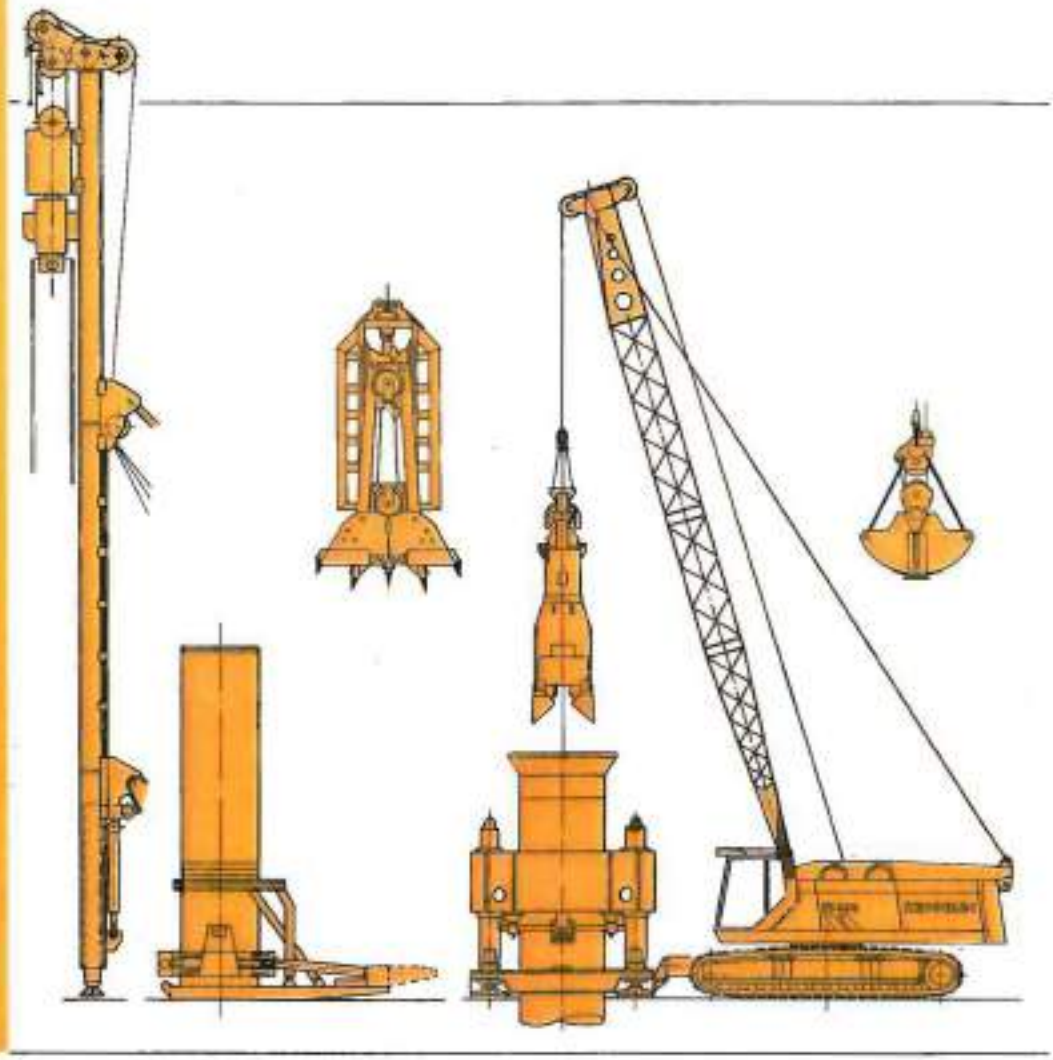
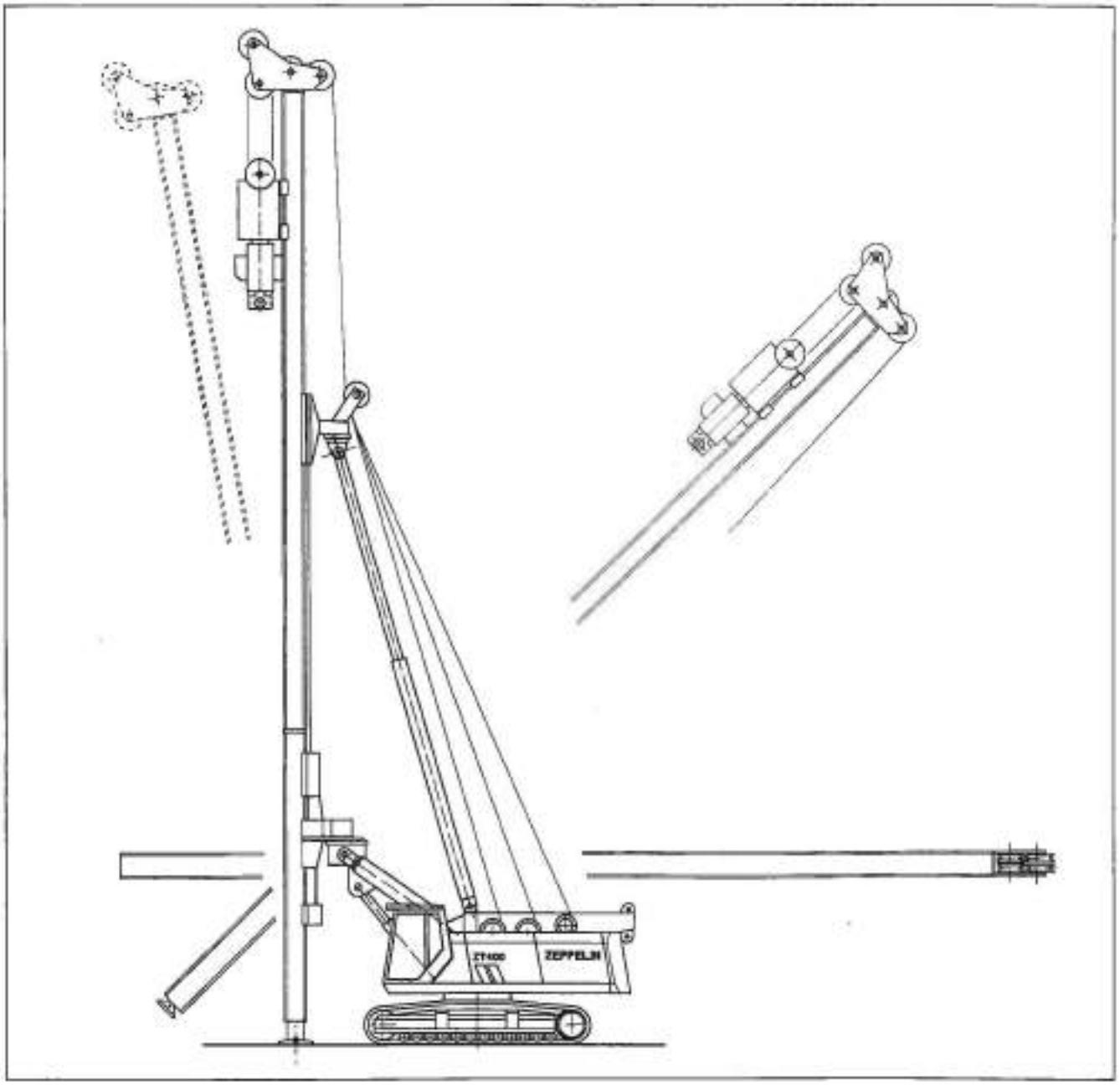
CRAWLER CRANES



ZT 400
Carrier Units

ZEPPELIN

Piling Equipment Zeppelin ZT 400

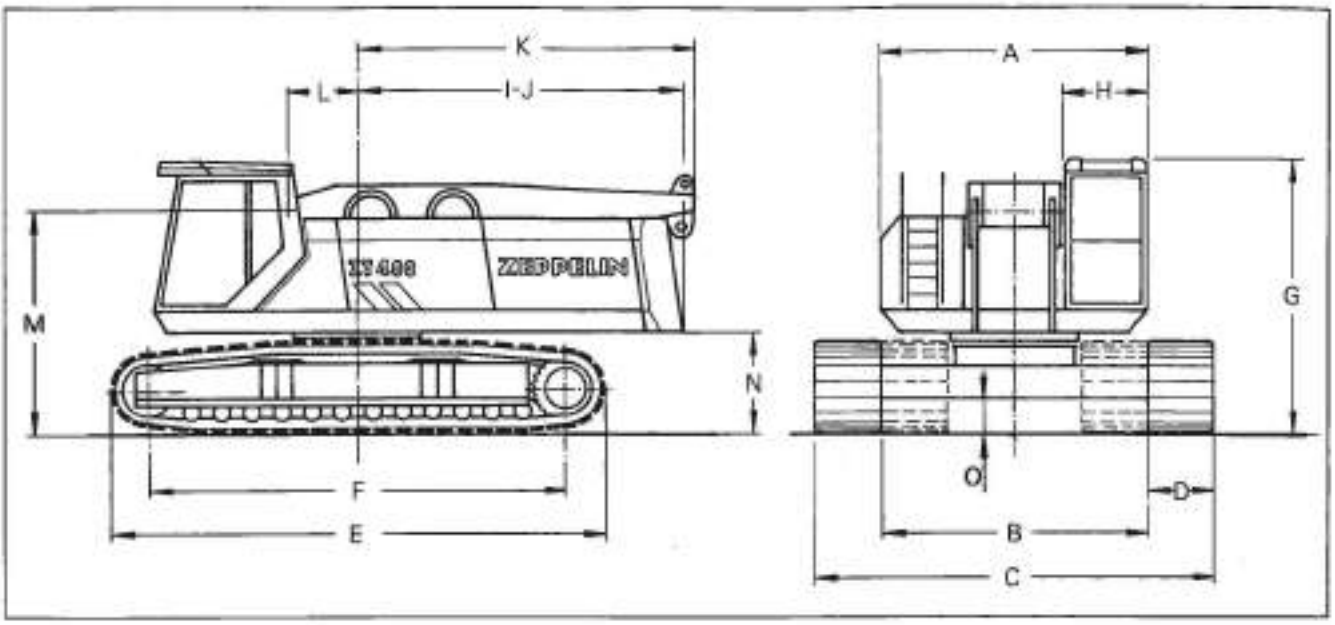


Piling Equipment

Leader length		m	24
Reach from center of rotation		m	3,8 – 5,0
Load capacity		kp	20 000 – 11 000
Inclination	forward	degree	5 (1:11)
	backward	degree	45 (1:1)
	crossward	degree	+/– 4 (1:14)
Slewing of lead left/right		degree	90
Outreach		m	1,8/5,0
Permiss. pull on vibro hammer		t	50
Permiss. down pull on vibrator		t	15
Permissible moment		max. mt	20
Standard winch assembly		t	7,5 – 12,5 – 7,5

Hydraulic supply	l/min.	2 – 4 x 223
Leader and hydraulics for		Vibro hammers Hydraulic freefall hammers Rotary drilling equipment Diesel hammers
Caterpillar Diesel engines according to application		
Transport Dimensions		
Transport length	m	18
Transport width	m	3,2
Transport height	m	3,6
Transport weight	approx. kp	67 000
Transport weight excl. counterw.	kp	57 000

Technical Data Zeppelin ZT 400



Dimensions

	mm
A Width of superstructure	3200
B Transport width	3200
C Working width	4800
D Width of crawler shoes	800
E Length of crawlers	5850
F Center of rotation – center of tumbler	4910
G Clearance height of basic machine	3230
H Width of cab	1000
I Radius of rear end	3835
J Radius of rear end with add. counterweight	4050
K Radius of winch carrier in trans. position	4000
L Center of rotation – boom foot	800
M Hight of boom foot	2670
N Clearance of uppercarriage	1070
O Clearance of undercarriage	400

Transport weights

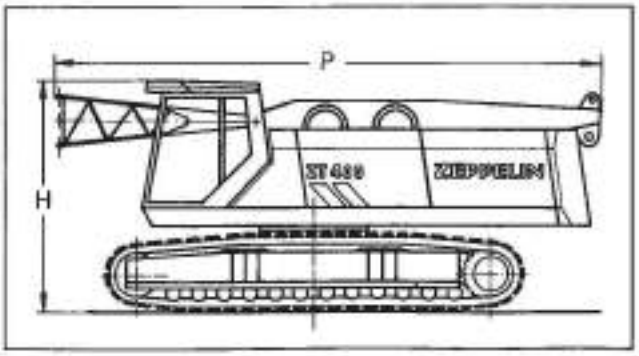
	kg
Basic mach. with lower boom part excl. counterw.	32000
Basic mach. with lower boom part 10 t counterw.	42000
Basic mach. with lower boom part 10 t counterw. 3,5 t add. counterweight	45500
Lower boom part	585
Upper boom part	1320
Boom extension 3 m	295
Boom extension 6 m	555
Boom extension 12 m	1060

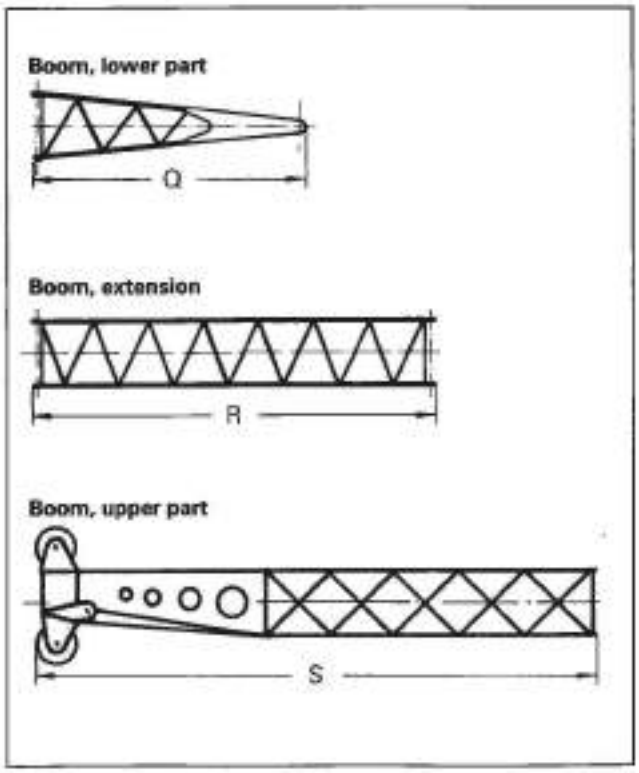
Working weight

Basic machine,
12 m boom, 13,5 t counterweight ..... 46000 – 48000

Transport Dimensions

H Transport hight				3230
P Transport length incl. lower boom part				9870
B Transport width				3200
		length mm	width mm	height mm
Q Boom, lower part		4870	1100	1000
R Boom, extension	3 m	3130	1100	1000
R Boom, extension	6 m	6130	1100	1000
R Boom, extension	12 m	12130	1100	1000
S Boom, upper part	7 m	7370	1340	1850





Technical Data Zeppelin ZT 400

Engines

standard

Caterpillar	3116		DI – TA	127 kW (173 PS)

optional

Caterpillar	3306	B	DI – TA	222 kW (302 PS)
Caterpillar	3406	B	DI – TA	300 kW (408 PS)

Performance according to DIN 6271

6-cylinders, 4-stroke water cooled Diesel engines, direct injection fuel system, Turbocharged, Aftercooler, Fuel saving **Economy-Management-System** for working under medium load.

Fuel tank: 860 l
Additional tank: 860 l optional

Winches

optional

		Freefall winches			
		1.	2.	3.	4.
Line pull	KN	75	85	108	130
Rope diameter	mm	19	21	23	26
Line speed	m/min.	120	100	100	85
Drum diameter	mm	400	441	483	546

optional

		Crane winches			
		1.	2.	3.	4.
Line pull	KN	58	88	100	125
Rope diameter	mm	19	21	23	26
Line speed	m/min.	120	100	100	100
Drum diameter	mm	400	441	483	546

A wide range of winches are available and extend the job opportunities. The hydrostatic winch drive operates in a closed hydraulic circuit. Freefall winches are equipped with multiple disc type clutches and brakes. Line speed is continously adjustable between 0 and max. The electronic control guarantees smooth lifting operation even under hanging load, in lifting and lowering direction. Automatic cut-off when reaching security windings on winch. The winches are mounted into the winch carrier which is also used as the A-frame.

Hydraulic System

Hydraulic pumps for winch drives, travel drives, slewing gear, boom adjustment cylinder and telescopic device for undercarriage are connected to distribution gear box. Electric/electronic controls operates the hydraulic system. Additional hydraulic circuits can be attached for external hydraulic supplies.

STANDARD HYDRAULIC SYSTEM

Pumps for winch drives	2x	223 l/min.
Pumps for travel drive	2x	223 l/min.
Pump for slewing gear		139 l/min.
Pump for boom adjustment cylinder		50 l/min.
Oil pressure		approx. 300 bar

ADDITIONAL HYDRAULIC CIRCUITS

For the supply of Vibrohammers, Hydraulic Freefall Hammers, Piling leaders, Driling Rigs, Oscillators, Rotators and other Attachments with open or closed hydraulic circuits.

Additional circuit 1	223 l/min.
Additional circuit 2	223 l/min.
Additional circuit 3	139 l/min.
Additional circuit 4	50 l/min.

further combinations on request.

Boom Adjustment Device

The winches are installed into the adjustable winch carrier. The adjustment is controlled by a hydraulic cylinder. Boom pendant ropes are connected to the winch carrier. Winch carrier is also used as A-frame.
Safety locking valves and security equipment guarantee safe operation in each position of boom.

Slewing Gear

According to working conditions one or two slewing gears will be installed. The system is hydraulically controlled in a closed circuit. A hydraulic motor with security brake system is driving a planetary gear box working on the slewing ring with inner teething.
Slewing speed: 0 – 3,5 rpm.
Two speed slewing gear for sensitive crane operation is standard.

Counterweight Lowering Equipment

For transport weight reduction counterweights can be installed and dismantled without any outside assistance.

Controls

The electronic monitoring system controls, interlocks and indicates all working-, security- and control functions of the machine. All important functions are indicated on the LCD display, which is located in sight of the operator. Any malfunctions are shown on the display and will guide the operator for trouble shooting. The crane safety device is integrated into the electronic control system. When working in the crane mode the actual datas of boom length, loads and angles are automatically displayed. If changes of these conditions occur the operator will be guided to program system inside preset safety standards.

Boom

The tubular boom consists of lower boom, upper boom and boom extensions. Boom parts are pin connected. The upper boom part can be fited with pin connections for installation of auxillary jib and piling leader.

Undercarriage

The heavy duty long crawler undercarriage is made in tractor type design and lifetime lubricated. Hydraulically extendable crawler side frames guarantee acceptable transport dimensions and excellent operating conditions.
Independant drive of crawlers for all kind of driving motions.

Travel speed:	2,2 km/h
Gradebility:	45 %
Ground pressure:	0,5 kg/cm²