

G/s "DZELME" celtņa specifikācija.

Celtņa svars:

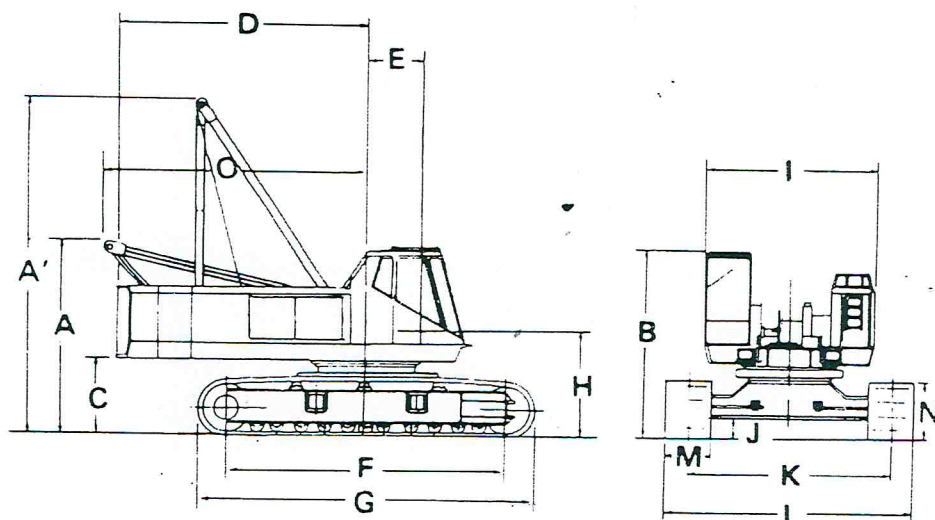
- 68,0 tonnas ar izlici
- 58,2 tonnas (*pašmasa*)
- + 10-20 t. (*greifera kauss ar dažādu svaru*).

Celtņa izlices garums ir 24,40 m.

Pamata konstrukcijai ir 2 x 6 m izlices papildus pagarinājuma posmi.

Kuģa 1/2 platums $B = 13,7 : 2 = 7 \text{ m}$

Pēc nepieciešamības iespējams saīsināt izlices garumu- samazinot to uz **3-4 metriem**.



General Dimensions LS-138RHD₅

A : Height over low gantry unit	3.395 m	J : Ground clearance	0.410 m
A' : Height over high gantry unit	5.595 m	K : Center to center distance of crawler	
B : Height of cab	3.215 m	extended	3.850 m
C : Counterweight ground clearance	1.120 m	retracted	2.660 m
D : Radius of rear end	4.165 m	L : Overall width of crawler	
E : Center of rotation to boom foot pin	1.000 m	extended	4.660 m
F : Center to center distance of tumbler	5.000 m	retracted	3.470 m
G : Overall length of crawler	5.925 m	M : Shoe width	0.810 m
H : Height from ground to boom foot pin	1.735 m	N : Height of shoe	1.025 m
I : Overall width of house	3.235 m	O : Tail swing radius at low gantry	4.790 m

**DIESEL ENGINE:**

Mitsubishi 6D22T - 6 cylinders
 in Line-Displacement 11,149 cc
 Rated power 184 kW at 2200 RPM
 Max. torque 1030 Nm at 1200 RPM
 Fuel tank capacity 450 ltr.

ELECTRICAL SYSTEM:

Voltage. 24 V - Battery 2 x 12 V/150 Ah.
 Alternator 24 V/40 A - Starter motor 24 V/5,5 kW.

HYDRAULIC SYSTEM:

Two variable displacement axial piston pumps powers main hoist, aux. hoist, travel, boomhoist and the optional third drum.

One tripple hydraulic gear pump powers the swing, the lower extension and the controls system.

Max. flow 2 x 240 L/min.; 143L/min.
 91 L/min. and 34 L/min.

Relief valve setting variable pumps 315 bar

Hydraulic oil tank capacity 300 ltr.

Two joysticks for proportional control of main hoist, aux. hoist, boomhoist and swing.

Two long sticks for proportional control of the travel.

HOIST WINCHES:

Both winches are independent and can be switched in either lever controlled lowering or free fall mode. The drums are spiral grooved for 26 mm wire and have the same performance with max. line pull of 20 T., max. speed of 60 m/min. and a capacity of over 230 mtr. rope. For safety each drum has an electrically operated lock pawl.

BOOM HOIST WINCH:

The winch is independent and driven by a bi-directional, axial piston motor. The automatic multi disc brake is spring-applied and hydraulic released. The drum is parallel grooved for 16 mm wire and has an electrically operated lock pawl.

BOOM:

Lattice type with round tubular main chords and bracing of round steel tubing. Basic length 12,20 mtr. with 6,1 mtr. foot section and 6,1 mtr. head section with four head sheaves. Boom extensions available in 3,05 mtr., 6,10 mtr. and 9,15 mtr.

SWING:

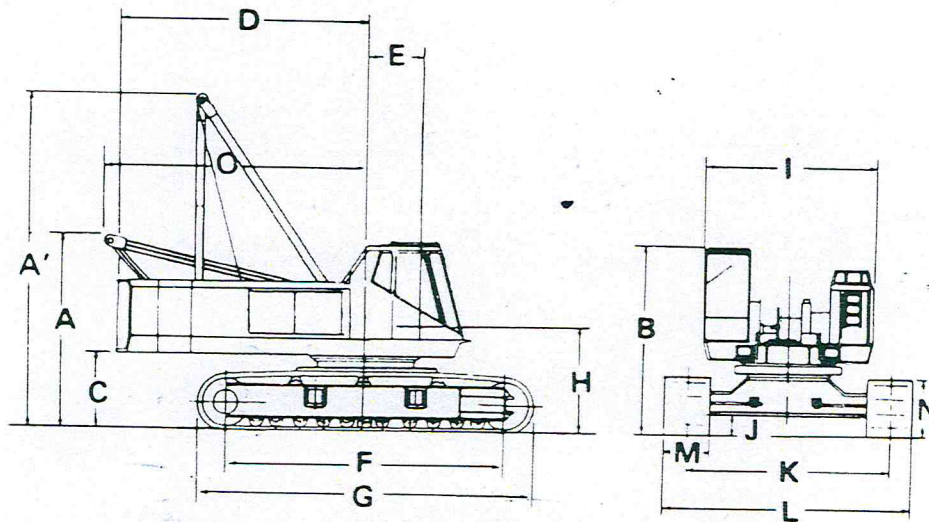
Single row ball bearing with internal toothing and driven by two axial piston motors and planetary gearbox. The two multi disc brakes are spring-applied and hydraulic released. Mechanical pin lock on two positions. The max. swing speed is 3,0 RPM.

COUNTERWEIGHT:

Removable, two pieces with total weight of 20 T.

CRAWLER:

Propulsion through axial piston motor and gear box. The multi disc brake is spring-applied and hydraulic released. The idlers and all rollers are mounted on bushings with floating seals requiring no further lubrications. The tracks with multiple hinged flat shoes have a hydraulic type tensioning device. Max. travel speed 1,7 km/h.



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E : Center of rotation to boom foot pin	1.000 m
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G : Overall length of crawler	5.925 m
H : Height from ground to boom foot pin	1.735 m
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J : Ground clearance	0.410 m
K : Center to center distance of crawler	
extended	3.850 m
retracted	2.660 m
L : Overall width of crawler	
extended	4.660 m
retracted	3.470 m
M : Shoe width	0.810 m
N : Height of shoe	1.025 m
O : Tail swing radius at low gantry	4.790 m



BOOMLENGTH: For clamshell application max. 24,40 mtr.

CLAMSHELL RATING: 10,0 T with 26 mm wire winches.

COUNTERWEIGHT: Removable, two pieces with total weight of 20 T.

GRADEABILITY: 30% (17°).

LINE SPEED:

Drums	Root dia.	Type	Line speed (Hoisting, Lowering)		Cable dia.
			Pump control "OFF" (Ordinary)	Pump control "ON"	
Main hoist (Front)	520 mm	Spiral grooved	High 60 m/min Low 30 m/min	High 20 m/min Low 10 m/min	26 mm
Aux. hoist (Rear)	520 mm	Spiral grooved	High 60 m/min Low 30 m/min	High 20 m/min Low 10 m/min	26 mm
3rd drum (option)	320 mm	Parallel grooved	65 m/min	22 m/min	16 mm
Boom hoist	320 mm	Parallel grooved	66 m/min	22 m/min	16 mm

Hoisting line speed varies with load.

WORKING WEIGHT AND GROUND PRESSURE

Shoe width	Weight	Pressure
810 mm	68,1 t	0.79 kg/cm ²
915 mm	68,9 t	0.71 kg/cm ²

With basic boom and counterweight but without bucket.

CLAMSHELL CAPACITIES AND WORKING RANGES:

(in metric tons)

Boom length (m)														
12.20			15.25			18.30			21.35			24.40		
R (m)	A (°)	L (t)	R (m)	A (°)	L (t)	R (m)	A (°)	L (t)	R (m)	A (°)	L (t)	R (m)	A (°)	L (t)
5.5	70	10.0												
6.0	67	10.0												
7.0	62	10.0	7.0	68	10.0									
8.0	57	10.0	8.0	64	10.0	8.0	69	10.0						
9.0	51	10.0	9.0	60	10.0	9.0	65	10.0	9.0	69	10.0			
10.0	44	10.0	10.0	55	10.0	10.0	62	10.0	10.0	66	10.0	10.0	69	10.0
12.0	30	10.0/11.7	12.0	45	10.0	12.0	54	10.0	12.0	60	10.0	12.0	64	10.0
			14.0	33	9.5	14.0	46	9.4	14.0	53	9.3	14.0	59	9.2
						16.0	36	7.8	16.0	46	7.7	16.0	53	7.6
									18.0	38	6.7	18.0	47	6.6
									20.0	30	5.9/19.6	20.0	40	5.7
												22.0	31	5.0

R: Working radius A: Boom angle L: Rated load

- Weight of bucket plus material shall not exceed these rated loads.
- Boom length shall not exceed 24.4 m.
- Apparant specific gravity of lifting material:
Earth 1.7 ~ 1.8 t/m³
Gravel 1.8 ~ 2.0 t/m³

