTY BOOM SYSTEMS



Our heavy duty range of booms are suitable for permanent rock breaking in arduous applications. A pedestal rock breaker boom is the safest way to manage arching/bridging, bottle-necks, and oversized materials. Our rock breaker boom systems enhance the safety, productivity and profitability of crushing applications in mines and quarries.

## RANGE OF MOTION



## SPECIFICATIONS

### FEATURES:

- Utilizes the maximum performance of the hydraulic hammer
- Sophisticated control system meets safety and reliability requirements and at the same time is user-friendly
- Made from high strength steel alloys, guaranteeing longevity and ensuring resistance to torsion and buckling
- Long lasting, heavy-duty hydraulic cylinders maximise productivity for longer periods
- Shock absorbing pedestal mounting increases stability

### BENEFITS:

- Keep your plant running at maximum productivity
- Quickly eliminate crusher blockages and provide smooth material flow
- Built to last for years in even the most arduous working environments
- Ensures high levels of safety of the operators work
- Vast economic impact as a result of improved productivity

MODEL	Horizontal Reach (A)	Maximum Reach (B)	Vertical Reach (C)	Swing	Suitable Breaker Models	Power Pack
	FT (M)	FT (M)	FT (M)			
ORB14XT	14.0 (4.3)	19.4 (5.9)	13.1 (4.0)	320	ORV1500H - ORV3000H	OPP40 - 60
ORB14XHDT	14.0 (4.3)	19.4 (5.9)	13.1 (4.0)	320	ORV4000, ORV5000H	OPP75
ORB17X	17.4 (5.3)	22.6 (6.9)	13.1 (4.0)	170	ORV1500H - ORV3000H	OPP40 - 60
ORB17XHD	17.4 (5.3)	22.6 (6.9)	13.1 (4.0)	170	ORV4000, ORV5000H	OPP75
ORB17XT	16.4 (5.0)	22.3 (6.8)	13.8 (4.2)	320	ORV1500H - ORV3000H	OPP40 - 60
ORB17XHDT	16.4 (5.0)	22.3 (6.8)	13.8 (4.2)	320	ORV3000H, ORV4000H	OPP60, 75
ORB20X	19.7 (6.0)	25.6 (7.8)	13.8 (4.2)	170	ORV1500H - ORV3000H	OPP40 - 60
ORB20XHD	19.7 (6.0)	25.6 (7.8)	14.8 (4.5)	170	ORV3000H, ORV4000H	OPP60, 75
ORB21XT	21.3 (6.5)	27.2 (8.3)	19.0 (5.8)	320	ORV1500H, ORV2500H	OPP40, 50
ORB21XHDT	21.3 (6.5)	27.2 (8.3)	19.0 (5.8)	320	ORV3000H, ORV4000H	OPP60, 75
ORB24X	24.6 (7.5)	30.5 (9.3)	19.5 (5.8)	170	ORV1500H, ORV2500H	OPP40, 50
ORB24XHD	24.6 (7.5)	30.5 (9.3)	19.5 (5.8)	170	ORV3000H, ORV4000H	OPP60, 75
ORB25XT	25.6 (7.8)	32.2 (9.8)	25.3 ( 7.7)	320	ORV2500H - ORV3000H	OPP50, 60
ORB25XHDT	25.6 (7.8)	32.2 (9.8)	25.3 ( 7.7)	320	ORV3000H - ORV5000H	OPP60, 75
ORB28X	28.5 (8.7)	35.4 (10.5)	25.3 ( 7.7)	170	ORV2500H - ORV3000H	OPP 50 - 60
ORB28XHD	28.5 (8.7)	35.4 (10.5)	25.3 ( 7.7)	170	ORV4000H - ORV5000H	OPP75
ORB29XT	28.9 (8.8)	37.7 (11.5)	30.2 (9.2)	320	ORV3000H - ORV7500H	OPP60 - 100
ORB32X	32.2 (9.8)	41.0 (12.5)	30.2 (9.2)	170	ORV3000H - ORV7500H	OPP60 - 100
ORB36XT	37.7 (11.5)	35.4 (10.5)	34.4 (10.5)	320	ORV3000H - ORV5000H	OPP60, 75
ORB40X	40 (12.2)	49.2 (15.0)	30.2 (9.2)	170	ORV3000H - ORV5000H	OPP60, 75

# POWER PACK UNITS



We offer a range of Submersed, Non—Submersed and Load Sensing Power Units for the purpose of operating both the rock breaker boom and hydraulic breaker. A hydraulic power unit is supplied with all static pedestal boom systems. All of our power units are designed for maximum performance, reliability, simple and efficient maintenance.

Our power units are selected to suit the chosen breaker and to ensure maximum productivity and performance of the complete boom system package. As standard, all our boom systems destined for static applications are supplied with a high specification hydraulic power unit. The unit comprises a high efficiency electric motor, a large displacement hydraulic pump and a high capacity reservoir. An oil tank heater and oil cooler are also offered depending on climate and region requirements.



Load Sensing Power Unit



Submersed Power Unit



Non-Submersed Power Unit

## SPECIFICATIONS

POWER PACK UNIT SPECIFICATIONS							
		OPP22	OPP37	OPP37	OPP45	OPP55LS	OPP75LS
MOTOR	KW	22	30	37	45	55	75
	HP	30	40	50	60	75	100
MOTOR RUNNING SPEED	RPM	1450	1450	1450	1450	1450	1450
PUMP TYPE		Single	Single	Tandem	Tandem	Tandem	Tandem
PUMP	CC	48	62	75 + 48	75 + 48	96 + 48	122 + 48
PUMP FLOW RATE	LPM	60	84	105 + 42	100 + 42	120 + 42	170 + 60
	GPM (US)	16	22	27 + 11	26 + 11	32 + 11	45 + 16
PUMP WORKING PRESSURE	BAR	180	200	200	200	200	200
	PSI	2650	3000	3000	3000	3000	3000
MAX OPERATING PRESSURE	BAR	210	220	220	220	220	220
	PSI	3100	3200	3200	3200	3200	3200
HYDRAULIC RESERVOIR CAPACITY	LITRES	150	200	350	500	500	500
	GAL (US)	40	53	92	132	132	132

# HYDRAULIC ROCK BREAKERS



We offer a full range of hydraulic breakers which complement our boom systems. The power to weight ratio of the OKADA ORV Series of hydraulic breakers provides superior efficiency and performance. Designed for improved hydraulic efficiency and safety, our powerful, reliable and durable breakers will significantly increase the productivity of your work.



#### FEATURES:

- Energy of piston stroke is accumulated due to charged nitrogen gas
- Built-in valve is easily accessed for maintenance
- Installation designed to be easy and safe for the operator
- Housing design protects against abrasion, dust and debris
- Sound attenuated

#### BENEFITS:

- Long service life due to advanced heat treatment process
- Pistons are manufactured using materials proven in intensity, anti-wear, heat resistant, anti-impact etc.
- High efficiency & performance
- Extremely maintenance-friendly

	MODEL	800SH	1100H	1500H	2500H	3000H	4000H	5000H	7500H
<b>SPECIFICATION</b>									
Carrier Class	1000 lb	10 - 18	10 - 18	13 - 22	22 - 34	28 - 40	38 - 54	44 - 66	60 - 92
	m ton	4.5 - 8	4.5 - 8	6 - 10	10 - 15	13 - 18	17 - 25	20 - 30	27 - 42
Impact Energy Class	ft lb	850	1100	1500	2500	3000	4000	5000	7500
	Joules	1153	1492	2034	3390	4068	5424	6780	10170
Operating Weight	lb	730	1118	1667	1990	2550	3500	4400	5950
	kg	331	507	756	902	1156	1587	1995	2698
Unit Working Length	inch	63	75	83	89	91	103	114	124
	cm	160	190	212	226	231	262	290	315
Tool Diameter	inch	2.95	3.15	3.54	4.1	4.5	5.3	5.7	6.1
	mm	75	80	90	104	114	135	145	155
Tool Working Length	inch	16.2	19.5	22.6	23.4	24	28.9	28.2	30.2
	mm	411	496	575	594	610	734	716	767
Frequency	L Mode bpm	380-900	400-800	350-700	350-550	320-550	320-480	270-400	230-400
	S Mode bpm	n/a	600-1100	490-1000	600-900	400-470	400-600	330-500	270-470
Auto Stop		0	-	-	0	0	0	0	0
85 db (A) Level Distance	ft	35 - 58	57 - 95	65 - 91	75 - 105	78 - 109	83 - 116	98 - 137	119 - 167
	m	11 - 18	17 - 19	20 - 28	23 - 32	24 - 33	25 - 35	30 - 42	36 - 51
<b>ENERGY</b>									
Mechanical Energy	hp	17 - 33	14 - 37	15 - 38	35 - 65	45 - 78	62 - 98	73 - 117	98 - 133
	kW	13 - 25	10 - 28	11 - 28	26 - 48	33 - 58	47 - 73	55 - 87	73 - 99
Mechanical Energy Average	hp	25	25.5	26.5	50	61.5	80	95	115.5
	kW	19	19	20	37	46	60	71	86
<b>HYDRAULICS</b>									
Oil Flow Range	gpm	14 - 20	15 - 23	16 - 26	25 - 35	32 - 42	40 - 53	47 - 63	63 - 72
	lpm	64 - 83	56 - 87	60 - 98	83 - 117	110 - 132	114 - 132	163 - 200	178 - 238
Operating Pressure	psi	1740-2400	1990-2418		2030 - 2700		2275 - 2700		
	bar	120 - 165	137 - 167		140 - 180		157 - 180		

## AUTO-LUBRICATION SYSTEMS



For heavy duty booms working continuously we would recommend the Auto Lubrication System

## REMOTE CONTROL



The boom can be remotely controlled using a hand held remote control unit (radio / tethered). This allows the operator more flexibility to operate the boom from a safe distance.

## QUICK HITCH



Our quick couplers and hitches will improve the productivity, flexibility and potential of your machine for even the most demanding jobs.

## OPERATOR'S CABIN



We offer both a single or a double operator's cabin. Optional heating, air conditioning, and electric panel available.

## OPERATOR'S SEAT



The ergonomic seat is designed for operators comfort. this seat can be placed in an existing control room or cabin.

## MANUAL CONTROLS



The boom can be operated using valve bank controls mounted into a operators control stand, or operators seat.

## HYDRAULIC BREAKER



We offer our ORV Series of hydraulic hammers that are fully compatible to operate on our boom systems.

## ANCHOR BASE



Steel support to add into the foundations for anchoring heavy load bearing structures.

## SUPPORT TOWER



A steel support tower can be used to support heavy equipment. Designed to ensure structural integrity and to gain maximum capacity, they may feature a walkway and ladder.

## CUSTOMER

## SUPPORT

## INSTALLATION



From the initial inquiry you make to Okada America, right through to when you receive your system, our dedicated team will be with you every step of the way. We take great pride in our customer service, providing world class support, delivering 100% customer satisfaction. Our committed customer support team is equipped with the experience and thorough industry and product knowledge to help assist you, whatever the nature of your inquiry.

Whether you are looking to install or commission a single machine or multiple pieces of equipment, our technicians are there to support you at every step of the process. From feasibility and project management to system configuration and training we can handle installation review, start-up and and commissioning of equipment. We offer our customers a complete design to commissioning service.

## SPARE PARTS

At Okada America Inc. we know the importance of quick turnarounds when you have a breakdown on site. Manufacturing insures we always have a supply of spare parts, so if the need should arise; you can keep production on schedule and minimize costly, unscheduled downtime by getting them when you need them.

When it comes to parts, our focus is on quality, service and value. Our spare parts keep your machinery working at peak performance and maximize its resale value. You can be assured that our spare parts have superior durability and ease of fit due to the raw materials and the high quality precision manufacturing.

## AFTERCARE

Receiving your new Pedestal Breaker System is just the beginning of your relationship with us. Our comprehensive after-sales product support reviews installation, and performs system start-up and commissioning of booms, operator and maintenance training, technical trouble shooting and spare parts requirements. We offer the highest level of customer care. If a problem should occur, we stay in contact with each customer until their situation is resolved.

We understand that time is money, and that even with regular evaluations and mechanical audits of your equipment, unanticipated downtime can occur. Our comprehensive service ensures that our customers get the professional support and technical advice they need, when they need it.

## INSTALLATION

We can supervise or review installation and perform start-up and commissioning of our boom systems for our customers. From the primary planning stage, organizing equipment and manpower, to implementing the project on-site and carrying out follow up meetings with your staff, our team can oversee each step of the process to ensure ease of installation. We will keep in close contact with our customers throughout the process to ensure that everyone is fully informed in terms of scope of supply and scheduling. After installing any new boom system, we will conduct rigorous on-site testing to ensure that the system is working to maximum productivity.





HYDRAULIC BREAKERS | COMPACTORS

DEMOLITION CRUSHERS & SHEARS | PULVERIZERS

ROTATING PULVERIZERS | TROMMEL SCREENING BUCKETS

DEMOLITION & MATERIAL GRAPPLES

***COUNT ON OKADA.***

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