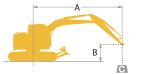
## Lifting Capacities



```
Rating over front
```

Rating over side or 360 degrees

ED160		Standard Arn	n: 9' 4" (2.84 m)	Without buck	et Shoe:24" (60	00 mm)						
$\sim$		5' (1.5	im)	10' (3	3.0 m)	15' (4	.6 m)	20' (6	.1 m)	At. Max	k. reach	
		H	<del>,</del>	H	<del>,</del>	ŀ	<del>,</del>	ŀ	<mark>,</mark>	ŀ	<del>,</del>	Radius
25' (7.6 m)	lb (kg)									*4,470 (2,020)	*4,470 (2,020)	14' 11" (4.55 m)
20' (6.1 m)	lb (kg)					*6,700 (3,030)	*6,700 (3,030)	*3,730 (1,690)	*3,730 (1,690)	*3,700 (1,670)	*3,700 (1,670)	20' 0" (6.09 m)
15' (4.6 m)	lb (kg)					*7,370 (3,340)	*7,370 (3,340)	5,640 (2,550 )	4,930 (2,230)	*3,450 (1,560)	*3,450 (1,560)	22' 10" (6.97 m)
10' (3.0 m)	lb (kg)			*12,680 (*5,750)	*12,680 (*5,750)	8,740 (3,960)	7,420 (3,360)	5,420 (2,450)	4,720 (2,140)	*3,440 (1,560)	3,360 (1,520)	24' 4" (7.43 m)
5' (1.5 m)	lb (kg)			15,850 (7,180)	12,340 (5,590)	8,060 (3,650)	6,800 (3,080)	5,130 (2,320)	4,450 (2,010)	*3,620 (1,640)	3,170 (1,430)	24' 9" (7.55 m)
G. L.	lb (kg)			*14,820 (6,720)	11,560 (5,240)	7,570 (3,430)	6,370 (2,880)	4,900 (2,220)	4,230 (1,910)	3,700 (1,670)	3,230 (1,460)	24' 1" (7.35 m)
-5' (-1.5 m)	lb (kg)	*10,600 (4,800)	*10,600 (4,800)	14,780 (6,700)	11,450 (5,190)	7,390 (3,350)	6,200 (2,810)	4,810 (2,180)	4,150 (1,880)	4,130 (1,870)	3,590 (1,620)	22' 3" (6.80 m)
-10' (-3.0 m)	lb (kg)	*17,820 (8,080)	*17,820 (8,080)	*14,650 (6,640)	11,680 (5,290)	7,480 (3,390)	6,280 (2,840)			5,320 (2,410)	4,580 (2,070)	19' 0″ (5.79 m)

1. Do not attempt to lift or hold any load that is greater than these lifting capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lifting capacities.

2. Lifting capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.

CAB & CONTROL

Two control levers, pilot-operated

3. Arm bucket pin is defined as lift point.

4. The above lifting capacities are in compliance with ISO 10567. They do not exceed 87 % of hydraulic lifting capacity or 75 % of tipping load. Lifting capacities marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.

5. Operator should be fully acquainted with the Operator's and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.

6. Lifting capacities apply to only machines as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

#### STANDARD EQUIPMENT

ENGINE

Engine, ISUZU AR-4JJ1XASK-02, Diesel engine with turbocharger and Intercooler (Stage IV-compliant engine) Auto idle Stop Automatic engine deceleration Batteries (2x 12V - 80 Ah) Starting motor (24V - 5kW), 50 amp alternator Engine oil pan drain cock Double element air cleaner CONTROL

Working mode selector (H-mode, S-mode and ECO-mode)

SWING SYSTEM & TRAVEL SYSTEM Swing rebound prevention system Independent travel Two-speed travel with automatic shift down Sealed & lubricated track links 600mm track shoes Grease-type track adjusters Automatic swing brake 6 way dozer blade

MIRRORS & LIGHTS Rear view mirror and rearview camera Three front working lights Swing flashers

#### **OPTIONAL EQUIPMENT**

Front-guard protective structures (may interfere with bucket action) Rotation piping N&B piping Boom and arm lock valves

Horn, electric Integrated left-right slide-type control box Cab light (interior) Coat hook Large cup holder Detachable two-piece floor mat 7-way adjustable suspension seat Retractable seatbelt Headrest Handrails Intermittent windshield wiper with double-spray washer Skylight Top guard (ISO 10262 : 1998) Tinted safety glass Pull-type front window and removable lower front window Easy-to-read multi-display monitor Automatic air conditioner Emergency escape hammer Radio, AM/FM Stereo with speakers 12V power outlet Refueling pump Travel alarm Pattern changer Belly guard KOMEXS

Note: Standard and optional equipment may vary. Consult your KOBELCO dealer for specifics.

Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. Please consult your nearest KOBELCO distributor for those items you require. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice. Copyright by **KOBELCO CONSTRUCTION MACHINERY CO.,LTD**. No part of this catalog may be reproduced in any manner without notice.

#### **KOBELCO CONSTRUCTION MACHINERY U.S.A. INC.**

22350 Merchants Way, Katy, Texas 77449 http://www.kobelco-usa.com/

Right side camera

Rain visor (may interfere with bucket action)

Cab additional light

Air suspension seat

Inquiries To:

Complies with the latest exhaust emission regulations US EPA EU (NRMM) Tier IV Final Stage IV Regulations



#### Hydraulic Excavator



KOBELCO

Q

ED160 BR-5

60 Branner

A – Reach from swing centerline for arm top B - Arm bucket pin height above/below ground

C – Lifting capacities in pounds (kilograms)

Bucket: Without bucket Dozer blade: up

Relief valve setting: 4,970 psi (34.3 MPa)



Bucket Capacity :

0.50 cu yd SAE

Engine Power :

95.6 hp {71.3 kW} @ 2,000 rpm (SAE NET)

Operating Weight :

36,200 lb {16,400 kg}

# Productive Digging and Large-Capacity Dozing

BRADE

 $\left( \begin{array}{c} \end{array} \right)$ 

ΕΠ

Fit a hydraulic excavator with a large, tilt-angle dozer blade for great performance both digging and dozing—that's the ED160 Blade Runner. Using one machine to cover a whole range of jobs including leveling, digging, pipe laying and backfilling, gives a massive boost in productivity. The tilt-angle blade allows leveling and backfilling on irregular ground. The ED160 Blade Runner features the worry-free SR short rear swing specs, and it has built-in toughness to handle the double tasks of dozing and digging. Its iNDr noise and dust control system cuts engine noise and simplifies maintenance.

Add to that a well-equipped, comfortable cab. Giving fast, efficient digging and large capacity dozing, this one machine is versatility itself on site.

Integrated Noise & Dust Reduction Cooling System

# Low Noise and Easy Maintenance Mean Greater Value Than Ever A New Design Approach Leads to a Revolutionary Double Offset Duct Structure

By reviewing the iNDr configuration, Kobelco achieved both great visibility and a compelling design even though the engine compartment has been enlarged to meet TIER IV Final standards, maintaining the value of iNDr.

iNDr absorbs sound energy by utilizing the engine cooling duct paths of air to minimize noise levels. The new model is equipped with a selective catalytic reduction (SCR) unit, which required a new design with two offset ducts on top. This allows ample space to absorb engine noise, making these new excavators as quiet as previous SR models.





#### The Results Are Exceptional. The Big Merits:

#### "Ultimate Low Noise" is achieved by minimizing sound leakage during operation

Kobelco's "Ultimate Low Noise" system exceeds all noise standards. Noise from the engine and cooling fan is absorbed by the duct, reducing machine's noise signature to the lowest in the industry. Perfect for urban utility renewal projects.



#### Eliminating dust maintains cooling system performance

The high-density 60-mesh\* filters dust in the intake air. This prevents clogging of the cooling system and the air cleaner, which maintains peak performance. The



How the filter catches dust

\* "60-mesh" means that there are 60 holes formed by horizontal and vertical wires in every square inch of filter



## Easy filter maintenance system simplifies cleaning

Daily inspection consists of a visual check of the iNDr filter only. If it looks dirty, it can be removed and washed without special tools.



New Environmentally-Friendly Engine

#### New TIER IV Final-compliant engine

NOx reduction rate

Compared to previous models

KOBELCO

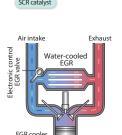
The new type of TIER IV Final-compliant engine is fitted with a diesel oxidation catalyst (DOC) and an SCR device to control emissions without using a diesel particulate filter (DPF). It has a large-capacity DEF/AdBlue tank, extending intervals between fill-ups.



1.14

#### EGR cooler reduces NOx

Cooled exhaust gases from the EGR cooler are mixed with fresh air in the intake. The recirculated air lowers the combustion temperature which reduces NOx.



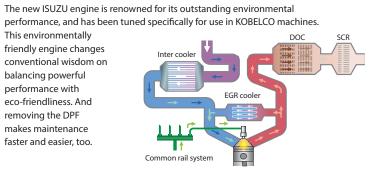


#### Wide, clear view to the rear

Even with the larger engine compartment, the design minimizes hood height, ensuring an excellent direct view to the rear. In addition, the operator can monitor conditions behind the machine with clear, wide-angle images from the rear-view camera, which comes as standard equipment.



#### Newly developed engine raises the bar for construction machinery



PM missions cut:

Particulate matter (PM) is mostly soot resulting from incomplete combustion; Improved combustion efficiency reduces PM emissions.

#### Common rail system

High-pressure injection atomizes the fuel, and more precise injection improves combustion efficiency. This also contributes to better fuel economy.



Common rail systen

# Unbeatable Cost Performance

Greater Work Capacity: **Exceeding Expectations in Productivity** 

#### Improved Fuel Efficiency Contributes to High Performance

#### Superior digging volume

This excavator offers dynamic digging force even as it minimizes fuel consumption rates, achieving class-leading work volume. H-mode with an increased torque setting delivers about 5.2% greater digging volume.

#### Digging volume/hour



## Max. bucket digging force 21,357 lbf {95.0 kN} (ISO 6015) 20,500 lbf {91.2 kN} (SAE J 1179)

Max. arm crowding force 13,100 lbf {58.1 kN} (ISO 6015) 12,700 lbf {56.7 kN} (SAE J 1179)



#### Energy-Efficient System

#### ECO-mode: engineered for economy

Kobelco's ECO-mode maximizes the operating efficiency of the engine and other components to achieve much greater fuel efficiency. Just press a button to choose the operation mode best suited to the task at hand and the working conditions.

#### Optimal operation with three modes

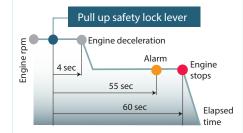


productivity on your toughest jobs node ••• Ideal balance of productivity

and fuel efficiency for a range

of urban engineering projects

ECO-mode • • • Minimum fuel consumption for utility projects and other work that de hands precision



#### AIS (Auto Idle Stop)

If the safety lock lever is lifted up, the engine will stop automatically. This eliminates wasteful idling during standby, saving fuel and reducing CO2 emissions as well.

#### Hydraulic system engineered to reduce energy loss

Kobelco's proprietary hydraulic systems feature hydraulic

design that reduces friction resistance and valves designed for higher efficiency, minimizing energy loss throughout the system.

#### {790 mm} and a depth of 24" {600 mm}. With 44,100 lbf {196 kN} of drawbar pulling force, the ED160 has the power to doze and backfill in all recommended operating positions

Dual Purpose from the Start!

Large capacity dozing

Dimensions:  $10' 8'' \{3,260 \text{ mm}\}$  (width) x  $32'' \{815 \text{ mm}\}$  (height) Working Ranges:

 $2'7''{790mm}$  (height) x  $24''{600mm}$  (depth)

Drawbar Pulling Force: 44,100lbf {196kN}

Dozer Capacity: 2.1cu yd {1.6m<sup>3</sup>}

#### Power, Angle and Tilt capability (PAT)



The 6-way dozer blade has Power, Angle and Tilt capability (PAT) operated from the cab. With a single control lever, the blade can be angled 25 degrees to the left or right for dispensing earth and materials away for the operator's path. The blade also tilts up on the left and right sides by 1'6" {455 mm} for slope grading, culverts and ditches.



#### Single dozer lever A conveniently located single dozer lever controls all blade

hydraulic function.



#### Exclusive dozer circuit

The dedicated dozer circuit has a relief valve setting of 3,970 psi (27.4 MPa). Steady and powerful dozing is unaffected by digging, swinging, travel or other machine function.

#### ED160 Blade Runner is fitted with a large dozing blade 10'8" {3,260 mm} wide and 32" {815 mm} high, and can readily shift large volumes of earth, working to a height of 2'7"

#### Curved track shoes

The curved shape of the crawler shoes improves maneuverability with good grip and gives crisp travel minimizing damage to ground surfaces.

#### Plenty of ground clearance

Excellent ground clearance ensures unhindered travel.



## Great swing power, short cycle times

Powerful swing power and top-class swing speed.

## Swing Speed: 11.0 min<sup>-1</sup> {rpm}

## Swing Torque: 29,400lb-ft {39.9kN}

#### Compact swing radius

Compact design ensures efficient operation on sites where space is limited.



Tail overhang:

# Cab Design That Puts the Operator First

Wide and open, the cab's interior overflows with features that streamline operation



#### Comfort

#### Big roomy cab

The big roomy cab puts the operator first, ensuring a quiet, comfortable work environment.

Wide-open field of view

On the right side, the large single

window has no center pillar, and the whole cab is designed for a wide field

of view, giving the operator a direct view ahead and to the left and right.

Mirrors in three positions make it easy for the operator to see around the

machine.

#### Wide doors and ample head clearance mean smooth entry and

#### exit

The control box and safety lock lever tilt up at a larger angle, and the door handle height is positioned for easy cab entry and exit.



#### Bluetooth installed radio Bluetooth installed to allow connections with iPhones and other devices.

## Safety

#### **ROPS/FOPS** cab

ROPS (Roll-Over-Protective Structure)-compliant cab clears ISO standards (ISO-12117-2: 2008) and ensures greater safety for the operator should the machine tip over.



Standard FOPS, Top Guard Level II. Neets ISO10262)

Mounting brackets for vandalism guards are standard equipment (contact your KOBELCO dealer to fit vandalism front rock guards).











#### More comfortable seat means higher productivity

The cab interior offers a host of operator comforts. The seat guarantees comfort whether on the job or at rest, and everything is ergonomically planned and laid out for smooth, stress-free operation.



#### Equipment designed for comfort and convenience





Powerful automatic air conditioner Also standard is an automatic air conditioner that maintains a comfortable interior environment all year around.

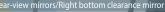








#### Expanded field of view for greater safety







# **Comprehensive Safety And Intuitive Operation**

User-friendly design and enhanced safety means greater efficiency and productivity.



#### Operator-friendly Features Include Controls that Are Easy to See, Easy to Use



#### Multi-display in color

Brilliant colors and graphic displays are easy to recognize on the LCD multi-display in the console. The display shows fuel consumption, maintenance intervals, and more.

- Analog gauge provides an intuitive reading of fuel level and engine water temperature
- ② Green indicator light shows low fuel consumption during operation
- B DEF (Ad Blue) tank level gauge
- 4 Fuel consumption/Switch indicator for rear camera images
- G Digging mode switch
- Monitor display switch 6

#### One-touch attachment mode switch

A simple flick of a switch converts the hydraulic circuit and flow amount to match attachment changes. Icons help the operator to confirm the proper configuration at a glance.



#### Rear view camera





NEW

Optional right side camera





#### Remote monitoring for peace of mind

KOMEXS (Kobelco Monitoring Excavator System) uses cellular communication and internet to relay data, and therefore can be deployed in areas where other forms of communication are difficult. When a hydraulic excavator is fitted with this system, data on the machine's operation, such as operating hours, location, fuel consumption, and maintenance status can be obtained remotely.

#### **Direct Access to Operational Status**

#### Location data

Operating hours

and more profitable.

11 Air, 2011

Date / Time

11 Apr (Sel)

13 Apr (Ho 14 Apr (Tue

Daily report

machines, etc.

•A comparison of operating times of

machines at multiple locations

shows which locations are busier

•Operating hours on site can be accurately recorded, for running

time calculations needed for rental

10 May. 2015

. . . . . . .

•Accurate location data can be obtained even from sites where communications are difficult.





#### Fuel consumption data

•Data on fuel consumption and idling times can be used to indicate improvements in fuel consumption.



Fuel consumption

Work status



Work data



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ing the		28.2191	11.10
40 R		12.5-94	4.4
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Phone in a		4100	1.1%

#### Graph of work content

•The graph shows how working hours are divided among different operating categories, including digging, idling, traveling and optional operations.

#### Maintenance Data and Warning Alerts

#### Machine maintenance data

•Provides maintenance status of separate machines operating at multiple sites.

•Maintenance data is also relayed to KOBELCO service personnel, for more efficient planning of periodic servicina

Hodel	Serial No.	Hater Hater	Realms Oil
MERCELLO-	0.36/0.35	734.10	434
SKIDSRLD D/SKIHIRL	10402-00789	39.10	-421
9423042-9	Y002-10454 0.845.7	390 H	(16)
scinic-e	YOL2 LONG	569.09	
587558-	THE MOUTH		

#### Warning alerts

•This system warns an alert if an anomaly is sensed, preventing damage that could result in machine downtime.

#### Alarm information can be received through E-mail

•Alarm information or maintenance notice can be received through E-mail, using a computer or cell phone.

#### Daily/Monthly reports



•Operational data downloaded onto a computer helps in formulating daily and monthly reports.

#### Security system

#### Engine start alarm

•The system can be set an alarm if the machine is operated outside designated time.

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Engine start alarm outside prescribed work time

#### Area alarm

•It can be set an alarm if the machine is moved out of its designated area to another location.

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Alarm for outside of reset area

# **Proper Maintenance Ensures Peak Efficiency**

Kobelco machines are designed for quick, simple inspection and maintenance.



Machine Information **Display Function** 

Displays only the maintenance information that's needed, when it's needed

Self-diagnostic function provides early-warning detection and display of any possible electrical issues

- Service-diagnostic function makes it easier to check the status of the machine
- Record function of previous maintenance issues including irregular and transient malfunction

Maintenance information display

#### Easy, on-the-spot maintenance



Urea tank Urea filler cap is placed on the step for easy access.



**Engine maintenance** A special lower access step, near the engine, simplifies maintenance



Handhold The handrail on the boom side allows easy to access to the top of the machinery deck.

#### Maintenance work, daily checks, etc., can be done from ground level

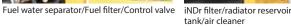
The layout allows for easy access from the ground for many daily checks and regular maintenance tasks.



Engine oil filte









tank/air cleaner





#### Improved Filtration System Reliability

the Next Level.

machines can deal with heavy work loads and

perform in rigorous site environments. From the lifecycle viewpoint, these machines

maintain their value throughout their

service lives.

Clean, contaminant-free fuel and hydraulic fluid are essential to stable performance. The improved filtration systems reduce the risk of mechanical trouble and enhance longevity and durability.

#### Hydraulic fluid filter

Recognized as the best in the industry, our super-fine filter separates out even the smallest particles. New cover prevents contamination when changing filters.

#### Hydraulic fluid filter clog detector

Pressure sensors at the inlet and outlet of the hydraulic fluid filte monitor differences in pressure to determine the degree of clogging If the difference in pressure exceeds a predetermined level, a warning appears on the multi-display, so any contamination can be removed from the filter before it reaches the hydraulic fluid reservoir.







## Double-element air cleaner The large-capacity element features

a double-filter structure that keeps the engine protected under the most demanding job conditions and backed up with an audible filter clog alarm in the operator's cab.





Washer fluid tank is located under the cab floor mat



Engine oil quick-drain valve can be turned without, special tools.



Fuel tank features bottom flange and large drain valve for easy maintenance.

Enlarged fuel filter























The enlarged fuel filter with built-in water separator maximizes filtering performance.

# Quality that Keeps on Shining. Valuable Assets Take Your Business to





#### Easy cleaning saves time



Detachable two-piece floor mat has handles for easy removal The mat's raised edges trap dirt and grit for easy cleaning.





Special crawler frame design makes it easy to clean off mud.



#### Long-interval maintenance

Long-life hydraulic oil reduces cost and labor.

Replaceme 1,000

#### Highly durable super-fine filter

The high-capacity hydraulic oil filter incorporates glass fiber with superior cleaning power and durability

## Specifications

#### Engine

Mode	el ISUZU	AR-4JJ1XASK-02
Туре		Direct injection, water-cooled, 4cycle diesel engine with intercooler, turbocharger (complies with EPA Tier IV Final)
No. of cylinders		4
Bore and stroke		3.75" (95.4 mm) x 4.13" (104.9 mm)
Displacement		183.0 cu in (2.999 L)
Rated power	SAE NET	95.6 hp (71.3 kW)/2,000 rpm
output	Without fan	105.3 hp (78.5 kW)/2,000 rpm
Max. torque	SAE NET	256 lb-ft (347 N·m)/1,800 rpm
Max. torque	Without fan	277 lb-ft (375 N·m)/1,800 rpm

#### Hydraulic System

Pump	
Туре	Two variable displacement pumps + Two gear pumps
Max. discharge flow	2 x 34.3 gpm {30 L/min}, 1 x 5.3 gpm {20 L/min},
Max. discharge now	1 x 14.5 gpm {55 L/min}
Relief valve setting	
Boom, arm and bucket	4,970 psi (34.3 MPa)
Travel circuit	4,970 psi (34.3 MPa)
Swing circuit	4,060 psi (28.0 MPa)
Dozer circuit	3,970 psi (27.4 MPa)
Control circuit	725 psi (5.0 MPa)
Pilot control pump	Gear type
Main control valves	8-spool
Oil cooler	Air cooled type

#### Hydraulic P.T.O

Output	Maximum Pressure	Max Flow US GPM, (lpm)		
Specification	PSI (MPa)	2,000 rpm	1,100 rpm	
N&B	3,550 (24.5)	69 (260)	19 (71.5)	
Rotary	3,550 (24.5)	13.2 (50)	7 (27.5)	

#### Swing System

Swing motor	Axial piston motor
Parking brake	Oil disc brake, hydraulic operated automatically
Swing speed	11.0 rpm (11.0 min <sup>-1</sup> )
Swing torque	29,400 lb-ft (39.9 kN)
Tail swing radius	4' 11" (1,490 mm)
Min. front swing radius	7' 10" (2,400 mm)

#### Bucket Selection Chart

### Travel System

Travel motors	$2 \times$ Axial piston , two speed motors
Parking brakes	Oil disc brake per motors
Travel shoes	40 each side
Travel speed	3.0/1.5 mph (4.8/2.4 km/h)
Drawbar pulling force	44,100 lbf (196 kN) (SAE J 1309)
Gradeability	70 % {35 deg}
Ground clearance	1' 6" (455 mm)

#### Cab & Control

Cab

All-weather, sound-suppressed steel cab mounted on the silicon-sealed suspension mounts and equipped with a heavy, insulated floor mat.

#### Control Two hand levers and two foot pedals for travel Two hand levers for excavating and swing

Electric rotary-type engine throttle

#### Boom, Arm & Bucket

Boom cylinders	3.9" (100 mm) x 3' 7" (1,092 mm)
Arm cylinder	4.5" (115 mm) x 3' 8" (1,120 mm)
Bucket cylinder	3.7" (95 mm) x 3' 0" (903 mm)

#### Dozer Blade

Dozer cylinder	4.5 " (114 mm) x 8.3" (210 mm)
Dimensions	10' 8" (3,260 mm) (width) x 32" (815 mm) (height)
Working ranges	2' 7" (790 mm) (up) x 24" ( 600 mm) (down)
Max. tilt height	1' 6" {445 mm}
Angle	25 degrees

#### Refilling Capacities & Lubrications

Fuel tank	50.2 US gal (190 L)
Cooling system	2.38 US gal (9.0 L)
Engine oil	3.43 US gal (13.0 L)
Travel reduction gear	2 x 1.32 US gal (5.0 L)
Swing reduction gear	0.44 US gal (1.65 L)
Hydraulic oil tank	21.0 US gal (79.3 L) tank oil level
	44.4 US gal (168.0 L) hydraulic system
DEF/AdBlue tank	9.0 US gal (33.9 L)

Bucket Duty	Capacity (SAE) cu yd {m³}	Width in {m}	Bucket Weight Ib {kg}	Arm 9' 4" {2.84 m}
	0.30 {0.229}	18 {0.457}	650 {296}	Н
	0.44 {0.336}	24 {0.609}	720 {327}	Н
General	0.58 {0.443}	30 {0.762}	835 {379}	Μ
General	0.73 {0.558}	36 {0.914}	905 {411}	L
	0.88 {0.672}	42 {1.066}	1,015 {460}	L
	0.30 {0.229}	18 {0.457}	705 {320}	Н
	0.44 {0.336}	24 {0.609}	780 {354}	Н
Heavy Duty	0.58 {0.443}	30 {0.762}	900 {408}	Μ
	0.73 {0.558}	36 {0.914}	975 {442}	L
	0.88 {0.672}	42 {1.066}	1,090 {494}	Х

H: Used with material weight up to 3,000 lb/cu yd (1,780 kg/m<sup>3</sup>) M: Used with material weight up to 2,500 lb/cu yd (1,483 kg/m<sup>3</sup>) L: Used with material weight up to 2,000 lb/cu yd (1,186 kg/m<sup>3</sup>)

X: Not recommended

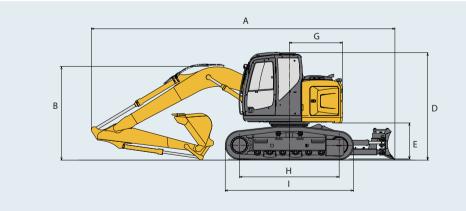
#### Working Ranges

Working Ranges	Unit:ft-in (mm)
MODEL	ED160 Blade Runner
Arm length	9' 4" (2.84 m)
a- Max. digging reach	28' 10" (8.78)
b- Max. digging reach at ground level	28' 3" (8.61)
c- Max. digging depth	19' 1" (5.82)
d- Max. digging height	31' 10" (9.71)
e- Max. dumping clearance	23' 10" (7.26)
f- Min. dumping clearance	7' 9" (2.38)
g- Max. vertical wall digging depth	17' 4" (5.29)
h- Min. swing radius	7' 10" (2.40)
i- Horizontal digging stroke at ground level	15' 6" (4.72)
j- Digging depth for 8' (2.4 m) flat bottom	18' 6" (5.63)
Bucket capacity (SAE heaped)	0.5 cu yd (0.38 m³)

	Digging Force (ISO 6015)	Unit: lbf {kN}	
	Arm length		9' 4" {2.84 m}
	Bucket digging force	SAE	20,500 {91.2}
	bucket digging force	ISO	21,357 {95.0}
Arm cr	Arm crowding force	SAE	12,700 {56.7}
	Annerowang loice	ISO	13,100 {58.1}

#### Dimensions

Arm length		9' 4" {2.84 m}	
А	Overall length	28' 5" {8,650}	
В	Overall height (to top of boom)	10' 3" {3,130}	
С	Overall width of crawler	8' 6" {2,590}	
D	Overall height (to top of cab)	9' 11" {3,030}	
Е	Ground clearance of rear end*	3' 4" {1,010}	
F	Ground clearance*	1' 8" {455}	
G	Tail swing radius	4' 11" {1,490}	



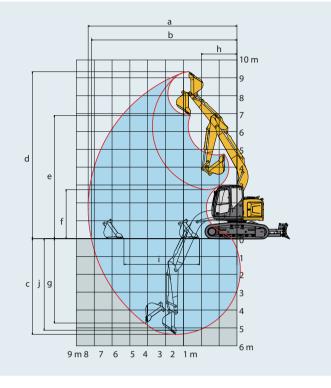
#### Operating Weight & Ground Pressure

In standard trim, with standard boom, 9' 4" {2.84m} arm, and 0.5 cu.yd. {0.38m3} SAE heaped bucket

Shaped		Triple grouser shoes (even height)	
Shoe width	in {mm}	2' 0" {600}	
Overall width of crawler	ft-in {mm}	8' 6" {2,590}	
Ground pressure	psi {kPa}	6.3 {43}	
Operating weight	lbs {kg}	36,200 {16,400}	







#### Unit:ft-in (mm)

Н	Tumbler distance	9' 2" {2,800}
1	Ovrall length of crawler	11' 10" {3,600}
J	Track gauge	6' 6" {1,990}
К	Shoe width	2' 0" {600}
L	Overall width of upperstructure	8' 2" {2,490}
Μ	Overall width (blade wings extended)	10' 8" {3,260}
Ν	Folded blade width	8' 1"{2,460}

\*Without including height of shoe lug.

