

Bulk Materials Handling Metso Balance Crane (MBC)



Systems Designed to

Meet our Clients' Goals

Metso has supplied bulk materials handling systems for over 100 years. Our engineering staff responds to clients' needs at any phase of a project, from planning and conceptual design through start-up, operation and support services.

Committed to meeting our clients' needs, we take into consideration all technical, environmental and financial aspects of each project.

We are a single-source systems supplier with full engineering services and we tailor our services to provide for specific bulk materials handling equipment requirements.

Metso (MBC) Balance Crane

Metso's constituent companies in the bulk materials handling business area were established circa 1890. With a totally comprehensive product line and an unparalleled range of services, Metso clients, large and small, can expect complete solutions from a single-source supplier.

The Metso Balance Crane (**MBC or B-Crane**) has been utilized for over 30 years for many applications:

- Coal fired power plants
- Shipping and transfer terminals
- Scrap handling
- Port container handling

And other applications such as, log, slab, grain and fertilizer handling.



Customers' Success

Duke Energy - Miami Fort Station
North Bend, Ohio



Dominion - Chesterfield Power Station
Chesterfield, Virginia



Constellation Energy - Brandon Shores Power Plant
Glen Burnie, Maryland







Features

- Full Programmable Logic Control (PLC)
- Full Man Machine Interface (MMI)
- Remote Trouble Shooting Hardware
- (27) Pressure Sensors Installed Throughout the Machine
- Grab Pressure Cut-Off Sensor
- Overload Control System
- PLC Counter Balance Control.....
- Hydraulic Tank Level Sensor Programming.....
- (40) Minimes Hydraulic Test Ports.....
- Automatic Hopper Stop.....
- Separate Hydraulic & Electric Rooms within Electric Hydraulic Power Unit (EHU)
- Direct Pump Attachment to Electric Motor.....



Benefits

..... Smooth Control of Machine and All Functions

..... Full Operator Machine Control Resulting in Easy Command and Trouble Shooting

..... 24/7 Remote Problem Solving Assistance

..... Complete and Constant Machine Monitoring for Pressure Check/Continuous Self-Diagnosis

..... Improves Machine Speed and Reduces Machine Heating

..... Facilitates Smooth Operation

..... The Operator Maintains Control Over Hydraulic Fluid Through Machine Programing

..... Easy Warning of Hydraulic Leaks and Hose Collapse

..... Numerous and Convenient Test Connection Ports

..... Crane Calibrated for Specific Hopper Height

..... Avoids Electrical Damage Due to Hydraulic Oil Leaks Caused by Hose Bursts

..... Avoids Dry Coupling, Sealing Issues, Splitter Box Heat-Up and Reduces Noise



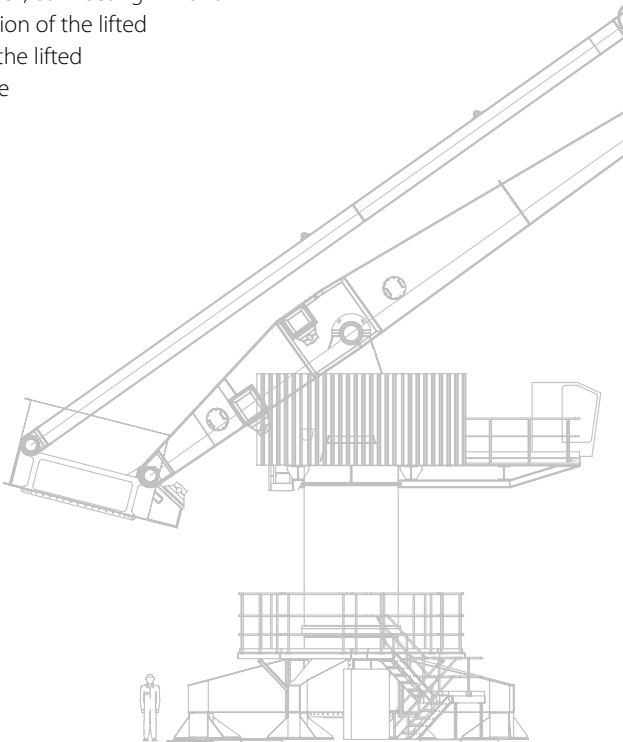


Equipment and Systems

Why a (MBC) Metso Balance Crane?

The system has been designed so that the hydraulic cylinders only have to lift half of the load while the counterweight deals with the other half.

The Metso Balance Crane is based on a unique counterbalancing principle. The boom, stick, connecting link and counterweight form a parallelogram. This ensures that the weight of machine and a portion of the lifted load are balanced at any point in the duty cycle. This results in 50% less energy to move the lifted load. It is up to 80% more energy efficient than comparable hydraulic excavators. Because the crane is so closely balanced about the slewing ring, foundation requirements are minimized. Cranes have routinely been mounted on a single large diameter pile or small cell. The crane is easily adaptable to crawler mounting or on railmounted undercarriages.



Description	Metso Balance Crane Sizes (Fixed Crane)									
	1	2	3	4	5	6	7	8	9	10
Max. Lifted Load (MT)	1.5	2.3	3.8	6	9	15	25	45	67	105
Max. Reach (Meters) (Feet)	14	16	18	20	26	31	38	46	56	70
	46	53	59	67	85	102	125	151	184	230
Nominal Power (kW) (HP)	15	22	30	37	90	160	320	400	600	970
	20	30	40	50	120	215	430	540	800	1300
Footprint (M x M) (Feet x Feet)	4x4		6x6				8x8		12x12	
	13x13		20x20				26x26		40x40	

Scrap
 Bulk
 Special Application/Large Capacity

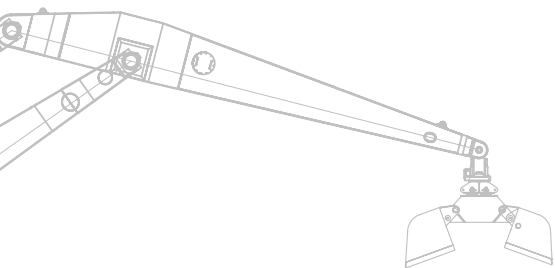
With 10 fixed crane sizes, Metso can adapt the lifted load and reach geometries to provide solutions to any site application.



Service Solutions

Engineering and Life Cycle Services

It's all about improving your business. An effective and proactive maintenance program is a proven method for optimizing the return on your investment.



Optimize the reliability and availability of your equipment or plant.

Metso offers a complete portfolio of solutions.

- Maintenance Strategy and Implementation
- Life Cycle Service Contracts
- Field Service
- Safety, Health and Environment
- Education and Training
- Wear and Spare Parts

Our staff of LCS engineers, backed by extensive archives of OEM, are our strongest assets. Our people are trained to look for the root of the problem. The knowledge we have of similar machines and the latest technology can save you time and offer you new ideas.

We service our own bulk materials handling equipment, as well as that of many of our competitors. Metso's service or field staff personnel remain on site/on call, 24 hours a day, 7 days a week for emergency service. We also offer equipment inspections and personnel training.

Our expertise is based on over a century of experience and today our industry-leading solutions embrace the latest technology and an extensive service solution offering.

Metso
Service Solutions
Expect results!





Expect results

Expect results is our promise to our customers and the essence of our strategy. It is the attitude we share globally. Our business is to deliver results to our customers to help them reach their goals.



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