



**GRIL 8500 T**



# SPECIFICATIONS



## CHASSIS

### CHASSIS

Heavy duty, all welded box type section frame.

### OUTRIGGERS

4 independent hydraulically operated telescopic outrigger beams with vertical hydraulic jacks and lock valves. Removable floats. Electro-hydraulic controls with partial extension facility controlled from the cab.

### ENGINE

CATERPILLAR ACERT C6.6, six cylinders turbocharged intercooler diesel engine, electronically controlled and water cooled.

Max power 116.5kW at 2.200 rpm. Max torque 683 Nm at 1.400 rpm. Dry type air cleaner with safety cartridge and service indicator. Fuel tank capacity 200 lt.

### TRANSMISSION

Engine mounted torque converter driving an electro-hydraulically controlled powershift transmission having 6 forward and 6 reverse speeds.

### HYDRAULIC PUMPS

Four gear type hydraulic pump system, driven from power-take-offs mounted on torque converter and engine. Total pumps capacity 380 l/min. Oil tank capacity 430 l.

### AXLES

Front: driving/steering axle with differential and planetary reduction solidly mounted to frame.

Rear: driving/steering axle with differential and planetary reduction, pivot mounted. Automatic rear axle oscillation lockout.

### STEERING

Front: hydraulically powered steering controlled by steering wheel. Rear: independent hydraulically powered steering with rear wheel alignment indicator. Four steering modes: only front, only rear, coordinated and crab steering. Positive lock to hold in center line rear wheels for road travel.

### BRAKES

Service and emergency: disk type, compressed air over hydraulic pressure dual independent braking system, foot operated on all wheels.

Parking: disk type, spring set, air released brake actuator acting on front axle.

### TYRES

16.00 x 25 – earthmover type, single mounted front and rear.

### ELECTRICAL EQUIPMENT

24 V starting and lighting equipment according to EC traffic regulations.

### OPTIONAL EQUIPMENT

- 8.0 m offsetable extension
- 9.0 - 16.1 m telescopic offsetable extension
- Single hook 5.000 kg capacity
- Hookblock 15.000 kg
- Auxiliary hoist, max line pull 4.000 kg
- Work lights (on cab and base boom)

## SUPERSTRUCTURE

### SUPERSTRUCTURE FRAME

Fabricated from high tensile steel plate.

### BOOM

4 sections 10.1 to 32 m automatically synchronized fully powered telescopic boom.

Max. boom head height 34.5 m.

### BOOM ELEVATION

Single double-acting hydraulic cylinder. Elevation from  $-3^{\circ}$  a  $+80^{\circ}$ .

### SLEW

360° continuous rotation. Hydraulic motor driving slewing pinion through planetary double reduction unit. Spring applied, hydraulically released multidisc type slew brake.

Free swing device. Internal gear teeth slew ring. Hand operated positive slew lock controlled from operator's cab.

### MAIN HOIST

Hydraulic, two speeds. Twin gear type hydraulic motor driving grooved hoist drum through double reduction gear unit.

Spring applied, hydraulically released fail-safe hoist brake and counterbalance valve.

### OPERATOR'S CAB

Turntable mounted on rubber grommets, left hand drive, fully enclosed, all steel construction with safety glass and operator's seat on slides with height and rake adjustment.

### CRANE CONTROLS

Armrest mounted joysticks for independent or simultaneous operation of crane motions; electric switches for control of outriggers, fast hoist speed and free swing.

### CONTROL VALVES

Individual valve banks permitting simultaneous independent control of multiple crane functions.

Centralized system for hydraulic pressure control.

### TRAVEL CONTROLS

Adjustable steering wheel for control of front steering axle.

Electric switch for independent steering of rear axle. Transmission gear selection, forward-reverse shift and parking brake control.

Control switch for high-low range speeds with automatic 2 or 4 wheel drive selection.

Master gauge for engine diagnostic.

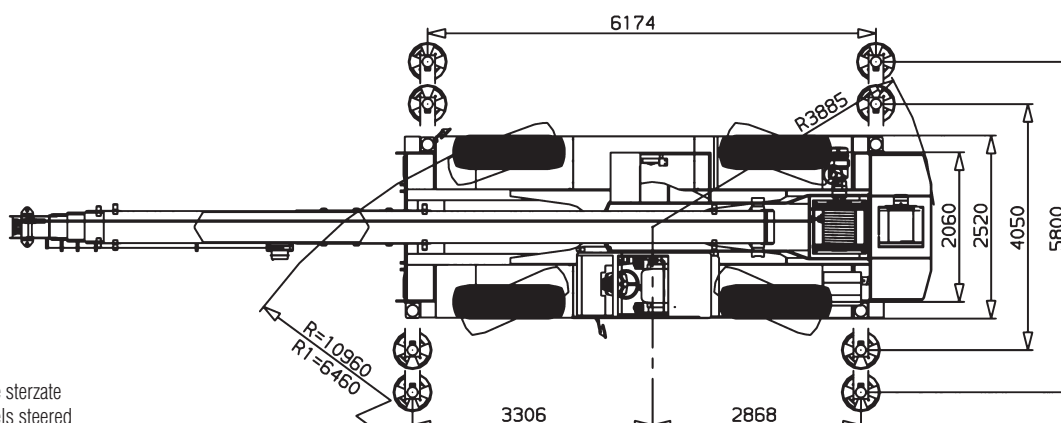
### SAFETY DEVICES

Overhoist and overlower limit switches; lock valves on all cylinders; hydraulic overload valves on all systems.

- Motion cut equipment\*
- Electronic safe load indicator\*
- Independent cab heater/defroster\*
- Air conditioned
- Spare tyre 16.00 x 25

\*Standard equipment for CE machine

R1:  
4 ruote sterzate  
4 wheels steered



Dimensions (mm)

**PORTATE BRACCIO TELESCOPICO - LIFTING CAPACITIES TELESCOPIC BOOM - CAPACITES DE LEVAGE FLECHE TELESCOPIQUE - TRAGLASTEN TELESKOPAUSLEGER - CAPACIDADES DE CARGA PLUMA TELESCOPICA**



10,1 m - 32 m



100 %





360°



4,4 t



 m	10,1 m	13,8 m	17,4 m	21 m	24,7 m	28,4 m	32 m	 m
2,5	45,0							2,5
3,0	40,4							3,0
3,5	31,6	18,0						3,5
4,0	31,3	18,2	17,0	16,1				4,0
4,5	27,2	18,5	16,6	14,5				4,5
5,0	24,0	19,0	15,7	13,7	11,6	8,3		5,0
6,0	19,4	19,3	15,2	13,1	10,6	7,8	6,3	6,0
7,0	14,5	14,5	13,6	12,0	9,4	7,0	5,9	7,0
8,0	12,0	11,7	11,4	10,6	8,5	6,7	5,6	8,0
9,0		9,4	9,2	9,0	7,6	6,3	5,4	9,0
10,0		7,8	7,8	7,5	6,6	5,8	4,9	10,0
12,0		5,4	5,5	5,5	5,3	4,7	3,9	12,0
14,0			4,2	4,2	4,2	3,8	3,2	14,0
16,0				3,1	3,1	3,0	2,9	16,0
18,0				2,5	2,4	2,4	2,4	18,0
20,0					1,8	1,9	2,0	20,0
22,0					1,4	1,5	1,5	22,0
24,0						1,2	1,2	24,0
26,0						0,9	0,9	26,0
28,0							0,7	28,0
30,0							0,5	30,0



10,1 m - 17,4 m



16.00 R 25





360° / 0°



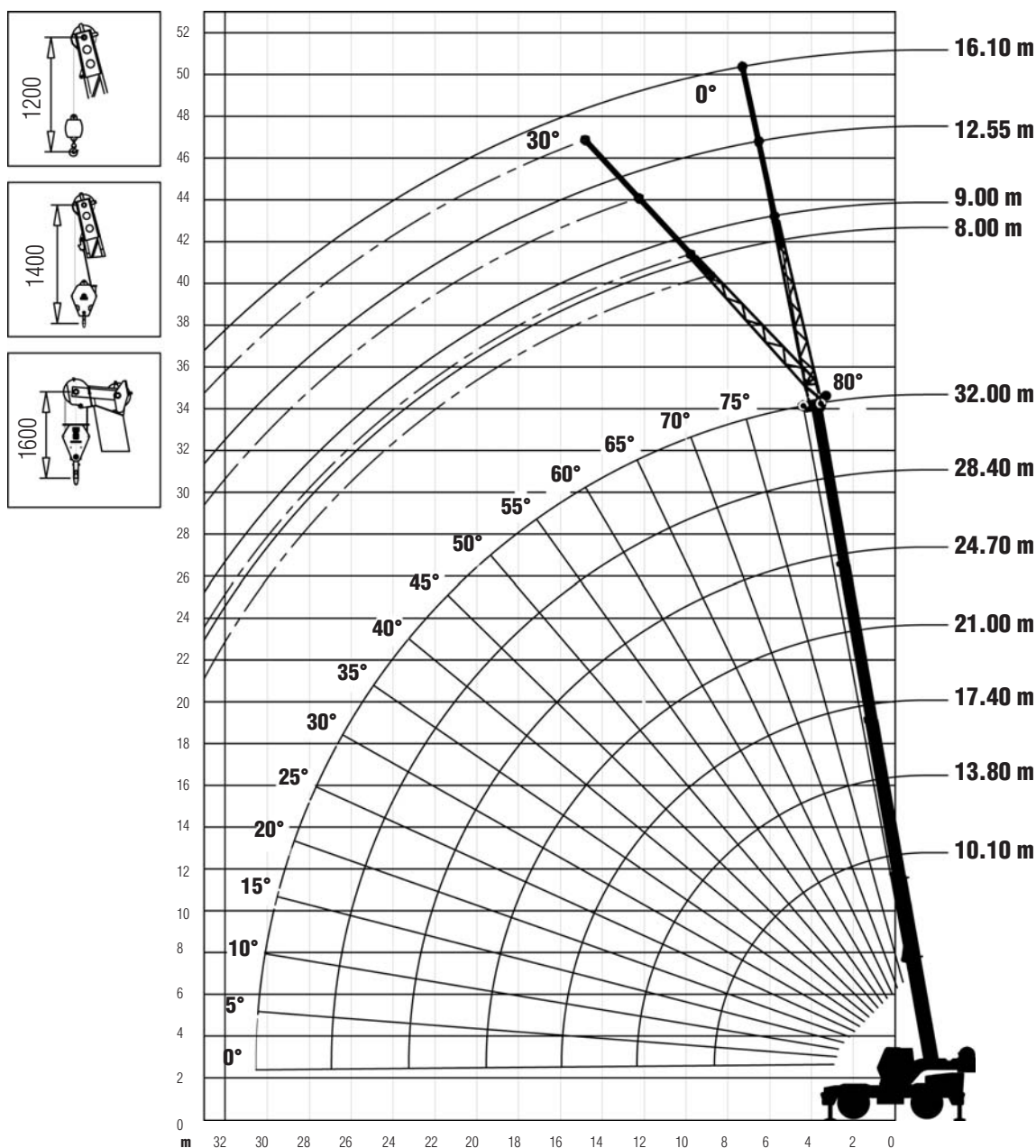
4,4 t



 m	0 km/h			3 km/h			 m
	360°			0°			
	10,1 m	13,8 m	17,4 m	10,1 m	13,8 m	17,4 m	
2,5				18,8	7,0		2,5
3,0				18,8	7,0		3,0
3,5	10,1	2,2	1,5	16,7	7,0		3,5
4,0	8,2	2,2	1,5	15,1	7,0	2,4	4,0
4,5	7,0	2,2	1,5	13,7	7,0	2,4	4,5
5,0	5,9	2,2	1,5	12,5	7,0	2,4	5,0
6,0	4,3	2,2	1,5	10,4	7,0	2,4	6,0
7,0	3,2	2,2	1,5	7,9	7,0	2,4	7,0
8,0	2,4	2,2	1,5	6,2	5,9	2,4	8,0
9,0		1,7	1,5		4,7	2,4	9,0
10,0		1,2	1,1		3,8	2,4	10,0
12,0					2,5	2,4	12,0
14,0						1,6	14,0
15,0						1,2	15,0

# GRIL 8500 T

## DIAGRAMMA DI LAVORO - WORKING DIAGRAM - DIAGRAMME DE TRAVAIL - ARBEITSBEREICH - DIAGRAMA DE TRABAJO



### NOTE SULLA TABELLA DI PORTATE



- I carichi riportati nella tabella di portata sono a norme CE.
- Le portate sono indicate in tonnellate.
- Il peso dei bozzelli, delle prolunghe braccio, delle imbracature e di qualsiasi altra attrezzatura di sollevamento deve essere detratto dalle portate indicate in tabella per ottenere il carico netto sollevabile.
- I raggi di lavoro sono misurati dal centro della ralla di rotazione.
- Per lunghezze di braccio e/o raggi di lavoro non elencati, usare il carico minore corrispondente alla lunghezza di braccio e/o al raggio di lavoro immediatamente successivi.
- Le portate su stabilizzatori sono valide solo se tutte le travi degli stabilizzatori sono completamente estese e la gru, accuratamente livellata, appoggia su una superficie di supporto solida.
- Le portate su pneumatici sono valide a condizione che i pneumatici siano gonfiati alla pressione prescritta e che la gru operi su un terreno piano, solido ed orizzontale:
  - per le portate statiche su 360° l'oscillazione dell'assale posteriore deve essere bloccata.
  - per le portate frontali in traslazione il fermo di blocco della rotazione deve essere inserito e la marcia con il carico sospeso deve essere eseguita con il carico leggermente sollevato da terra, prossimo alla gru, evitando oscillazioni del carico

### NOTES TO LOAD CHARTS



- The tabulated lifting capacities comply with the CE standards.
- Lifting capacities are given in metric tons.
- The weight of the hookblocks, boom extensions, sling and all auxiliary lifting devices must be deducted from the lifting capacities to obtain the net load to be lifted.
- Working radii are measured from the slewing centreline.
- For boom lengths and/or radii not listed use the smallest load given for the next longer boom length and/or radius.
- The capacities on outriggers are valid only if all outrigger beams are fully extended and the crane accurately levelled on a firm supporting surface.
- The capacities on tyres are valid only if the tyres are inflated to the recommended pressure and the crane works on a flat, solid and horizontal surface:
  - for 360° static capacities the rear axle oscillation must be locked.
  - for over front travelling capacities the swing lock pin must be fully engaged and the travel with suspended load should be carried out with the load little raised from the ground, close to the crane and avoiding load oscillations

**PORTATE PROLUNGA - LIFTING CAPACITIES BOOM EXTENSION - CAPACITES DE LEVAGE FLECHETTE  
TRAGLASTEN KLAPPSPITZE - CAPACIDADES DE CARGA PLUMIN**



 m	10,10 m		24,70 m		32,00 m		m 
	8 m		8 m		8 m		
	0°	30°	0°	30°	0°	30°	
3,0	3,6	1,4					3,0
3,5	3,5	1,3					3,5
4,0	3,4	1,3					4,0
4,5	3,3	1,2					4,5
5,0	3,2	1,2	4,0				5,0
6,0	2,9	1,1	3,7				6,0
7,0	2,6	1,1	3,5		3,3		7,0
8,0	2,3	1,0	3,4	1,3	3,2		8,0
9,0	1,9	1,0	3,2	1,3	3,1		9,0
10,0	1,5	1,0	3,0	1,2	3,0	1,3	10,0
12,0	0,9	0,9	2,8	1,2	2,8	1,2	12,0
14,0			2,6	1,1	2,6	1,1	14,0
16,0			2,2	1,1	2,4	1,1	16,0
18,0			1,7	1,0	2,1	1,0	18,0
20,0			1,4	0,9	1,8	1,0	20,0
22,0			1,0	0,8	1,5	0,9	22,0
24,0			0,8	0,7	1,2	0,8	24,0
26,0					1,1	0,8	26,0
28,0					0,9	0,7	28,0
29,0					0,9	0,7	29,0



 m	10,10 m						24,70 m						32,00 m						m 
	9 m		12,55 m		16,10 m		9 m		12,55 m		16,10 m		9 m		12,55 m		16,10 m		
	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°	
3,0	2,4		1,9																3,0
3,5	2,2		1,7																3,5
4,0	1,9		1,6		1,3														4,0
4,5	1,6		1,4		1,1														4,5
5,0	1,4		1,3		1,0	2,8						3,2							5,0
6,0	1,2	1,4	1,0		0,9	2,5	1,9	1,5	3,0										6,0
7,0	1,1	1,1	0,9		0,8	2,2	1,7	1,4	2,7	2,0	1,5								7,0
8,0	1,0	0,8	0,7	1,2	0,6	1,9		1,5	2,4	1,8	1,4								8,0
9,0	1,0	0,7	0,6	1,0	0,5	1,7	1,4	1,3	2,2	1,6	1,3								9,0
10,0	1,0	0,5	0,5	0,8	0,5	0,7	1,4	1,3	1,1	1,1		1,9	1,5	1,4		1,2			10,0
12,0	0,8			0,5		0,6	1,2	1,1	0,9	1,1	1,0	1,5	1,2	1,1		1,1			12,0
14,0				0,4		0,5	1,0	0,9	0,7	0,9	0,8	0,7	1,3	1,0	0,9	1,1	0,9		14,0
16,0						0,3	1,0	0,7	0,5	0,7	0,5	0,6	1,1	0,9	0,7	0,9	0,7	0,6	16,0
18,0							0,9	0,5		0,5		0,6	1,0	0,7	0,5	0,7	0,4	0,6	18,0
20,0							0,8	0,4		0,4		0,5	0,9	0,5	0,4	0,5		0,5	20,0
22,0							0,8					0,5	0,9	0,4		0,4		0,5	22,0
23,0							0,7					0,4	0,9	0,4		0,4		0,5	23,0

# GRIL 8500 T

## DATI TECNICI - SPECIFICATIONS - CARACTERISTIQUES - TECHNISCHE DATEN - DATOS TECNICOS



Peso sugli assali Axle loads Poids d'essieux Achslasten Carga por eje	1	2	Peso totale Total weight Poids total Gesamtgewicht Peso total
t	14,5	15,3	29,8



		1	2	3	R1	R2	R3	
Km/h	4x4	3	5,5	16	3	5,5	16	70%
Km/h	4x2	6	12	37	6	12	37	17%
		16.00 x 25						



Funzioni Mechanisms Mécanismes Antriebe Mecanismos	Progressivamente variabile Infinitely variable Progressivement variable Stufenlos Infinitamente variable	Diametro / Lunghezza fune Rope diameter / Rope length Diamètre / longueur du câble Seil ø / Seillänge Diámetro cable / longitud cable	Tiro max. ammissibile Max. permissible line pull Effort max. admis sur brin Max. zulässiger Seilzug Carga max. por reenvío
	0 - 115 m/min	18 mm x 175 m	50,1 kN
	0 - 129 m/min	15 mm x 120 m	39,2 kN
	0 - 2,7 min <sup>-1</sup>		
	-3° - +80°	circa 50 s - approx 50 s-env. 50 s - ca 50 s -aprox. 50 s	
	10,10 m - 32,0 m	circa 75 s - approx 75 s-env. 75 s - ca 75 s - aprox. 75 s	



Portata Lifting capacity Force de levage Traglast Capacidad de carga	N° di carrucole No of sheaves Nbr de poulies N° der Rollen No de poleas	N° di taglie No of lines Nbr de brins Strangzahl No de reenvíos	Peso Weight Poids Gewicht Peso
45 t	5	11	550 kg
15 t	1	3	290 kg
5 t	-	1	100 kg

Con riserva di modifiche senza preavviso / Subject to modification without notice / Änderungen vorbehalten / Sous réserve de modification sous préavis / Salvo modificaciones sin notificación previa.

## Simboli - Symbols - Symboles - Symbolen - Símbolos



Braccio telescopico  
Telescopic boom  
Flèche télescopique  
Teleskopausleger  
Pluma telescópica



Prolunga braccio  
Boom extension  
Rallonge de flèche  
Klappspitze  
Extensión de pluma



Stabilizzatori  
Outriggers  
Calage  
Abstützungen  
Estabilizadores



Pneumatici  
Tyres  
Pneumatiques  
Bereifung  
Neumáticos



Rotazione  
Slewing  
Orientation  
Drehwerk  
Giro



Contrappeso  
Counterweight  
Contrepoids  
Gegenwicht  
Contrapeso



Raggio  
Radius  
Portée  
Ausladung  
Radio



Marcia  
Gear  
Rapport  
Gang  
Marcha



Gamma lenta  
Low range  
Gamme basse  
Gelände  
Gama lenta



Gamma veloce  
High range  
Gamme haute  
Strasse  
Gama alta



Argano principale  
Main hoist  
Treuil principal  
Haupthubwerk  
Cabrestante principal



Argano ausiliario  
Auxiliary hoist  
Treuil auxiliaire  
Hilfshubwerk  
Cabrestante auxiliar



Sfilo braccio  
Boom telescoping  
Télescopage de flèche  
Teleskopieren  
Telescopaje de pluma



Elevazione braccio  
Boom elevation  
Relevage de flèche  
Wippwerk  
Elevación de pluma



Bozzello  
Hookblock  
Crochet moufle  
Hachenflasche  
Gancio