

400

Power rating : 337 kW (458 ch) - 451.6 hp
Mass : 78 t - 171 600 lbs

Shovel equipment :
buckets : 3 400 to 5 500 L
4 ½ to 7 ¼ cu.yd
penetration force : 44 000 daN - 98 600 lbs

Backhoe equipment :
buckets : 2 200 to 3 700 L
2 ⅞ to 4 ¾ cu.yd
digging depth : 10.25 m - 33'8"
reach at ground level : ... 14.60 m - 47'11"





Engine

- Number of engines 1 DEUTZ BF 12 L 413 F
- Total engine power (SAE) at 2 650 rpm 375 kW (510 ch) - 502.8 hp
- 4 stroke V 12 cylinder Diesel
- Swept volume 19 144 cm³ - 1 168 cu. in
- Bore 125 mm - 4.921"
- Stroke 130 mm - 5.118"
- Cooling by air
- Battery starting Four 6 volt batteries = 24 V ; 192 A/h
- **Power rating under Poclain conditions of utilisation :**
- Rpm 2 150 tr/mn - 2 150 rpm
- HP SAE 337 kW (458 ch) - 451.6 hp
- HP DIN 70020 320 kW (435 ch) - 428.8 hp
- HP DIN 6270B 291 kW (396 ch) - 390.4 hp
- Specifications valid to an altitude of 5 600' - (1700 m) at a temperature of 68° F - (20 °C)
- Service capacities
- Engine crankcase 22 L - 4.8 UK gals - 5.8 US gals
- Fuel tank 945 L - 208 UK gals - 249 US gals
- Average hourly fuel consumption 66,2 L - 14.5 UK gals - 17.5 US gals
- Engine/pump unit fitted on rubber shock absorbers
- Heavy duty engine air filter
- Electric motor on option

Variodyn® hydraulic circuit

- Variable flow circuit offering independent and simultaneous operation of all functions.
- Maximum operating pressure (normal duties) 320 bar - 4 650 psi
- Maximum operating pressure (intermittent for increased lift and breakout force) 400 bar - 5 800 psi
- Flow rate from 159 to 636 l/mn
- 35 to 139.9 UK gpm - 42 to 167.9 US gpm
- Hydraulic reservoir capacity 750 L - 165 UK gals - 198 US gals
- Total circuit capacity 1 200 L - 264 UK gals - 317 US gals
- Function selector
- Radial piston, constant volume pump with excellent suction characteristics
- Direct drive through flexible coupling
- Total hydraulic horsepower 233 kW (317 ch) - 312.6 hp
- Backfeeding valve banks for front-end functions
- Forced-air oil coolers on independent cooling circuit
- High pressure multispiral hose minimum safety factor 2 to 4 times operating pressure
- Double-acting cylinders
- Cylinder thrusts :

	Boom	Stick	Bucket
	204 000 daN	147 000 daN	79 000 daN
	457 000 lbs	329 000 lbs	177 000 lbs
	204 000 daN	147 000 daN	196 500 daN
	457 000 lbs	329 000 lbs	440 000 lbs

- **Motors**
Low speed, high torque hydraulic motors with hydrostatic braking
- **Turning joint**
Self lubricating

Upperstructure

- **Frame**
All-welded unit
Demountable upperstructure walkway
Wide, non-slip catwalks
Removable counterweight
- **Upperstructure swing**
Two brake-type hydraulic motors acting directly on external ring gear
- Torque 21 420 m.daN - 155 000 lbs.ft
- Swing speed 3.5 rpm
- Automatic hydrostatic braking
- External ring gear with alternate cross roller bearings
- Lubrication of bearings automatic

• **S 2200 Cab**

Mounted on rubber shock absorbers ; removable ; sound proofed
 Up-and-over windshield ; no blind spots
 Options : cab guarding ; raised cab

• **Operation**




Hydraulic power controls	
Attachments and swing	2 controls levers
Travel	2 pedals
Automatic hydrostatic braking	
Automatic centralised greasing of all attachment pins and bushes and ring gear	
Two, twin-speed windshield wipers, windshield washers, heating and defrosting	
Interior light, cigar lighter	
Working lights - on upperstructure	2 x 70 W
on front-end	2 x 70 W
Air conditioning	option
Sunshade	option

• **Safety features**






Upperstructure swing lock for road travel or transportation	
In the event of engine failure front-end equipment can be grounded	
Safety glass, horn, warning flashing indicators, fire extinguisher	
Cab guarding	option
Safety belt	option
Control panel featuring :	
Engine temperature gauge, hour meter	
Warning lights :	
Oil pressure, engine temperature, engine oil and air filter clogging indicator	
Clogging indicator (centralised greasing system), 'low' mark on grease reservoir, failure of grease pump	

Carrier frame

- Structure
All-welded structure demountable carrier frame
- Lifetime greased rollers
- Tractor type crawlers ; hydraulic track tensioning ; spring type shock absorber

				
5,68 m - 18'8"	3,60 m - 11'10"	0,67 m - 2'2"	7	2

Ground contact area

	 0,60 m - 24"	 0,85 m - 34"	 1 m - 40"
	58 325 cm ² - 62.8 sq.ft	82 630 cm ² - 88.9 sq.ft	97 210 cm ² - 104.6 sq.ft
	* 1,260 bar - 18.27 psi	0,910 bar - 13.20 psi	0,795 bar - 11.53 psi
	** 1,190 bar - 17.30 psi	0,855 bar - 12.40 psi	0,750 bar - 10.88 psi

Other types and dimensions of pads available to order

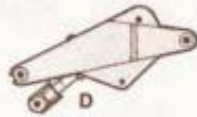
* 4,40 m - 3,10 m - 4 000 L
14'5" - 10'2" - 5 1/4 cu.yd

** 7,50 m - 3,50 m - 2 500 L
24'7" - 11'6" - 3 1/4 cu.yd

Travel

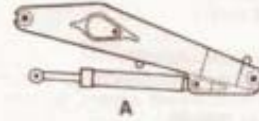
- Sprocket drive by high torque hydraulic motor (dual displacement braked hydraulic motors)
Single stage and planetary reduction gears
- Independent crawler drive
Machine can pivot on the spot
- Travel speeds 0 to 2.95 km/h - 0 to 1.83 mph
Braking-type motors optional
- Gradability 60 % (58 % continuous)
- Tractive effort 44 300 daN - 99 200 lbs
- Automatic, hydraulic travel speed limiter prevents downhill runaway

mounting and mass of attachments

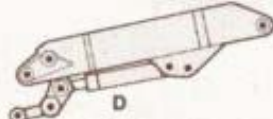


3,10 m - 10'2"; 4 810 kg - 10 580 lbs

shovel

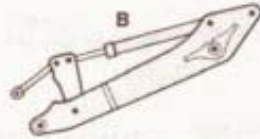


- 4,40 m
14'5"
- 4 450 kg
10 010 lbs

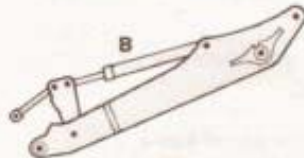


4,40 m - 14'5"; 6 540 kg - 14 390 lbs

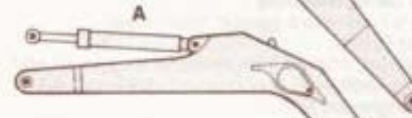
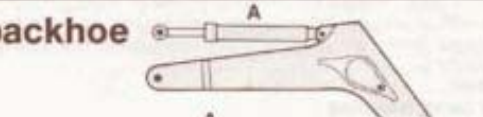
backhoe



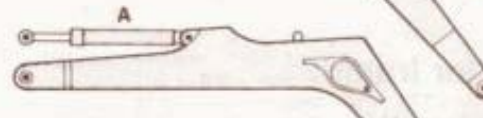
3,50 m - 11'6"; 3 430 kg - 7 550 lbs



4,50 m - 14'9"; 3 670 kg - 8 070 lbs



- 6,50 m
21'4"
- 6 190 kg
13 620 lbs



- 7,50 m
24'7"
- 6 690 kg
14 720 lbs



- 8,50 m
27'11"
- 7 110 kg
15 640 lbs

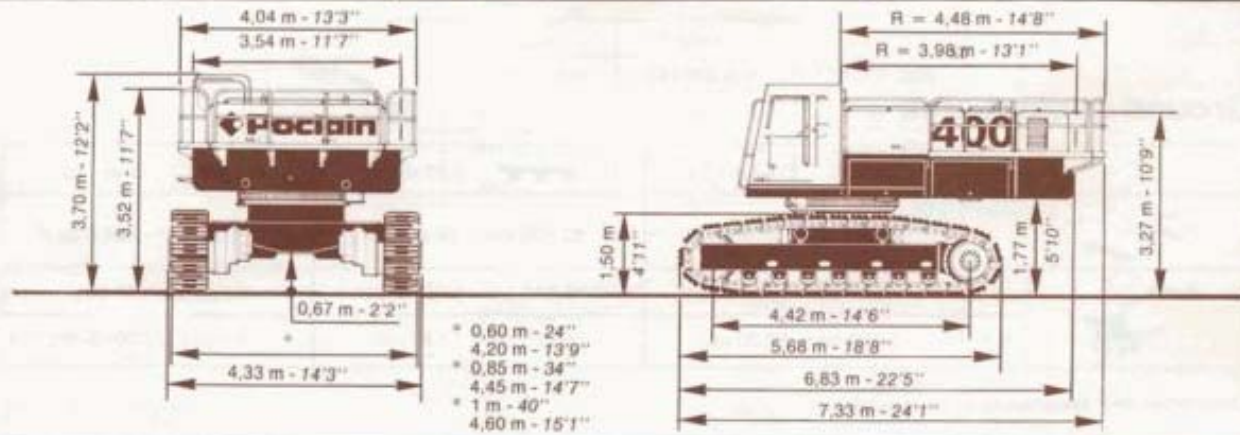
Cylinders A = 1 600 mm - 63";
1 080 kg - 2 375 lbs

B = 1 550 mm - 61";
465 kg - 1 020 lbs

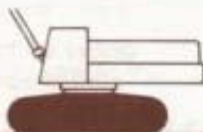
C = 1 500 mm - 59";
540 kg - 1 190 lbs

D = 800 mm - 32";
1 010 kg - 2 220 lbs

shipping dimensions



mass



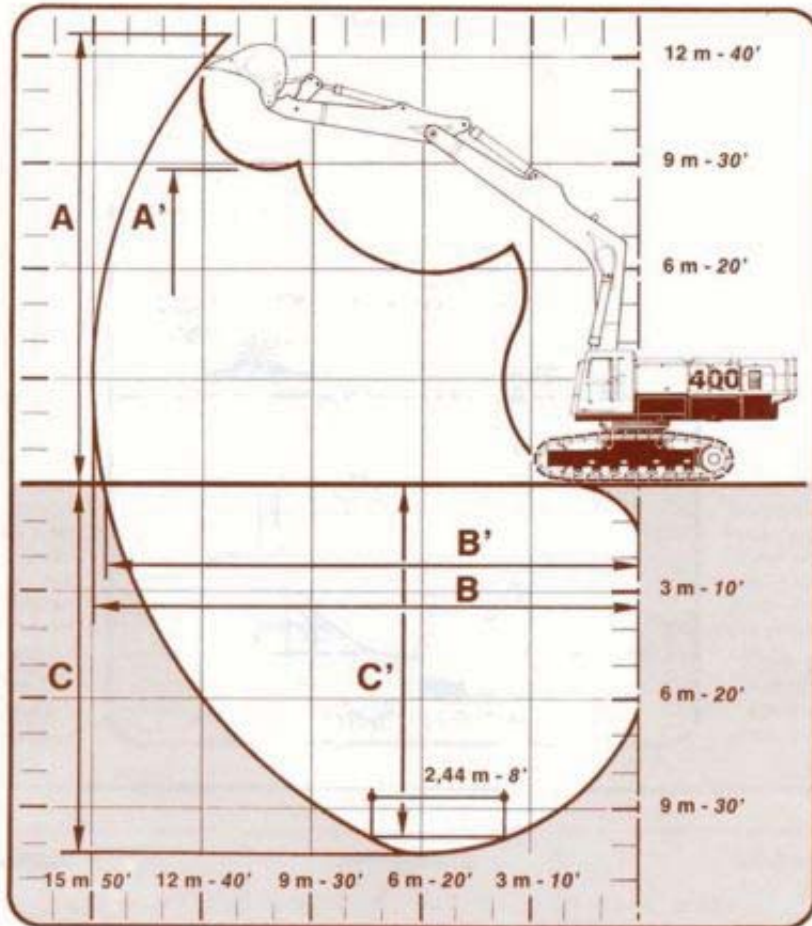
with 24" pads = 27,760 t - 61 070 lbs
with 34" pads = 29,240 t - 64 330 lbs



30,230 t - 66 510 lbs
(with counterweight : 10,5 t - 23 100 lbs)

Machine shipping mass variable
from 70,7 t - 155 540 lbs
to 78,7 t - 173 140 lbs
depending on specifications and attachment

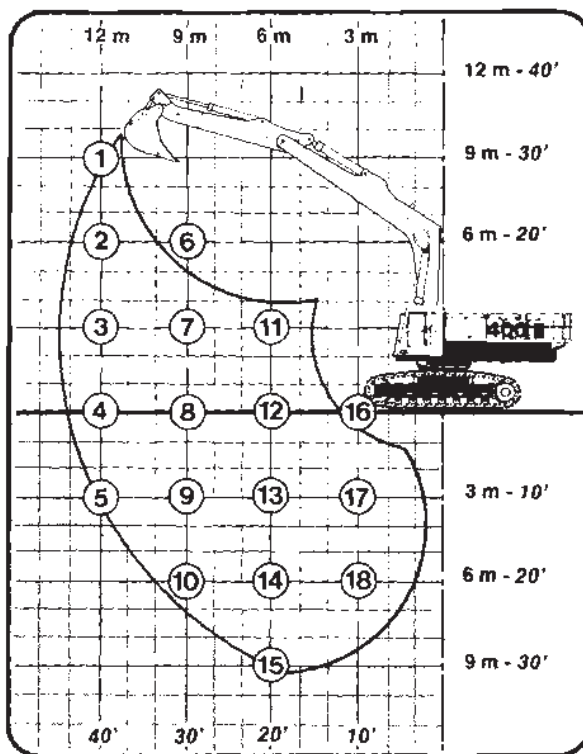
backhoe equipment



		6,50 m - 21'4"		7,50 m - 24'7"		8,50 m - 27'11"	
		3,50 m - 11'6"	4,50 m - 14'9"	3,50 m - 11'6"	4,50 m - 14'9"	3,50 m - 11'6"	4,50 m - 14'9"
A	m	11,10	11,40	11,75	12,00	12,35	12,55
	in	36'5"	37'5"	38'7"	39'5"	40'6"	41'2"
A'	m	7,30	7,80	8,10	8,40	8,70	9
	in	23'11"	25'7"	26'7"	27'7"	28'7"	29'6"
B	m	11,80	12,70	12,90	13,85	14,05	14,90
	in	38'8"	41'8"	42'4"	45'5"	46'1"	48'11"
B'	m	11,45	12,35	12,60	13,55	13,70	14,60
	in	37'7"	40'6"	41'4"	44'6"	44'11"	47'11"
C	m	7,15	8,10	8,20	9,15	9,25	10,25
	in	23'6"	26'7"	26'11"	30'	30'4"	33'8"
C'	m	6,85	7,85	8,15	8,90	9	10,05
	in	22'6"	25'9"	26'9"	29'2"	29'6"	32'11"
	daN	27 300	22 800	27 200	22 700	27 300	22 700
	lbs	61 200	51 100	61 200	50 800	61 200	50 800
	daN	30 500		30 500		30 500	
	lbs	68 300		68 300		68 300	

lifting capacity

< 80°



2 500 L - 3 1/4 cu.yd bucket

Lift capacity ratings are in daN and pounds and are given without safety factor. Reach is computed using the horizontal distance from the machine's centre of rotation to the load hitting point on the back of the bucket. Rating height is the vertical distance from the load hitching point to the ground.

Loads are based on the machine's being on firm, level ground.

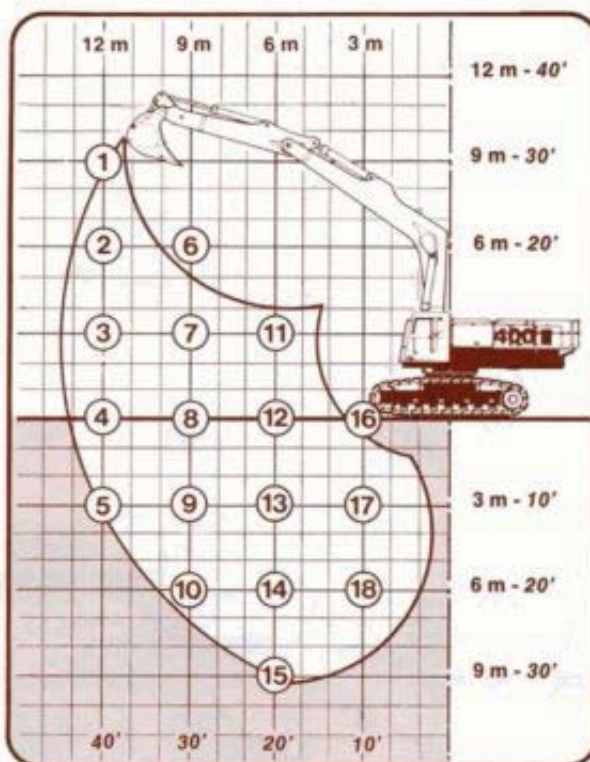
* Loads limited by hydraulic capacity Machine on 4 stabilisers.

Note : In certain countries safety regulations in force call for the application of an additional safety factor to these figures.

	6,50 m - 21'4"				7,50 m - 24'7"				8,50 m - 27'11"			
	3,50 m - 11'6"		4,50 m - 14'9"		3,50 m - 11'6"		4,50 m - 14'9"		3,50 m - 11'6"		4,50 m - 14'9"	
	daN	lbs	daN	lbs	daN	lbs	daN	lbs	daN	lbs	daN	lbs
1											5 700*	12 500*
2							6 500*	14 300*	7 400*	16 300*	6 200*	13 600*
3							7 500*	16 500*	8 400*	18 500*	7 500*	16 500*
4							8 800*	19 400*	9 000*	19 800*	8 500*	18 700*
5											8 900*	19 500*
6	11 500*	25 300*	9 600*	21 100*	10 000*	22 000*	8 300*	18 300*	8 800*	19 400*		
7	13 300*	29 300*	12 100*	26 600*	12 100*	26 600*	11 000*	24 200*	11 200*	24 600*	9 800*	21 600*
8	15 000*	33 000*	14 700*	32 300*	14 000*	30 800*	13 300*	29 300*	14 000*	30 800*	12 000*	26 400*
9			14 700*	32 300*	14 000*	30 800*	14 000*	30 800*	13 500*	29 700*	13 000*	28 600*
10									12 000*	26 400*	12 000*	26 400*
11	20 000*	45 100*	17 500*	38 500*	20 000*	44 000*	17 000*	37 400*	20 000*	44 000*	17 000*	37 400*
12	25 000*	55 000*	23 500*	51 700*	23 500*	51 700*	22 000*	48 400*	22 000*	48 400*	21 000*	46 200*
13	24 000*	52 800*	24 500*	53 900*	23 500*	51 700*	23 800*	52 400*	22 000*	48 400*	22 000*	48 400*
14			18 500*	40 700*	18 000*	39 600*	20 000*	44 000*	19 000*	41 800*	20 000*	44 000*
15											12 000*	26 400*
16	23 000*	50 600*	22 000*	48 400*	17 800*	39 200*	14 000*	30 800*				
17	40 000*	88 000*	33 000*	72 600*	28 000*	61 600*	23 500*	51 700*	22 000*	48 400*	18 000*	39 600*
18			37 500*	82 500*	33 500*	73 700*	37 000*	81 400*	32 000*	70 400*	30 000*	66 000*
19												
20												

lifting capacity

○ 360°



2 500 L - 3 ¼ cu.yd
bucket

Lift capacity ratings are in daN and pounds and are given without safety factor. Reach is computed using the horizontal distance from the machine's centre of rotation to the load hitching point on the back of the bucket. Rating height is the vertical distance from the load hitching point to the ground.

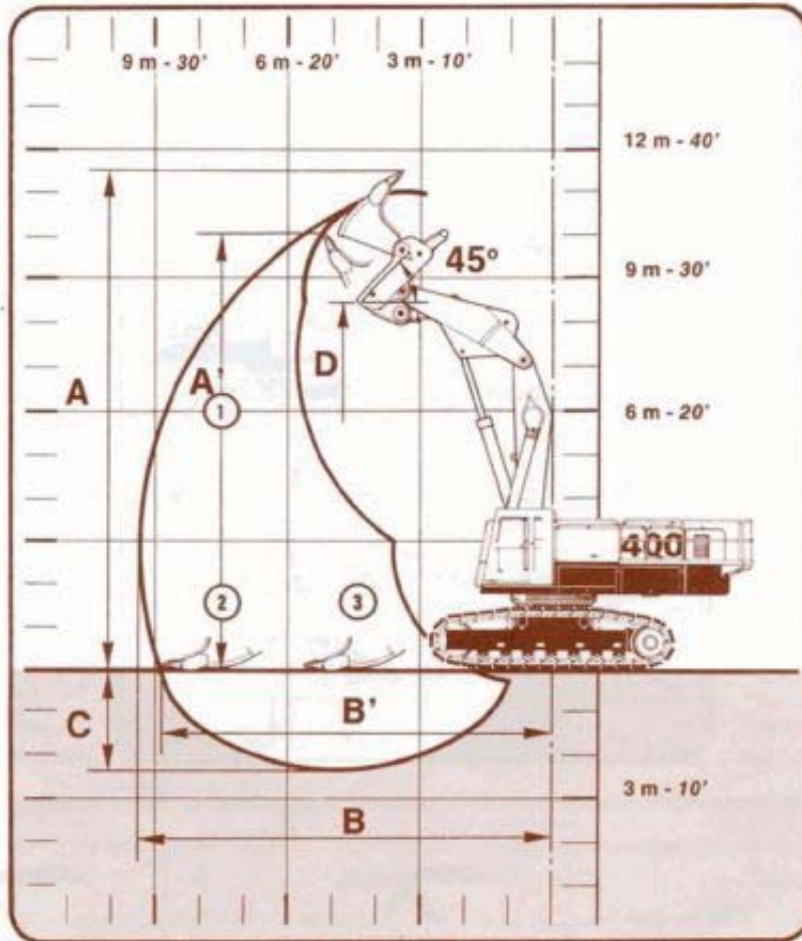
Loads are based on the machine's being on firm, level ground.

* Loads limited by hydraulic capacity
Machine on 4 stabilisers.

Note : In certain countries safety regulations in force call for the application of an additional safety factor to these figures.



	6,50 m - 21'4"				7,50 m - 24'7"				8,50 m - 27'11"			
	3,50 m - 11'6"		4,50 m - 14'9"		3,50 m - 11'6"		4,50 m - 14'9"		3,50 m - 11'6"		4,50 m - 14'9"	
	daN	lbs	daN	lbs	daN	lbs	daN	lbs	daN	lbs	daN	lbs
1											5 700*	12 500*
2							6 500*	14 300*	7 400*	16 300*	6 200*	13 600*
3							7 500*	16 500*	8 400*	18 500*	7 500*	16 500*
4							8 800*	19 400*	9 000*	19 800*	8 500*	18 700*
5											8 900*	19 600*
6	11 500*	25 300*	9 600*	21 100*	10 000*	22 000*	8 300*	18 300*	8 800*	19 400*		
7	13 300*	29 300*	12 100*	26 600*	12 100*	26 600*	11 000*	24 200*	11 200*	24 600*	9 800*	21 600*
8	15 000*	33 000*	14 700*	32 300*	14 000*	30 800*	13 300*	29 300*	14 000*	30 800*	12 000*	26 400*
9			14 700*	32 300*	14 000*	30 800*	14 000*	30 800*	13 500*	29 700*	13 000*	28 600*
10									12 000*	26 400*	12 000*	26 400*
11	20 000*	45 100*	17 500*	38 500*	20 000*	44 000*	17 000*	37 400*	20 000*	44 000*	17 000*	37 400*
12	25 000*	55 000*	23 500*	51 700*	23 500*	51 700*	22 000*	48 400*	22 000*	48 400*	21 000*	46 200*
13	24 000*	52 800*	24 500*	53 900*	23 500*	51 700*	23 800*	52 400*	22 000*	48 400*	22 000*	48 400*
14			18 500*	40 700*	18 000*	39 600*	20 000*	44 000*	19 000*	41 800*	20 000*	44 000*
15											12 000*	26 400*
16	23 000*	50 600*	22 000*	48 400*	17 800*	39 200*	14 000*	30 800*				
17	40 000*	88 000*	33 000*	72 600*	28 000*	61 600*	23 500*	51 700*	22 000*	48 400*	18 000*	39 600*
18			37 500*	82 500*	33 500*	73 700*	37 000*	81 400*	32 000*	70 400*	30 000*	66 000*
19												
20												

shovel equipment – bottom dump bucket



 4,40 m - 14'5"

 3,10 m - 10'2"

A	m	11,15
	in	35'10"
A'	m	10,10
	in	33'2"
B	m	9,40
	in	30'10"
B'	m	8,90
	in	29'2"
C	m	2,30
	in	7'7"
D	m	8,40
	in	27'7"
	daN	46 500
	lbs	104 150
	daN	43 650
	lbs	97 800

lifting capacities

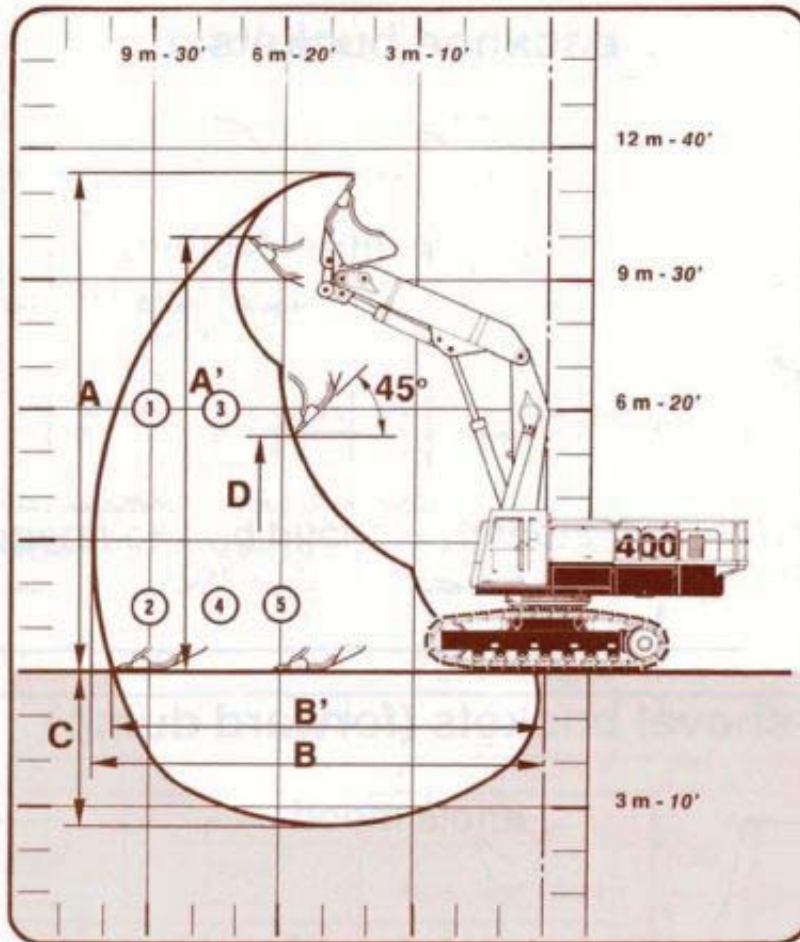
	Work circuit	
	daN	lbs
1	14 150*	31 700*
2	15 900*	35 600*
3	30 900*	69 200*
	Heavy lift circuit	
	daN	lbs
1	17 000	38 100
2	16 000	35 850
3	39 800	89 150

Lift capacity ratings are given without safety factor. Load ratings are given in daN and pounds with 360° swing.

Rated reach is the horizontal distance from the machine's centre of rotation to the centre of gravity of the load in the bucket. Rated height is the vertical distance from this same point to the ground.



* Loads limited by hydraulic capacity.

shovel equipment — forward dump bucket



 4,40 m - 14'5"

 4,40 m - 14'5"

A	m	11,40
	in	37'5"
A'	m	10
	in	32'10"
B	m	10,25
	in	33'7"
B'	m	9,80
	in	32'2"
C	m	3,60
	in	11'10"
D	m	5,40
	in	17'9"
	daN	43 600
	lbs	97 650
	daN	24 900
	lbs	55 800

lifting capacities

	Work circuit	
	daN	lbs
1	11 300*	25 300*
2	13 000	29 100
3	11 900*	26 650*
4	16 600*	37 200*
5	22 500*	50 400*
Heavy lift circuit		
	daN	lbs
1	14 200	31 800
2	13 000	29 100
3	17 350*	38 850*
4	17 500	39 200
5	28 500	63 850

Lift capacity ratings are given without safety factor. Load ratings are given in daN and pounds with 360° swing. Rated reach is the horizontal distance from the machine's centre of rotation to the centre of gravity of the load in the bucket. Rated height is the vertical distance from this same point to the ground.

* Loads limited by hydraulic capacity.

bucket capacities

backhoe buckets



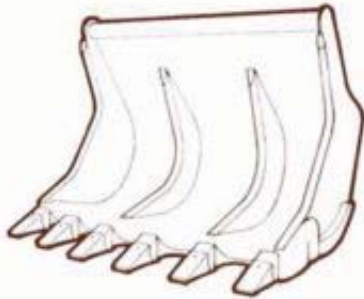
The choice of bucket capacity depends on the specific weight of the material handled, the length and composition of the front end equipment and the nature of the ground the machine is standing on. All buckets are fitted with cast cutting lips, removable tooth points and are equipped to receive sidecutters.

CECE		PCSA							
		heaped		struck					
L	cu.yd	L	cu.yd	L	cu.yd	m	in	kg	lbs
2 100	2 ¾	2 200	2 ¾	1 560	2	1,36 - 1,51	54 - 59	2 350	5 170
2 500	3 ¼	2 700	3 ½	1 870	2 ½	1,60 - 1,75	63 - 69	2 630	5 790
3 000	3 ¾	3 200	4 ¼	2 190	3	1,85 - 2,00	73 - 79	2 850	6 270
3 500	4 ½	3 700	4 ¾	2 600	3 ½	1,85 - 2,00	73 - 79	3 020	6 640

CECE Rated Capacity (Committee for European Construction Equipment) with slope 1:2 (slope angle 26° 34')

PCSA Nominal Capacity (Power Crane and Shovel Association Standard N° 3) heaped, with a 1:1 angle of repose (45°), and struck.

shovel buckets (forward dump)



CECE		PCSA							
L	cu.yd	m	in	m	in	kg	lbs		
3 400	4 ½	2,30	91			4 870	10 710		
4 000	5 ¼	2,30	91			5 240	11 530		
5 400	7	2,60	102			5 250	11 550		

shovel buckets (bottom dump)

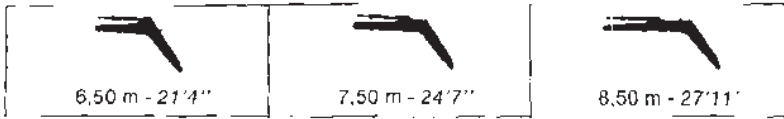


CECE		PCSA							
L	cu.yd	m	in	m	in	m	in	kg	lbs
4 000	5 ¼	2,30	91			1,46	58	7 810	17 180
5 500	7 ¼	2,60	102					9 100	20 020

special buckets and attachments available on application

shipping dimensions

backhoe attachment



complete front end equipment

	3,50 m 11,6"	4,50 m 14,9"	3,50 m 11,6"	4,50 m 14,9"	3,50 m 11,6"	4,50 m 14,9"	
A	4,55	4,85	4,90	5,25	5,40	5,65	
in	14'11"	15'11"	16'1"	17'3"	17'9"	18'7"	
B	11,90	12	13	13,10	14,05	14,05	
in	39'1"	39'5"	42'8"	42'11"	46'2"	46'2"	

dipperstick and bucket cylinders disconnected

	3,50 m 11,6"	4,50 m 14,9"	3,50 m 11,6"	4,50 m 14,9"	3,50 m 11,6"	4,50 m 14,9"	
A	4,45	4,65	4,65	4,90	5,20	5,35	
in	14'7"	15'3"	15'3"	16'1"	17'1"	17'7"	
B	11,85	11,95	12,95	13,05	14	14,05	
in	38'11"	39'3"	42'6"	42'10"	46	46'2"	

boom alone

	3,50 m 11,6"	4,50 m 14,9"	3,50 m 11,6"	4,50 m 14,9"	3,50 m 11,6"	4,50 m 14,9"	
A	3,85	4,15	4,15	4,65	4,65	5,35	
in	12'8"	13'7"	13'7"	15'3"	15'3"	17'7"	
B	10,70	11,75	11,75	12,80	12,80	14,05	
in	35'2"	38'7"	38'7"	42	42	46'2"	

shovel equipment

complete front end equipment

	3,50 m 11,6"	4,50 m 14,9"	3,50 m 11,6"	4,50 m 14,9"	
A	4,30	4,80	4,80	5,35	
in	14'1"	15'9"	15'9"	17'7"	
B	12,70	13,80	13,80	14,05	
in	41'8"	45'8"	45'8"	46'2"	

boom alone

	3,50 m 11,6"	4,50 m 14,9"	3,50 m 11,6"	4,50 m 14,9"	
A	3,75	4,15	4,15	4,65	
in	12'4"	13'7"	13'7"	15'3"	
B	9,05	11,75	11,75	12,80	
in	29'8"	38'7"	38'7"	42	

notes

Poclain - 60330 LE PLESSIS-BELLEVILLE (F) - R.C. Senlis 69548C - SIRET 695 480 244-00018 - D-400 CK-003 - Printed in France