# **KOBELCO**

**Hydraulic Excavator** 

KOBELLO

SK75SR-7

SK85CS-7



■ Bucket Capacity:

0.14-0.46 cu.yd. SAE

**■** Engine Power:

70.0 hp {52.3 kW} @ 2,100 rpm (SAE NET)

**■** Operating Weight:

17,840 - 18,700 lbs {8,090-8,490 kg}

SK75SR

19,270-20,100 lbs {8,740-9,120 kg}



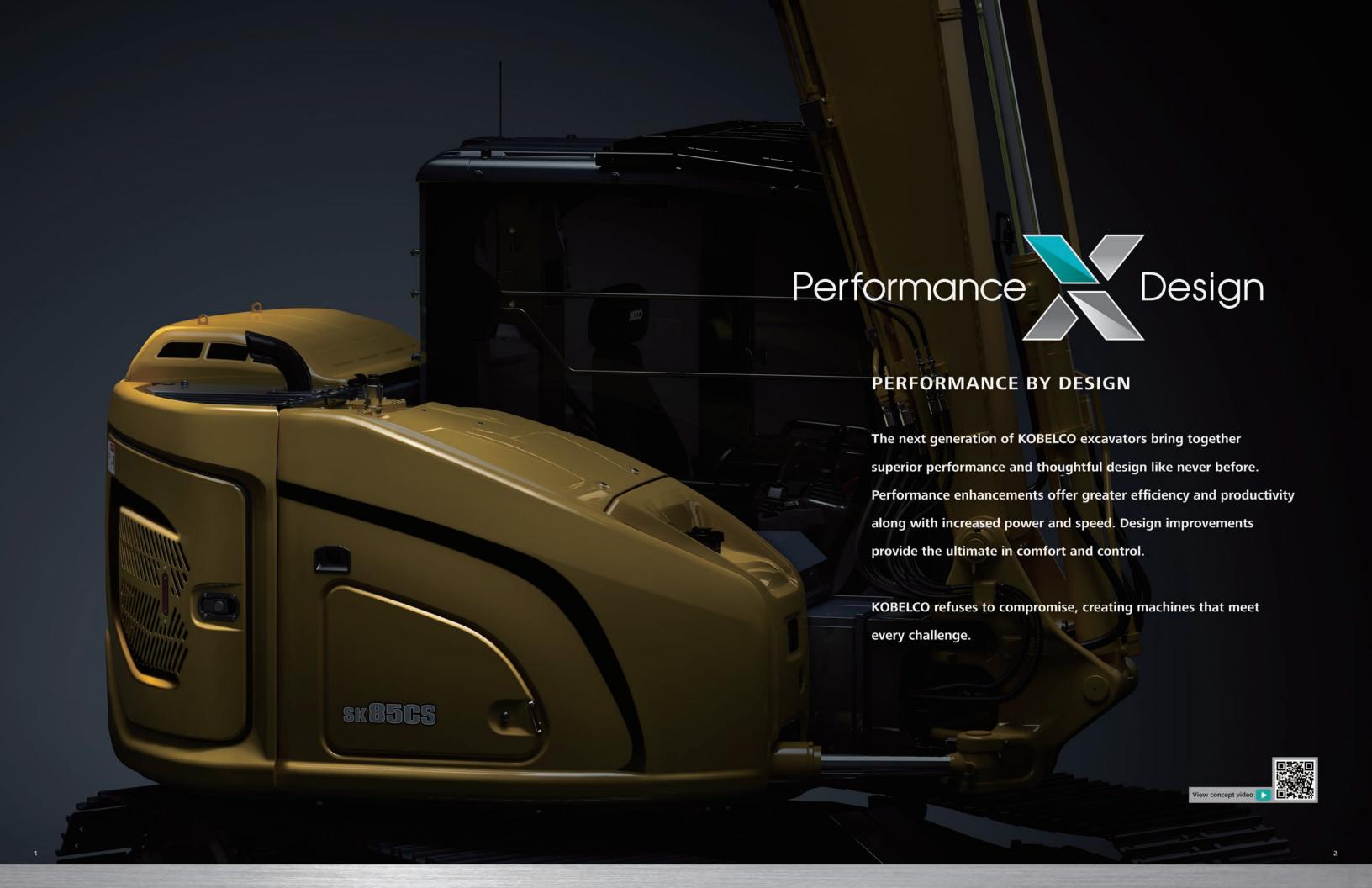
Complies with the latest exhaust emission regulations



Tier IV Final



Japanese Regulations







## **SAFETY ON FULL DISPLAY**

#### **Eagle Eye 3 Camera System**

Our high-resolution, large display shows right, left and rear side camera together. Multiple display allows operator to customize viewing needs to enhance operator awareness and jobsite safety.







#### 10-inch Color Monitor is the Largest in the Industry

The easy-to-operate menu screen and recognizable icons assist the operator to select the most important information needed to ensure jobsite safety and machine control.



#### **Dial in the Right Information**

Simply turn the jog dial to the right or left to select an operational feature, then press the dial to confirm selection.











## PREMIER OPERATOR COMFORTS

#### **Air Ride Suspension Seat**

A GRAMMER seat is offered as optional equipment, which achieves excellent shock absorption and superior ride comfort.

#### **Multi Vent Air Conditioner**

Cool air is blown from multiple outlets toward the operator's body for more comfortable operation.

#### **Ergonomic Lever Angles**

Operators can move levers horizontally without twisting their wrists, reducing fatigue.



# Operating force is 25% reduced (Compared to the previous size model)

#### **Adjustable Height Pilot Valves**

Pilot valve height is manually adjustable to suit operator's preference. (Only for Optional Air ride Suspension Seat.)

#### **LED Interior Light**

Interior lights turn on and off automatically when the door is open or the ignition is turned to the OFF position. This ensures easy entry and exit in the dark.

#### **Left Side Console**

Flip up left console, with integrated pilot control lock lever, tilts for easy entry and exit from the cab.

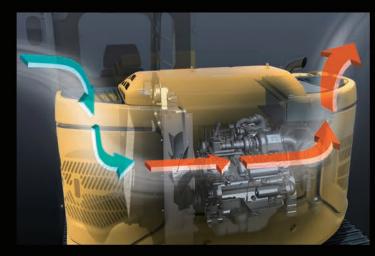




## **ENHANCED MULTI-FUNCTION CAPABILITIES**



## **EASY MAINTENANCE**





A high-density, stainless steel mesh filter, blocks debris from clogging the machine's coolers while promoting easy clean out without tools. The ridges of the corrugated filter allow the air to pass through, and the grooves collect the dust, which prevents the filter from clogging.



iNDr Filter

The corrugated design of the iNDr filter helps prevent the cooling system and air cleaner from clogging with dust while also reducing noise and maintenance to promote a cooler, more reliable hydraulics system and engine.

How the filter catches dust



Standard FOPS overhead cab guard

The standard FOPS guard can be tilted open for easy window cleaning. Meets standard FOPS, Top Guard Level II requirements. (ISO10262)



Ground level storage compartment access



Two-stage air filter







Ground level re-fueling

#### SAFETY AND CONVENIENCE IN EVERY CORNER



Standard built-in rear, left and right side cameras



Swing flashers for a safer job Travel alarm





Seatbelt unfastened indicator



Standard LED lights Bright LED lights ensure visibility even during night work



**Optional front-guards** (mesh or bar)



Increased clearance between the upper body and the track For reduced damage from debris rolled upwards by the track during operation



Adjustable height pilot valves Hands-free phone calls Operator can adjust height of attachment control levers (Only for optional Air Ride





USB charging port / 12 V power Smartphone holder socket



Includes USB port for charging



BS Geo Grip, bolt on rubber



Easily removable bonnet



**Ground level maintenance** 



**Ground level maintenance** Fuel filter / Fuel filter with built-in

## **Standard Equipment**

- Engine, YANMAR 4TNV98CT, Diesel engine with turbocharger and intercooler, Tier IV Final certified
- Auto Idle Stop
- Automatic engine deceleration
- Batteries (2 x 12 V 72 Ah/781 A [CCA])
- Starting motor (24 V 3.5 kW)
- 50 amp alternator
- Engine oil pan drain valve
- Two-stage air filter

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

- **SWING SYSTEM & TRAVEL SYSTEM** ■ Swing rebound prevention system
- Swing flasher
- Two-speed travel with automatic shift down
- Automatic travel priority
- Sealed & lubricated track links
- 23.6" (600 mm) steel track shoes, drilled for bolt on rubber inserts
- Grease-type track adjusters
- Automatic swing brake
- Dozer blade

#### MIRRORS, LIGHTS & CAMERAS

- Rear view mirrors, rear view camera and side view cameras
- Three LED front working lights



#### CAB & CONTROL

- Two control levers, pilot-operated
- Horn, electric
- Pattern changer
- LED door light (interior)
- Coat hook
- Large cup holder
- Detachable two-piece floor mat
- N&B hydraulic circuit
- Retractable 3-inch seatbelt
- Headrest
- Handrails
- Intermittent windshield wiper with double-spray washer
- Skylight
- Tiltable FOPS overhead cab guard (ISO 10262)
- Tinted safety glass
- Pull-type front window and removable lower front window
- Easy-to-read 10-inch LED SCREEN (Multi-display monitor)
- Automatic climate control
- Emergency escape hammer
- Radio (AUX & Bluetooth)
- 12 V converter
- Hands-free telephone
- USB charging port
- Travel alarm
- Lower swivel guard ■ Dozer float function

## **Optional Equipment**

- 17.7" (450 mm) Rubber tracks
- 17.7" (450 mm) BS Geo Grip
- 17.7" (450 mm) Steel track pads with bolt on rubber inserts
- Front-guard (mesh or bar)
- Cab additional light
- Offset boom (Only for SK75SR-7)

- Rotate hydraulic circuit
- Boom and arm hose burst valve
- Bolt on counterweight is available through parts department
- Air Ride Suspension seat

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

#### **Total Support for Machines with Network Speed and Accuracy**



KOMEXS is a telematics system for receiving machine information. Manage your machines anywhere in the world using the Internet. Location, workload and diagnostic data aid business operations.

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

#### **Location Data**

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.

#### **Operating Hours**

A comparison of operating times of machines at multiple locations shows which locations are busier and more profitable. Operating hours on site can be accurately recorded, for running time calculations needed for rental machines, etc.

#### **Graph of Work Content**

The graph shows how working hours are divided among different operating categories, including digging, idling, traveling, and optional operations (N&B).

#### **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 servicing.

#### **Security System**

#### **Engine Start Alarm**

Sends a notification if the engine is started outside of pre-defined hours.

#### Area Alarm

Sends a notification if the machine leaves a pre-defined area.

## **Specifications**



Model	YANMAR 4TNV98CT
Туре	Four-stroke, liquid-cooled, direct injection diesel, turbo charged
No. of cylinders	4
Bore and stroke	3.86" × 4.33" (98 mm × 110 mm)
Displacement	202.5 cu.in (3.318 L)
Dated navyor autaut	70.0 hp {52.3 kW} /2,100 rpm (SAE NET)
Rated power output	72.0 hp {53.7 kW} /2,100 rpm (Without fan)
	216 lb-ft {293 N·m} /1,365 rpm (SAE NET)
Max. torque	218 lb-ft {296 N·m} /1,365 rpm (Without fan)

## I Hydraulic System

Pump				
Туре	Variable displacement piston pumps + one gear pump			
Max. discharge flow	2 × 19.2 gpm (2 × 72.5 L/min) 1 × 5.0 gpm (1 × 19 L/min)			
Relief valve setting				
Boom, arm and bucket	4,260 psi {29.4 MPa}			
Travel circuit	4,260 psi {29.4 MPa}			
Swing circuit	3,550 psi {24.5 MPa}			
Control circuit	725 psi {5.0 MPa}			
Pilot control pump	Gear type			
Main control valves	12-spool			
Oil cooler	Air cooled type			

## **I Swing System**

Swing motor	One fixed displacement piston motor
Brake	Hydraulic; locking automatically when the swing control lever is in the neutral position
Parking brake	Wet multiple plate
Swing speed	11.5 rpm
Swing torque	12,500 lb-ft {17 kN·m}
Tail swing radius	4'6" {1,380 mm}

## I Hydraulic P.T.O.

Output Specification	Maximum Pressure	Max. Flow US GPM, (lpm) (0 pressure)
	PSI (Mpa)	2,100 rpm
N&B	4,770 (32.9)	38 (145)
Rotary	3,130 (21.6)	12.7 (48)

## I Travel System

Travel motors	Variable displacement piston, two-speed motors
Travel brakes	Hydraulic brake
Parking brakes	Wet multiple plate
Travel shoes	39 each side
Travel speed	1.7/3.1 mph {2.7/5 km/h}
Drawbar pulling force	17,300 lbs {77 kN}
Gradeability	58% {30°}

#### I Cab & Control

All-weather, sound-suppressed steel cab mounted on silicon-sealed viscous 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	

#### I Boom, Arm & Bucket

Boom cylinders	4.3" {110 mm} × 3' {916 mm}
Arm cylinder	3.7" {95 mm} × 2'9" {839 mm}
Bucket cylinder	3.3" {85 mm} × 2'6" {762 mm}

#### I Dozer Blade

Dozer cylinder	5.3" {135 mm} × 5.1" {129 mm}
Dimension	8'0" {2,450 mm} (width) × 18" {460 mm} (height)
Working range	14" {360 mm} (up) × 10" {250 mm} (down)

## ■ Refilling Capacities & Lubrications

Fuel tank	31.7 U.S.gal {120 L}
Cooling system	3.4 U.S.gal {12.8 L}
Engine oil	3.1 U.S.gal {11.8 L}
Travel reduction gear	2 × 0.3 U.S.gal {1.3 L}
Swing reduction gear	0.4 U.S.gal {1.5 L}
(forder off and soul)	11.6 U.S.gal {44 L}: Tank oil level
Hydraulic oil tank	22.2 U.S.gal {84 L}: Hydraulic system

#### Bucket Selection Chart

Developed Association	Bucket Capacity	Bucket Width	Bucket Weight	Arm ft-in (m)
Bucket type	cu.yd. (SAE) {m³}	inches {m}	lbs {kg}	7'0" {2.13 m}
Standard	0.14 {0.11}	16" {0.4}	330 {150}	Н
	0.18 {0.14}	16" {0.41}	350 {160}	Н
Heavy Duty	0.23 {0.18}	19" {0.48}	370 {170}	Н
neavy Duty	0.29 {0.22}	23" {0.58}	420 {190}	Н
	0.37 {0.28}	27" {0.68}	460 {210}	Н

H – Used with material weight up to 3,000 lbs/cu.yd. (1,780 kg/m³)

## Working Ranges

Boom	12'6" {3.82 m}
Arm Range	7′0″ {2.13 m}
a-Max. digging reach	22'7" {6.88}
b-Max. digging reach at ground level	22'2" {6.76}
c- Max. digging depth	15'0" {4.58}
d-Max. digging height	25'5" {7.75}
e-Max. dumping clearance	18'7" {5.67}
f- Min. dumping clearance	7'2" {2.19}
g-Max. vertical wall digging depth	13'7" {4.14}
h-Min. swing radius	7'0" {2.13}
i- Horizontal digging stroke at ground level	10'6" {3.21}
j- Digging depth for 8' (2.4 m) flat bottom	14'2" {4.31}

#### Digging Force (ISO 6015)

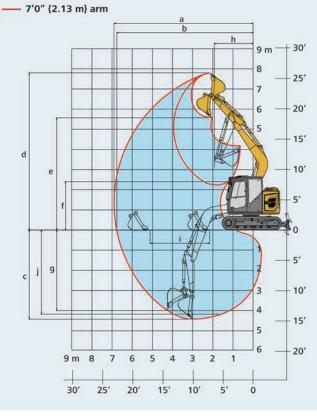
Digging Force (ISO 6015	Unit: lbs {kN}	
Arm length		7′0″ {2.13 m}
Duelot dissipa force	SAE	14,070 {62.6}
Bucket digging force	ISO	15,900 {70.9}
New controllers force	SAE	7,700 {34.2}
Arm crowding force	ISO	7 000 (25.3)

7,900 {35.2}

#### **I** Dimensions

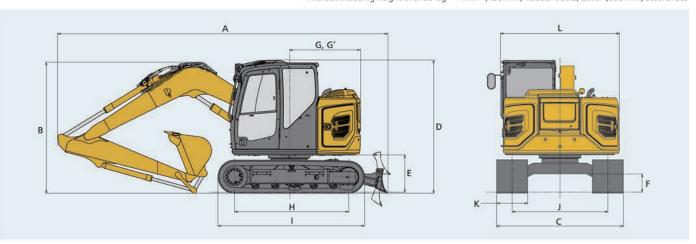
Ar	m length	7′0″ {2.13 m}		
Α	Overall length	20'10" {6,360}		
В	Overall height (to top of boom)	8'4" {2,540}		
c	Overall width (23.6" (600 mm) shoes)	8'0" {2,450}		
D	Overall height (to top of cab)	8'5" {2,570}		
E	Ground clearance of rear end*	2'4" {720}		
F	Ground clearance*	14" {355}		
G	Tail swing radius	4'6" {1,380}		
G'	Distance from center of swing to rear end	4'6" {1,380}		

#### Unit: ft-in {m}



н	Tumbler distance	7′3″ {2,210}
ı	Overall length of crawler	9'3" {2,830}
J	Track gauge	6'1" {1,850}
K	Shoe width**	17.7" {450}/23.6" {600}
L	Overall width of upperstructure	7'7" {2,300}

\*Without including height of shoe lug \*\*17.7" {450 mm} Rubber tracks, 23.6" {600 mm} Steel shoes



#### I Operating Weight & Ground Pressure

In standard trim, with standard boom, 7'0" {2.13 m} arm, and 0.29 cu.yd. {0.22 m³} ISO heaped bucket

Shaped		Rubber tracks	Steel tracks
Shoe width	ft-in (mm)	17.7" {450}	23.6" {600}
Overall width of crawler	ft-in {mm}	7'7" {2,300}	8'0" {2,450}
Ground pressure	psi {kPa}	5.28 (36)	4.2 (29)
Operating weight	lbs {kg}	17,840 {8,090}	18,700 {8,490}

## **Offset Boom Specifications**



Unit: ft-in {m}

## **I Working Ranges**

Boom	12'6" {3.82 m}					
Arm	5′9″ {1.76 m}					
Range	Max. left	Center	Max. right			
a-Max. digging reach	20'1" {6.11}	21'3" {6.48}	19'0" {5.78}			
b-Max. digging reach at ground level	19'7" {5.97}	20'10" {6.34}	18'5" {5.62}			
c-Max. digging depth	12'11" {3.94}	14'1" {4.30}	11'10" {3.60}			
d-Max. digging height	23'6" {7.17}	24'7" {7.49}	22'7" {6.88}			
e-Max. dumping clearance	16'9" {5.11}	17'10" {5.43}	15'9" {4.81}			
f- Min. dumping clearance	7'0" {2.13}	8'0" {2.45}	6'0" {1.83}			
g-Max. vertical wall digging depth	9'9" {2.96}	9'11" (3.30)	8'8" {2.64}			
h-Min. swing radius	4'11" {1.49}	13'0" {1.21}	6'8" {2.04}			
i- Horizontal digging stroke at ground level	10'2" {3.10}	10′1″ {3.08}	10'2" {3.09}			
j- Digging depth for 8' (2.4 m) flat bottom	11'8" {3.55}	12'10" {3.92}	10'6" {3.21}			

#### Digging Force (ISO 6015) Unit: lbs {kN}

Arm length		5′9″ {1.76 m}		
Design display force	SAE	14,070 {62.6}		
Bucket digging force	ISO	15,900 {70.9}		
	SAE	8,480 {37.7}		
Arm crowding force	ISO	8,860 {39.4}		

Unit: ft-in {mm}

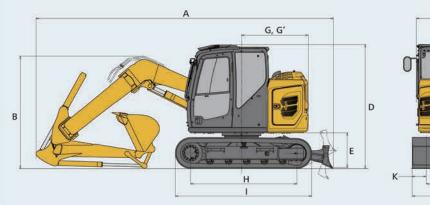
# \_\_\_\_ 5'9" {1.76 m} arm center

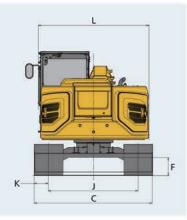
#### **I** Dimensions

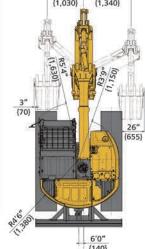
Aı	rm length	5′9″ {1.76 m
Α	Overall length	20'3" {6,160}
В	Overall height (to top of boom)	7'8" {2,330}
C	Overall width (23.6" {600 mm} shoes)	8'0" {2,450}
D	Overall height (to top of cab)	8'5" {2,570}
E	Ground clearance of rear end*	2'4" {720}
F	Ground clearance*	14" {355}

G	Tail swing radius	4'6" {1,380}
G'	Distance from center of swing to rear end	4'6" {1,380}
Н	Tumbler distance	7'3" {2,210}
1	Overall length of crawler	9'3" {2,830}
1	Track gauge	6'1" {1,850}
K	Shoe width**	17.7" {450}/23.6" {600}
L	Overall width of upperstructure	7'7" {2,300}

\*Without including height of shoe lug \*\*17.7" {450 mm} Rubber tracks, 23.6" {600 mm} Steel shoes





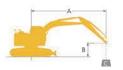


# ■ Operating Weight & Ground Pressure In standard trim, with standard boom, 5'9" {1.76 m} arm, and 0.29 cu.yd. {0.22 m³} ISO heaped bucket

Shaped		Rubber tracks	Steel tracks	
Shoe width	ft-in {mm}	17.7" {450}	23.6" {600}	
Overall width of crawler	ft-in {mm}	7'7" {2,300}	8'0" {2,450}	
Ground pressure	psi {kPa}	5.52 {38}	4.34 (30)	
Operating weight	lbs {kg}	18,678 {8,470}	19,555 {8,870}	

## **Lifting Capacities**







A - Reach from swing centerline B - Height above/below ground

C - Lifting capacities in pounds {kg} Relief valve setting: 4,260 psi {29.4 MPa}

SK75SR		Arm: 7'0" {2	2.13 m) No buck	cet Standard co	unterweight Sh	noe: 17.7" {450 r	nm} Rubber trac	cks Dozer: blade	e down	
	А	5′ {1	.5 m}	10' {3	3.0 m}	15′ {-	4.6 m}	At max	x. reach	
В			-	4	<b>—</b>	<u> </u>	-	4	-	Radius
20' {6.1 m}	lb {kg}			*5,020 {2,270}	*5,020 {2,270}			*4,350 {1,970}	*4,350 {1,970}	10'11"{3.34 m
15' {4.6 m}	lb {kg}			*4,660 {2,110}	*4,660 {2,110}	*4,310 {1,950}	3,610 {1,630}	*3,560 {1,610}	3,240 {1,460}	15'11"{4.85 m
10' {3.0 m}	lb {kg}			*5,750 {2,600}	*5,750 {2,600}	*4,520 {2,050}	3,520 {1,590}	*3,420 {1,550}	2,540 {1,150}	18'4"{5.59 m}
5' {1.5 m}	lb {kg}			*7,430 {3,370}	6,050 {2,740}	*5,000 {2,260}	3,320 {1,500}	*3,570 {1,610}	2,300 {1,040}	19'2"{5.84 m}
G.L.	lb {kg}			*7,990 {3,620}	5,640 {2,550}	*5,190 {2,350}	3,160 {1,430}	*3,930 {1,780}	2,330 {1,050}	18'7"{5.68 m}
-5' {-1.5 m}	lb {kg}	*7,340 {3,320}	*7,340 {3,320}	*7,000 {3,170}	5,560 {2,520}	*4,530 {2,050}	3,110 {1,410}	*3,720 {1,680}	2,710 {1,220}	16'8"{5.08 m}
-10' {-3.0 m}	lb {kg}	*5,890 {2,670}	*5,890 {2,670}	*4,180 {1,890}	*4,180 {1,890}			*2,910 {1,310}	*2,910 {1,310}	12'6"{3.81 m}

SK75SR		Arm: 7'0" {2	2.13 m) No buck	et Standard co	unterweight Sh	noe: 23.6" {600 i	nm) Steel tracks	Dozer: blade d	own	
	А	5' {1	.5 m}	10' {3	3.0 m}	15′ {	4.6 m}	At max	c. reach	
В			<del></del>	4	<del></del>	1	4	1	-	Radius
20' {6.1 m}	lb {kg}			*5,020 {2,270}	*5,020 {2,270}			*4,350 {1,970}	*4,350 {1,970}	10'11"{3.34 m
15' {4.6 m}	lb {kg}			*4,660 {2,110}	*4,660 {2,110}	*4,310 {1,950}	3,770 {1,710}	*3,560 {1,610}	3,390 {1,530}	15'11"{4.85 m
10' {3.0 m}	lb {kg}			*5,740 {2,600}	*5,740 {2,600}	*4,520 {2,050}	3,680 {1,660}	*3,420 {1,550}	2,660 {1,200}	18'4"{5.59 m]
5' {1.5 m}	lb {kg}			*7,430 {3,370}	6,320 {2,860}	*5,000 {2,260}	3,480 {1,570}	*3,570 {1,610}	2,420 {1,090}	19'2"{5.84 m}
G.L.	lb {kg}			*7,990 {3,620}	5,920 {2,680}	*5,190 {2,350}	3,320 {1,500}	*3,930 {1,780}	2,450 {1,110}	18'8"(5.69 m)
–5′ {–1.5 m}	lb {kg}	*7,340 {3,320}	*7,340 {3,320}	*7,000 {3,170}	5,830 {2,640}	*4,530 {2,050}	3,270 {1,480}	*3,720 {1,680}	2,850 {1,290}	16'8"{5.08 m
-10' {-3.0 m}	lb {kg}	*5,900 {2,670}	*5,900 {2,670}	*4,180 {1,890}	*4,180 {1,890}			*2,910 {1,310}	*2,910 {1,310}	12'6"{3.81 m]

SK75SR Of	set	Arm: 5'9" {1	.76 m) No buck	cet Standard co	unterweight Sh	oe: 17.7" {450 r	nm) Rubber trad	ks Dozer: blade	down	
	А	5' {1	.5 m}	10' {3	3.0 m}	15′ {-	4.6 m}	At max	c. reach	
В	<u> </u>		<del>#</del>	4	<b>#</b>	1	<del></del>	<u> </u>	-	Radius
20' {6.1 m}	lb {kg}							*6,240 {2,830}	*6,240 {2,830}	8'4"{2.56 m}
15' {4.6 m}	lb {kg}			*5,420 {2,450}	*5,420 {2,450}			*4,830 {2,190}	3,720 {1,680}	14'3"{4.36 m}
10' {3.0 m}	lb {kg}			*6,480 {2,930}	6,460 {2,930}	*4,870 {2,200}	3,300 {1,490}	*4,540 {2,050}	2,650 {1,200}	16'11"{5.16 m}
5' {1.5 m}	lb {kg}			*7,920 {3,590}	5,460 {2,470}	*5,240 {2,370}	3,010 {1,360}	*4,440 {2,010}	2,280 {1,030}	17'10"{5.43 m}
G.L.	lb {kg}			*8,000 {3,620}	4,940 {2,240}	*5,250 {2,380}	2,780 {1,260}	*4,380 {1,980}	2,280 {1,030}	17'3"{5.26 m}
-5' {-1.5 m}	lb {kg}	*8,470 {3,840}	*8.470 {3,840}	*6,630 {3,000}	4,910 {2,220}	*4,230 {1,910}	2,760 {1,250}	*4,160 {1,880}	2,730 {1,230}	15'1"{4.61 m}
-10' {-3.0 m}	lb {kg}			*3,110 {1,410}	*3,110 {1,410}			*2,950 {1,330}	*2,950 {1,330}	10'4"{3.15 m}

SK75SR Of	set	Arm: 5'9" {1	.76 m} No buc	ket Standard c	ounterweight !	Shoe: 23.6" {600	mm} Steel tra	cks Dozer: blad	e down	
	А	5′ {1.5 m}		10' {3.0 m}		15′ {4.6 m}		At max. reach		
В			<b>⇔</b>	<del></del>	1	-	1	-	Radius	
20' {6.1 m}	lb {kg}							*6,240 {2,830}	*6,240 {2,830}	8'4"{2.56 m}
15' {4.6 m}	lb {kg}			*5,420 {2,450}	*5,420 {2,450}			*4,830 {2,190}	3,890 {1,760}	14'3"{4.35 m
10' {3.0 m}	lb {kg}			*6,480 {2,930}	*6,480 {2,930}	*4,870 {2,200}	3,460 {1,560}	*4,540 {2,050}	2,790 {1,260}	16'11"{5.16 m
5' {1.5 m}	lb {kg}			*7,920 {3,590}	5,730 {2,590}	*5,240 {2,370}	3,170 {1,430}	*4,440 {2,010}	2,410 {1,090}	17'10"{5.43 m
G.L.	lb {kg}			*8,000 {3,620}	5,210 (2,360)	*5,250 {2,380}	2,940 {1,330}	*4,380 {1,980}	2,410 {1,090}	17'3"{5.26 m
-5' {-1.5 m}	Ib {kg}	*8,470 {3,840}	*8,470 {3,840}	*6,630 {3,000}	5,180 {2,340}	*4,230 {1,910}	2,920 {1,320}	*4,160 {1,880}	2,890 {1,310}	15'1"{4.61 m
-10' {-3.0 m}	lb {kg}		III	*3,120 {1,410}	*3,120 {1,410}	77		*2,950 {1,330}	*2,950 {1,330}	10'4"{3.15 m

- 1. Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.
- 2. Lift 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.
- 3. Bucket pin attachment point 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. Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

## **Specifications**



Model	YANMAR 4TNV98CT			
Туре	Four-stroke, liquid-cooled, direct injection diesel, turbo charged			
No. of cylinders	4			
Bore and stroke	3.86" × 4.33" (98 mm × 110 mm)			
Displacement	202.5 cu.in (3.318 L)			
Rated power output	70.0 hp {52.3 kW} /2,100 rpm (SAE NET)			
Rated power output	72.0 hp {53.7 kW} /2,100 rpm (Without fan)			
May taraus	216 lb-ft {293 N·m} /1,365 rpm (SAE NET)			
Max. torque	218 lb-ft {296 N·m} /1,365 rpm (Without fan)			

## I Hydraulic System

Pump		
Туре	Variable displacement piston pumps + one gear pump	
Max. discharge flow	2 × 19.2 U.S.gpm (2 × 72.5 L/min) 1 × 5.0 U.S.gpm (1 × 19 L/min)	
Relief valve setting		
Boom, arm and bucket	4,260 psi {29.4 MPa}	
Travel circuit	4,260 psi {29.4 MPa}	
Swing circuit	3,550 psi {24.5 MPa}	
Control circuit	725 psi {5.0 MPa}	
Pilot control pump	Gear type	
Main control valves	13-spool	
Oil cooler	Air cooled type	

## **I** Swing System

Swing motor	One fixed displacement piston motor		
Brake	Hydraulic; locking automatically when the swing control lever is in the neutral position		
Parking brake	Wet multiple plate		
Swing speed	11.5 rpm		
Swing torque	12,500 lb-ft {17 kN·m}		
Tail swing radius	5'5" {1,650 mm}		

## I Hydraulic P.T.O.

Output Specification	Maximum Pressure	Max. Flow US GPM, (ipm)	
	PSI (Mpa)	2,100 rpm	
N&B	4,770 (32.9)	38 (145)	
Rotary	3,130 (21.6)	12.7 (48)	

## I Travel System

Travel motors	Variable displacement piston, two-speed motors		
Travel brakes	Hydraulic brake		
Parking brakes	Wet multiple plate		
Travel shoes	39 each side		
Travel speed	1.7/3.1 mph {2.7/5 km/h}		
Drawbar pulling force	17,200 lbs {77 kN}		
Gradeability	58% {30°}		

#### I Cab & Control

#### Cab

All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous 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	

#### I Boom, Arm & Bucket

Boom cylinders	4.3" {110 mm} × 3' {916 mm}
Arm cylinder	3.7" {95 mm} × 2' 9" {839 mm}
Bucket cylinder	3.3" {85 mm} × 2' 6" {762 mm}

#### **I** Dozer Blade

Dozer cylinder	5.7" {145 mm} × 7.4" {189 mm}			
Dimension	8'0" {2,450 mm} (width) × 18" {460 mm} (height)			
Working range	20" {500 mm} (up) × 20" {500 mm} (down)			

## **■** Refilling Capacities & Lubrications

Fuel tank	31.7 U.S.gal {120 L}		
Cooling system	3.4 U.S.gal {12.8 L}		
Engine oil	3.1 U.S.gal {11.8 L}		
Travel reduction gear	2 × 0.3 U.S.gal {1.3 L}		
Swing reduction gear	0.4 U.S.gal {1.5 L}		
(1. d 15 11 1.	11.6 U.S.gal {44 L}: Tank oil level		
Hydraulic oil tank	22.2 U.S.gal {84 L}: Hydraulic system		

#### **I Bucket Selection Chart**

Programmes	Bucket Capacity	Bucket Width	Bucket Weight	<b>Arm ft-in</b> (m) <b>7'0"</b> {2.13 m}
Bucket type	cu.yd. (SAE) {m³}	inches {m}	lbs {kg}	
Standard	0.14 {0.11}	16" {0.4}	330 {150}	Н
	0.18 {0.14}	16" {0.41}	350 {160}	Н
Heavy Duty	0.23 {0.18}	19" {0.48}	370 {170}	Н
neavy Duty	0.29 {0.22}	23" {0.58}	420 {190}	H
	0.37 {0.28}	27" {0.68}	460 {210}	Н

H – Used with material weight up to 3,000 lbs/cu.yd. (1,780 kg/m³)

# SKEFFS

## Working Ranges

	Onit. It in this	
Boom	11'6" {3.50 m}	
Range	7'0" {2.13 m}	
a-Max. digging reach	24'7" {7.50}	
b-Max. digging reach at ground level	24'1" {7.34}	
c- Max. digging depth	14'7" {4.44}	
d-Max. digging height	23'9" {7.23}	
e-Max. dumping clearance	17'0" {5.18}	
f- Min. dumping clearance	5'7" {1.70}	
g-Max. vertical wall digging depth	12'4" {3.75}	
h-Min. swing radius	9'2" {2.80}	
i- Horizontal digging stroke at ground level	11'6" {3.51}	
i Digging donth for 9' /2 4 m) flat bottom	12'5" [4 12]	

#### Digging Force (ISO 6015)

Un	it:	lbs -	(k
011	165	103	fr.

Unit: ft-in (m)

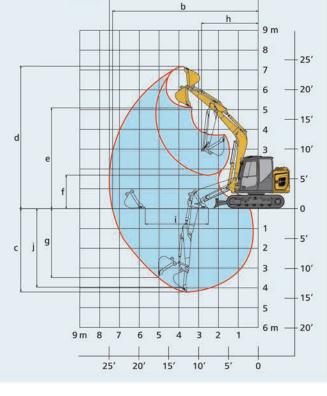
--- 7'0" {2.13 m} arm

Arm length		7′0″ {2.13 m}
Built de de la Constantina	SAE	14,070 {62.6}
Bucket digging force	ISO	15,900 {70.9}
A	SAE	7,350 {32.7}
Arm crowding force	ISO	7,580 {33.7}

#### **I** Dimensions

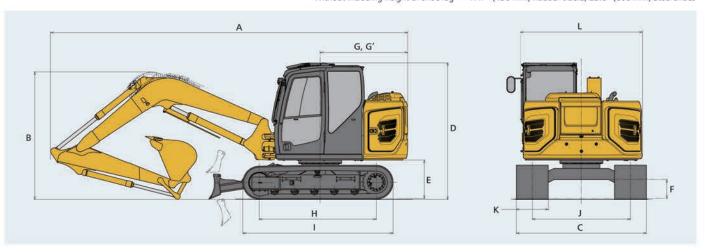
Unit: 1	t-in	Imr
OTHE.	C-UT	frin

Ar	m length	7′0″ {2.13 m}
A	Overall length	22'2" {6,750}
В	Overall height (to top of boom)	8'4" {2,550}
C	Overall width (23.6" {600 mm} shoes)	8'0" {2,450}
D	Overall height (to top of cab)	8'5" {2,570}
E	Ground clearance of rear end*	2'4" {720}
F	Ground clearance*	14" {355}
G	Tail swing radius	5'5" {1,650}
G'	Distance from center of swing to rear end	5'5" {1,650}



Н	Tumbler distance	7'3" {2,210}
1	Overall length of crawler	9'3" {2,830}
J	Track gauge	6'1" {1,850}
K	Shoe width**	17.7" {450}/23.6" {600]
L	Overall width of upperstructure	7'7" {2,300}

\*Without including height of shoe lug \*\*17.7" {450 mm} Rubber tracks, 23.6" {600 mm} Steel shoes



#### I Operating Weight & Ground Pressure

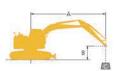
In standard trim, with standard boom, 7'0" {2.13 m} arm, and 0.29 cu.yd. {0.22 m³} ISO heaped bucket

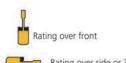
Shaped		Rubber tracks	Steel tracks
Shoe width	ft-in {mm}	17.7" {450}	23.6" {600}
Overall width of crawler	ft-in {mm}	7'7" {2,300}	8'00" {2,450}
Ground pressure	psi (kPa)	5.70 (39)	4.50 (31)
Operating weight	lbs {kg}	19,270 {8,740}	20,100 {9,120}

19

## **Lifting Capacities**







- A Reach from swing centerline
- B Height above/below ground
- C Lifting capacities in pounds {kg} Relief valve setting: 4,260 psi {29.4 MPa}

SK85CS		Arm: 7'0" {2.13 m} No bucket Standard counterweight Shoe: 17.7" {450 mm} Rub								bber tracks Dozer: blade down				
	А	5' {1.	.5 m}	10' {3.	.0 m}	15' {4	.6 m}	20' {6	.1 m}	At max	. reach			
В		-	<b>—</b>	-	<del></del>	-	<del></del>	-	<del></del>	-	-	Radius		
20' {6.1 m}	lb {kg}									*3,320 {1,500}	*3,320 {1,500}	12'6"{3.82 m}		
15' {4.6 m}	lb {kg}					*4,130 {1,870}	4,010 (1,810)			*2,610 {1,180}	*2,610 {1,180}	17'11"(5.47 m)		
10' {3.0 m}	lb {kg}					*4,770 {2,160}	3,870 {1,750}	*3,250 {1,470}	2,460 {1,110}	*2,510 {1,130}	2,380 {1,070}	20'4"{6.22 m}		
5' {1.5 m}	lb {kg}			*10,920 {4,950}	6,410 {2,900}	*6,010 {2,720}	3,610 {1,630}	*4,530 {2,050}	2,380 {1,070}	*2,670 {1,210}	2,180 {980}	21'2"{6.46 m}		
G.L.	lb {kg}			*8,680 {3,930}	6,040 {2,730}	*6,770 {3,070}	3,410 {1,540}	*4,630 {2,100}	2,310 {1,040}	*3,140 {1,420}	2,230 {1,010}	20'6"{6.26 m}		
-5' {-1.5 m}	lb {kg}	*7,660 {3,470}	*7,660 {3,470}	*10,500 {4,760}	6,040 {2,730}	*6,280 {2,840}	3,370 {1,520}	-		*4,390 {1,990}	2,600 {1,170}	18'3"{5.57 m}		
-10' {-3.0 m}	lb {kg}			*6,130 {2,780}	*6,130 {2,780}					*4,020 {1,820}	*4,020 {1,820}	13'3"{4.05 m}		

SK85CS		Arm: 7'0'	' {2.13 m} N	o bucket Sta	indard count	terweight Sh	ioe: 23.6" (60	00 mm} Steel	tracks Doze	er: blade dov	/n	
	А	5' {1.	.5 m}	10' {3	.0 m}	15' {4	1.6 m}	20' {6	.1 m}	At max	. reach	
В			-		<del>-</del>	1	<del>-</del>	1	-	1	<del>-</del>	Radius
20' {6.1 m}	lb {kg}									*3,320 {1,500}	*3,320 {1,500}	12'6"{3.81 m}
15' {4.6 m}	lb {kg}					*4,130 {1,870}	*4,130 {1,870}			*2,620 {1,180}	*2,620 {1,180}	17'11"{5.47 m
10' {3.0 m}	lb {kg}					*4,770 {2,160}	4,020 {1,820}	*3,250 {1,470}	2,570 {1,160}	*2,510 {1,130}	2,480 {1,120}	20'4"{6.22 m}
5' {1.5 m}	lb {kg}			*10,920 {4,950}	6,680 {3,020}	*6,010 {2,720}	3,770 {1,710}	*4,530 {2,050}	2,490 {1,120}	*2,670 {1,210}	2,280 {1,030}	21'2"(6.46 m)
G.L.	lb {kg}			*8,680 (3,930)	6,300 {2,850}	*6,770 {3,070}	3,570 {1,610}	*4,630 {2,100}	2,420 {1,090}	*3,140 {1,420}	2,330 {1,050}	20'6"(6.26 m)
-5' {-1.5 m}	lb {kg}	*7,660 {3,470}	*7,660 {3,470}	*10,510 {4,760}	6,310 {2,860}	*6,280 {2,840}	3,520 {1,590}			*4,390 {1,990}	2,720 {1,230}	18'3"(5.57 m)
-10' {-3.0 m}	lb {kg}			*6,140 {2,780}	*6,140 {2,780}					*4,020 {1,820}	*4,020 {1,820}	13'3"(4.05 m)

#### Note

- Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.
   Lift 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.
- Bucket pin attachment point 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. Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.



# Bringing KOBELCO quality to North America and the world

KOBELCO craftsmanship is based on 90 years of experience building excavators with advanced engineering practices and modern inspiration.

"Made by KOBELCO" guarantees quality around the world, overseen from our headquarters in Japan. Every KOBELCO excavator is built to the same exacting standards no matter where the excavator is produced.



In 1930, Kobe Steel manufactured Japan's first electric shovel, which was followed by the first hydraulic excavator in 1963. Since then, the KOBELCO brand has become known for groundbreaking machinery that excels at every task from civil engineering to recycling.



KOBELCO manufacturing is done in multiple production facilities around the world.

Since 2016, our plant in Moore, South Carolina has provided assembly, paint, and shipment lines to serve all of North America.

Note: This catalog may contain attachments and optional equipment that are r	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 conspolicy of continuous product improvements all designs and specifications are subject Copyright by <b>KOBELCO CONSTRUCTION MACHINERY CO., LTD.</b> No part of this catalog machines are subject to the control of the catalog machines.	ult your nearest KOBELCO distributor for those items you require. Due to our to change without advance notice.
KOBELCO CONSTRUCTION MACHINERY U.S.A. INC.	Inquiries To:
22350 Merchants Way, Katy, TX 77449 Tel: 281-888-8430 Fax: 281-506-8713 www.KOBELCO-USA.com	
<b>KOBELCO</b> is the corporate mark used by Kobe Steel on a variety of products and in the names of a number of Kobe Steel Group companies.	

Bulletin No. SK75SR/SK85CS-NA-201-190300N