

SPECIFICATION

STAGE V



MATERIAL HANDLER | JS20MH

Engine power: 97kW (130hp) Operating weight: 20,328 kg – 21,150 kg (excluding attachment)



INDUSTRYPLUS

Our IndustryPlus JS20MH material handler may be our entry level machine but it still offers the very highest levels of performance and productivity in material handling, with high specification, world-beating build quality and unrivalled comfort to help you get the job done.

INDUSTRYPRO

Our top of the range IndustryPro model has been designed and built specifically to get the job done in challenging applications. IndustryPro has a higher standard specification for even greater productivity, versatility and safety.



JUST THE JOB FOR GREATER DURABILITY.

Our JS20MH material handlers have rigid upper frames, providing maximum durability and support, while a closed box section revolving frame increases strength.

JUST THE JOB FOR GREATER COMFORT.

Our IndustryPlus and IndustryPro JS20MH material handlers are designed for comfort, featuring 6 viscous rubber mounts to minimise cab noise and vibration.



JUST THE JOB FOR GREATER EFFICIENCY.

Our new IndustryPlus and IndustryPro JS20MH material handlers are powered by the new jcb DiesellMAX 97kW Stage V compliant engine, for greater efficiency.



JUST THE JOB FOR GREATER SAFETY.

Our IndustryPro JS20MH material handler has additional standard features including full led work lights, road light guards and chevron counterweight.

JUST THE JOB FOR GREATER PERFORMANCE.

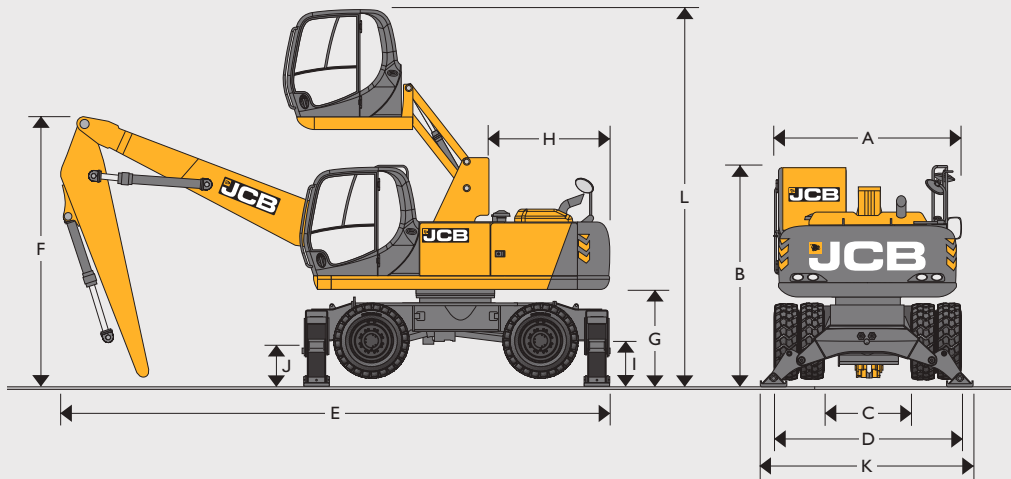
Both our Industry Solutions JS20MH material handlers have joystick proportional auxiliary controls for precision and control when handling material.

SPECIFICATION

JS20MH MATERIAL HANDLER

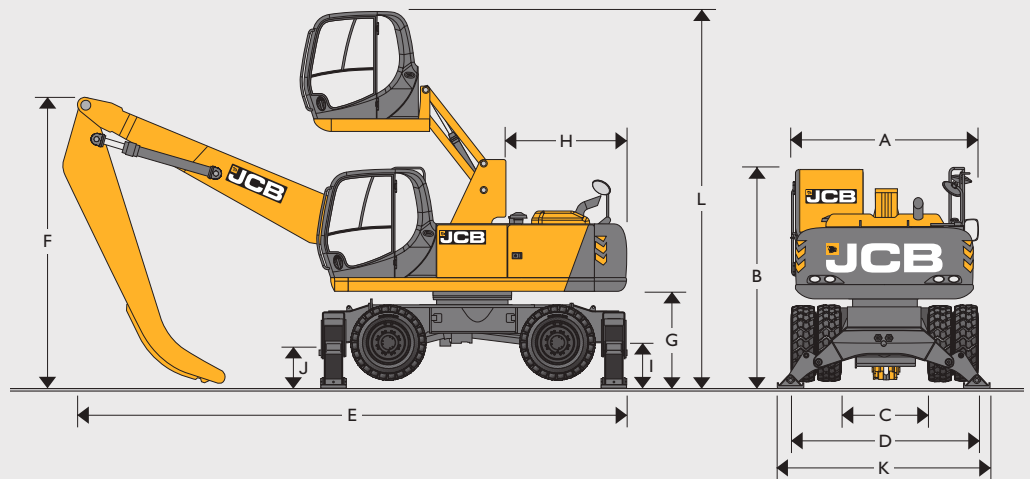
MAX. OPERATING WEIGHT: 21,150kg ENGINE POWER: 97KW (130HP)

STATIC DIMENSIONS - MATERIALS HANDLER



A	Overall width including steps (extra width axles)	mm	2811 (2981)
B	Height over cab (stabilisers raised)	mm	3194
C	Individual width between dual wheels (extra width axles)	mm	1386 (1556)
D	External width over dual wheels (extra width axles)	mm	2500 (2670)
E	Transport length	mm	8256
F	Transport height	mm	3336
G	Clearance under counterweight	mm	1270
H	Tail length	mm	2330
I	Height to axle centre line dual wheels	mm	498
J	Ground clearance	mm	350
K	Full width across stabilisers (down)	mm	3586
	Boom length	mm	5700
	Dipper length	mm	3600
L	Height over raised cab (stabilisers raised)	mm	5340

STATIC DIMENSIONS - SCRAP HANDLER



A	Overall width including steps (extra width axles)	mm	2811 (2981)
B	Height over cab (stabilisers raised)	mm	3194
C	Individual width between dual wheels (extra width axles)	mm	1386 (1556)
D	External width over dual wheels (extra width axles)	mm	2500 (2670)
E	Transport length	mm	8256
F	Transport height	mm	3336
G	Clearance under counterweight	mm	1270
H	Tail length	mm	2330
I	Height to axle centre line dual wheels	mm	498
J	Ground clearance	mm	350
K	Full width across stabilisers (down)	mm	3586
	Boom length	mm	5700
	Dipper length	mm	4000
L	Height over raised cab (stabilisers raised)	mm	5340

SPECIFICATION

JS20MH MATERIAL HANDLER

ENGINE

Model	JCB DIESELMAX 448 Stage V
Type	Water cooled, 4-stroke, 4-cylinder in-line, direct injection, turbocharged diesel.
Rated power (ISO14396)	97kW (130hp)
Piston displacement	4.765 litres
Injection	Electronic injection.
Air filtration	Dry element with secondary safety element and in cab warning indicator.
Cooling	Large capacity radiator.
Starting system	24 volt – 4kW.
Batteries	2 x 12 volt Heavy Duty.
Alternator	24 volt 100 amp.
Refuelling pump	Electric type (optional).

SWING SYSTEM

Drive train	Axial piston motor and planetary reduction final drive
Swing brake	Hydraulic braking plus automatic spring applied disc type parking brake
Swing speed	6 rpm
Swing gear	Large diameter, internally toothed fully sealed grease bath lubricated
Swing lock	Multi-position switchable brake

CHASSIS

Structure	High strength section						
Chassis	Front and rear stabilisers						
Stabilisers	Front or rear pin mount, independently operable – plus combinations						
Transmission	Hydrostatic drive via piston motor and powershift transmission						
Travel speed	<table border="1"> <tr> <th>Creep speed</th> <th>Low ratio</th> <th>High ratio</th> </tr> <tr> <td>2.4kph</td> <td>4.7kph</td> <td>19kph</td> </tr> </table>	Creep speed	Low ratio	High ratio	2.4kph	4.7kph	19kph
Creep speed	Low ratio	High ratio					
2.4kph	4.7kph	19kph					
Axles	Four wheel drive. Front steering axle oscillates						
Axle load capacity	32 tonnes						
Axle oscillation	+/- 8.5 degrees						
Ground clearance	350mm						
Steering	Fully hydraulic system						
Turning radius to outside of tyres	6.3m						
Brakes	All hydraulic, dual circuit hub brake system						
Parking brake	Built into the transmission						

SERVICE CAPACITIES

Fuel tank	litres	310
Engine coolant	litres	19.5
Engine oil	litres	20.4
Swing reduction gear	litres	6
Hydraulic system	litres	124
Hydraulic tank	litres	73
Transmission	litres	2.5
Axle differentials (each)	litres	Rear 12, Front 14
Axle hubs (each)	litres	2.0
DEF tank	litres	31.4

TYRES

Twins	10.00 x 20 solid tyres with spacer ring
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MAIN HYDRAULIC SYSTEM

System	Open centred, negative control hydraulic system with twin variable flow piston pumps providing flow-on-demand for maximum efficiency.
Main pumps	2 variable displacement axial piston type
Maximum flow	2 x 130 l/min
Main circuit pressure	314 bar
With power boost	343 bar
Servo pump	Gear type
Maximum flow	22 l/min
Servo pressure	40 bar

Grab operation

Maximum flow	138 l/min
Maximum pressure for grab ram operation	314 (343) bar

Rotate operation

Maximum flow	36 l/min (gear pump driven circuit) with closed centre
Hydraulic cylinders	With hardened, chromed piston rods and end cushioning on boom, dipper and bucket crowd cylinder

Filtration

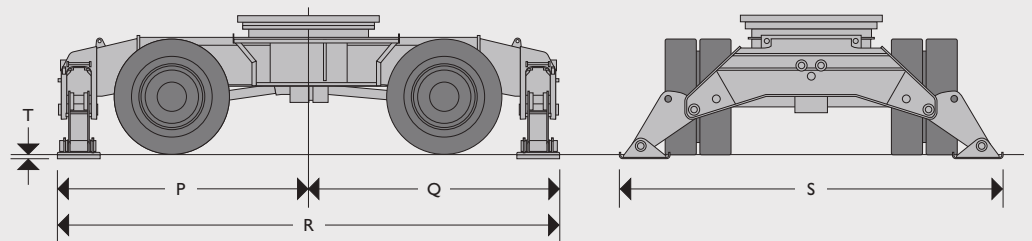
In tank	150 micron, suction strainer
Main return line	10 micron, fibreform element
Pilot line	10 micron, paper element

OPERATING WEIGHTS - HYDRAULIC RAISED CAB

Materials handler	kg	20,937
Scrap handler	kg	20,710

Machine equipped with 5.7m boom and 3.6m straight or 4.0m gooseneck dipper, no attachment. Operator and full fuel tank, and solid tyres.

CHASSIS DIMENSIONS

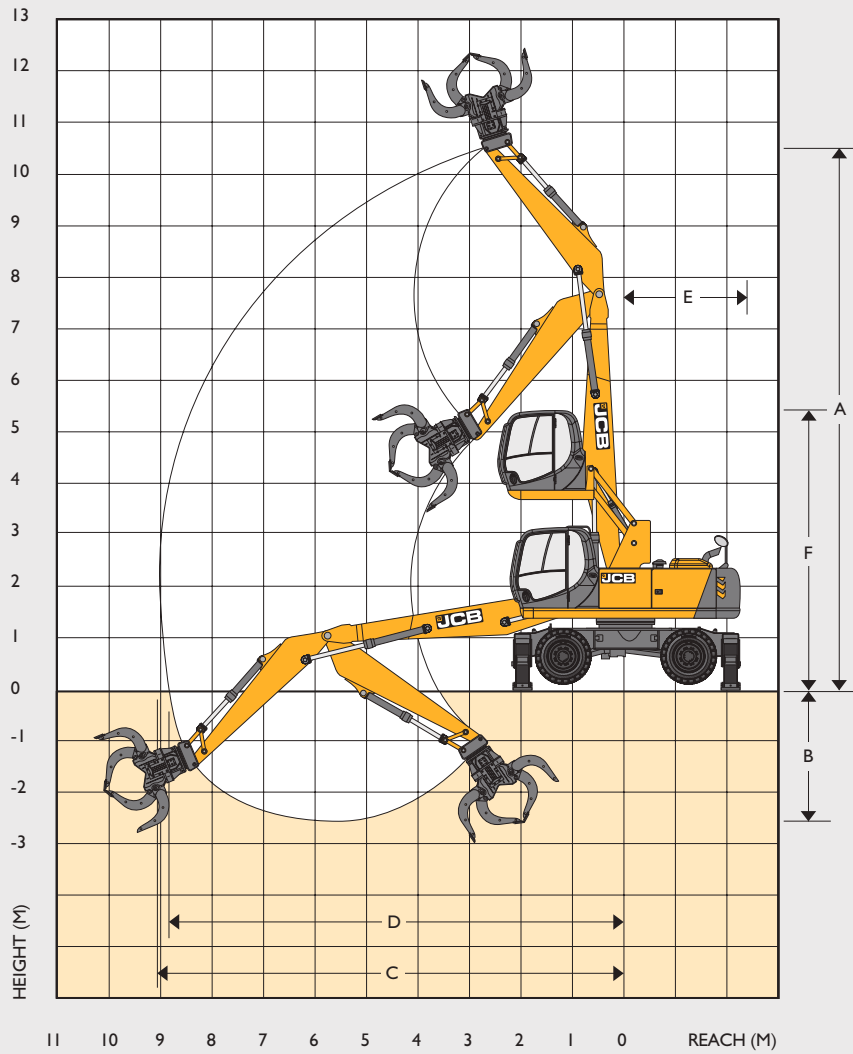


P	Centre of slewing ring to front stabilisers	mm	2351
Q	Centre of slewing ring to rear stabilisers	mm	2351
R	Length including front and rear stabilisers	mm	4701
S	Width over stabilisers (lowered)	mm	3586
T	Stabiliser lift height	mm	41

SPECIFICATION

JS20MH MATERIAL HANDLER

WORKING RANGE

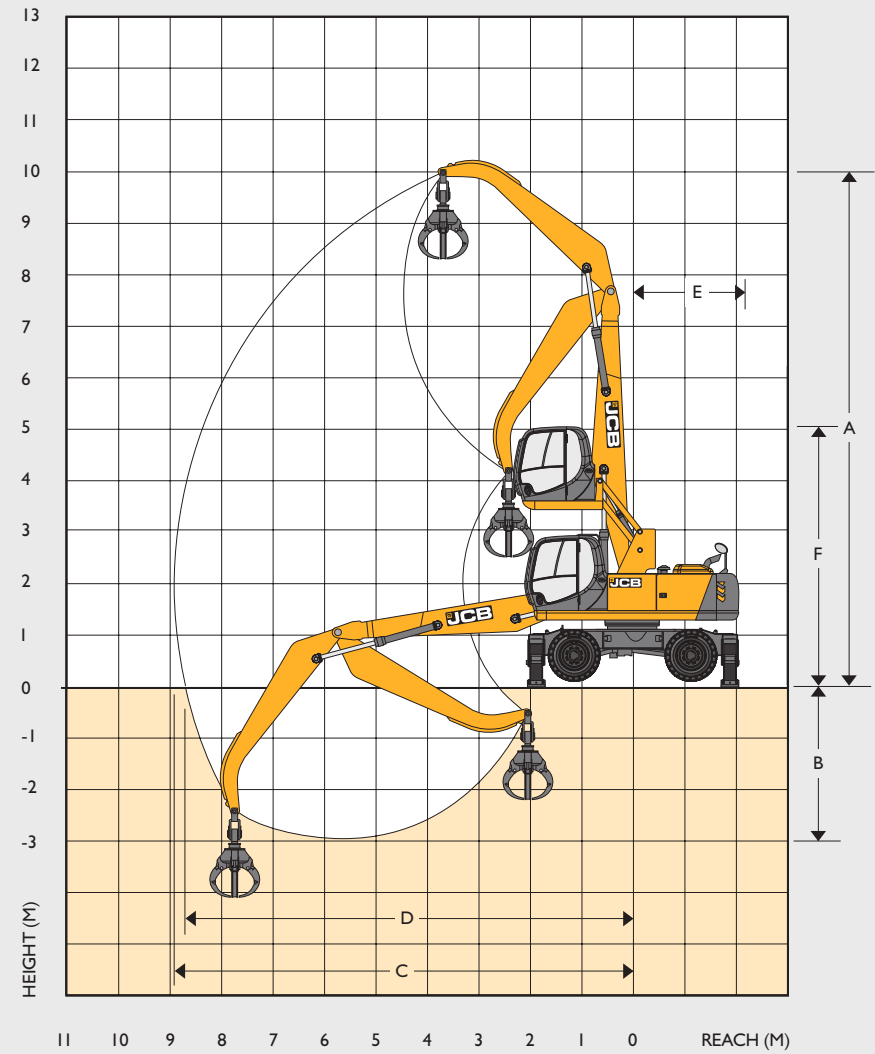


MATERIAL HANDLING

5.7m boom, 3.6m dipper

A	Maximum pin height	mm	10606
B	Maximum pin depth	mm	2493
C	Maximum pin reach	mm	9046
D	Maximum pin reach at ground level	mm	8806
E	Tail swing radius	mm	2330
F	Height over raised cab (stabilisers down)	mm	5380

WORKING RANGE



SCRAP HANDLING

5.7m boom, 4.0m dipper

















A	Maximum pin height	mm	10099
B	Maximum pin depth	mm	2893
C	Maximum pin reach	mm	8933
D	Maximum pin reach at ground level	mm	8690
E	Tail swing radius	mm	2330
F	Height over raised cab (stabilisers down)	mm	5380

SPECIFICATION

JS20MH MATERIAL HANDLER

















LIFT CAPACITIES – 5.7m boom, 3.6m dipper, stabilisers down

JS20MH MATERIALS HANDLER

Reach	3m		4m		5m		6m		7m		8m		9m		Capacity at Maximum Reach			
																	mm	
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm	
9.0m			7067*	7067*	6072*	6072*											5636	
8.0m					6195*	6195*	5586*	5586*								4979*	4979*	6713
7.0m			7079*	7079*	6196*	6196*	5542*	5542*	5017*	4664						4572*	4572*	7503
6.0m			7359*	7359*	6356*	6356*	5614*	5614*	5023*	4653	4500*	3719				4267*	3645	8092
5.0m			7881*	7881*	6645*	6645*	5763*	5763*	5082*	4600	4501*	3706				4190*	3334	8522
4.0m			8566*	8566*	7004*	7004*	5946*	5761	5157*	4522	4504*	3666				3963*	3136	8816
3.0m			9212*	9212*	7332*	7332*	6101*	5607	5206*	4430	4477*	3614				3746*	3019	8989
2.0m					7493*	7202	6155*	5457	5180*	4339	4384*	3562	3570*	2991*		3522*	2968	9047
1.0m			6850*	6850*	7373*	7004	6036*	5333	5029*	4262	4183*	3517				3273*	2978	8992
0m			5707*	5707*	6917*	6880	5960*	5248	4705*	4207	3822*	3488				2978*	2978*	8823
-1.0m			5916*	5916*	6122*	6122*	5081*	5081*	4158*	4158*	3233*	3233*				2791*	2791*	8523
-2.0m			6627*	6627*	4996*	4996*	4176*	4176*	3436*	3436*						3405*	3405*	7682

LIFT CAPACITIES – 5.7m boom, 3.6m dipper, stabilisers raised

JS20MH MATERIALS HANDLER

Reach	3m		4m		5m		6m		7m		8m		9m		Capacity at Maximum Reach			
																	mm	
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm	
9.0m			7067*	6392	6072*	4427										4979*	3594	5636
8.0m					6195*	4509	4579	3317								3764	2702	6713
7.0m			7079*	6445	6196*	4500	4595	3331	3545	2544						3132	2229	7503
6.0m			7359*	6317	6115	4421	4550	3289	3534	2534	2809	1984				2751	1939	8092
5.0m			7881*	6075	5959	4276	4458	3202	3484	2487	2797	1972				2507	1751	8522
4.0m			8193	5726	5745	4078	4331	3084	3410	2417	2759	1936				2350	1629	8816
3.0m			7730	5311	5500	3852	4188	2949	3323	2335	2710	1889				2255	1553	8989
2.0m					5267	3638	4048	2818	3237	2253	2660	1841				2229	1529	9047
1.0m			6850*	4669	5086	3470	3932	2709	3164	2183	2617	1800				2216	1516	8992
0m			5707*	4555	4972	3365	3852	2634	3113	2135	2589	1774				2269	1552	8823
-1.0m			5916*	4523	4924	3322	3814	2598	3089	2113	2584	1769				2381	1632	8523
-2.0m			6627*	4558	4933	3330	3817	2601	3099	2122						2746	1885	7682



Lift capacity front and rear.



















Lift capacity full circle.

- Notes:**
1. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
 2. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
 3. Rated loads marked with an asterisk(*) are limited by hydraulic capacity rather than tipping load.

















SPECIFICATION

JS20MH MATERIAL HANDLER

LIFT CAPACITIES – 5.7m boom, 4.0m dipper, stabilisers down JS20MH MATERIALS HANDLER

Reach	3m		4m		5m		6m		7m		8m		9m		Capacity at Maximum Reach		
																	mm
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
9.0m					5214*	5214*									4660*	4660*	5450
8.0m					6053*	6053*	5193*	5193*							4404*	4404*	6559
7.0m					6064*	6064*	5492*	5492*	4938*	4837					4304*	4304*	7366
6.0m					6223*	6223*	5579*	5579*	5050*	4812					4299*	3905	7965
5.0m			7619*	7619*	6541*	6541*	5750*	5750*	5130*	4751	4605*	3849			4366*	3560	8401
4.0m	10620*	10620*	8346*	8346*	6938*	6938*	5965*	5923	5233*	4665	4632*	3801			4238*	3339	8700
3.0m			9106*	9106*	7335*	7335*	6169*	5760	5320*	4566	4639*	3741			4088*	3203	8874
2.0m			9614*	9614*	7601*	7601*	6290*	5598	5346*	4466	4591*	3680			3937*	3138	8933
1.0m			9619*	9619*	7613*	7613*	6256*	5459	5260*	4378	4450*	3626			3772*	3136	8878
0m	3753*	3753*	7745*	7745*	7301*	6996	6010*	5357	5016*	4312	4171*	3587			3575*	3200	8706
-1.0m	4074*	4074*	6995*	6995*	6649*	6649*	5512*	5300	4568*	4274	3700*	3570			3321*	3321*	8411
-2.0m			6657*	6657*	5661*	5661*	4731*	4731*	3864*	3864*					3144*	3144*	7979

LIFT CAPACITIES – 5.7m boom, 4.0m dipper, stabilisers raised JS20MH MATERIALS HANDLER

Reach	3m		4m		5m		6m		7m		8m		9m		Capacity at Maximum Reach		
																	mm
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
9.0m					5214*	4656									4660*	4045	5450
8.0m					6053*	4714	4774	3508							4120	3017	6559
7.0m					6064*	4697	4774	3508	3715	2714					3413	2483	7366
6.0m					6233*	4615	4722	3459	3692	2692					2989	2158	7965
5.0m			7619*	6322	6156	4469	4624	3367	3635	2637	2941	2116			2716	1945	8401
4.0m	10620*	9401	8346*	5979	5938	4268	4492	3243	3554	2560	2894	2072			2537	1803	8700
3.0m			7993	5561	5685	4034	4340	3101	3459	2471	2838	2017			2426	1713	8874
2.0m			7541	5156	5435	3804	4189	2959	3365	2381	2779	1962			2369	1663	8933
1.0m			7205	4854	5229	3614	4059	2837	3281	2302	2728	1913			2361	1651	8878
0m	3753*	3753*	7014	4682	5091	3486	3964	2748	3219	2243	2691	1877			2405	1677	8706
-1.0m	4074*	4074*	6940	4616	5020	3421	3910	2698	3184	2210	2674	1861			2508	1747	8411
-2.0m			6657*	4625	5009	3410	3898	2686	3180	2206					2694	1877	7979



Lift capacity front and rear.



Lift capacity full circle.

- Notes:**
1. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
 2. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
 3. Rated loads marked with an asterisk(*) are limited by hydraulic capacity rather than tipping load.