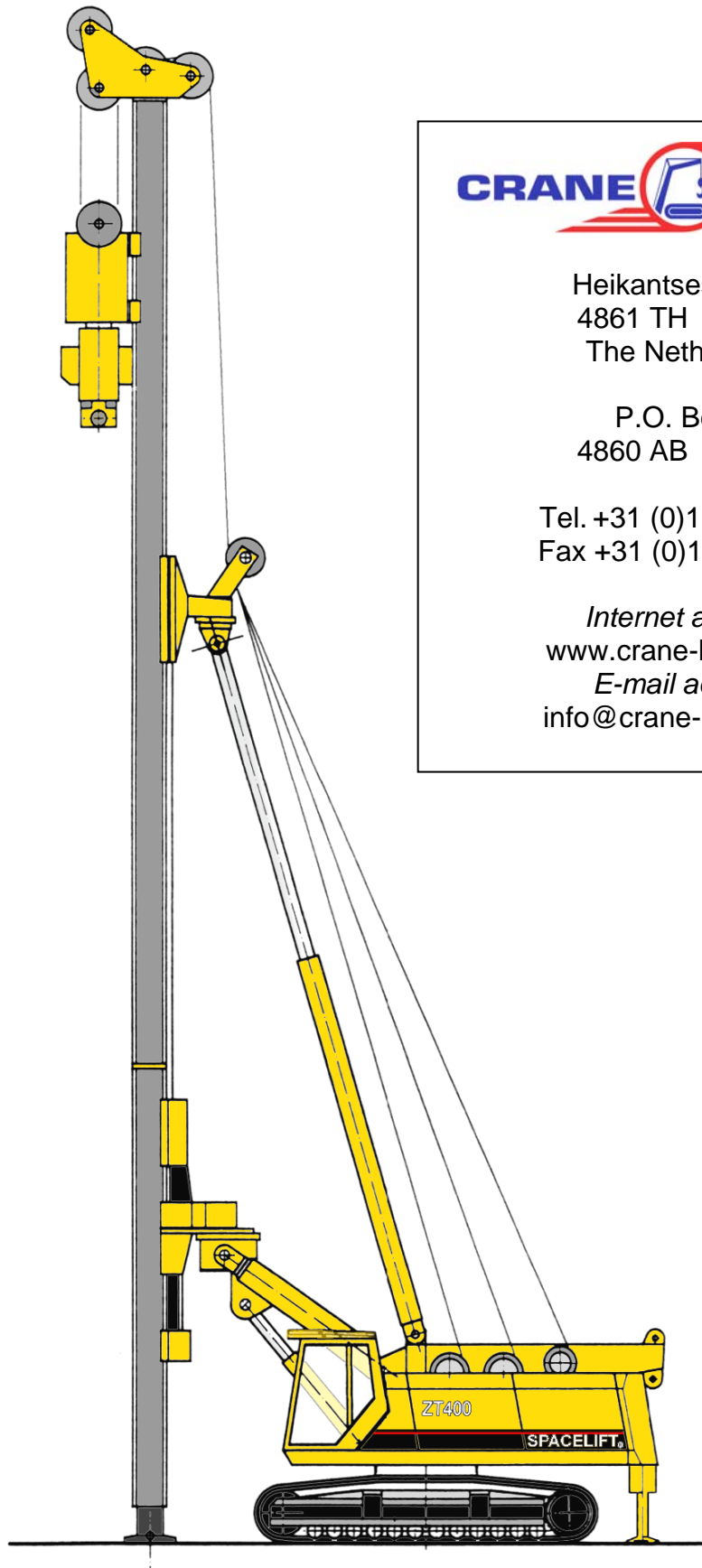


SPACELIFT®

Z E P P E L I N

ZT400-P PILING



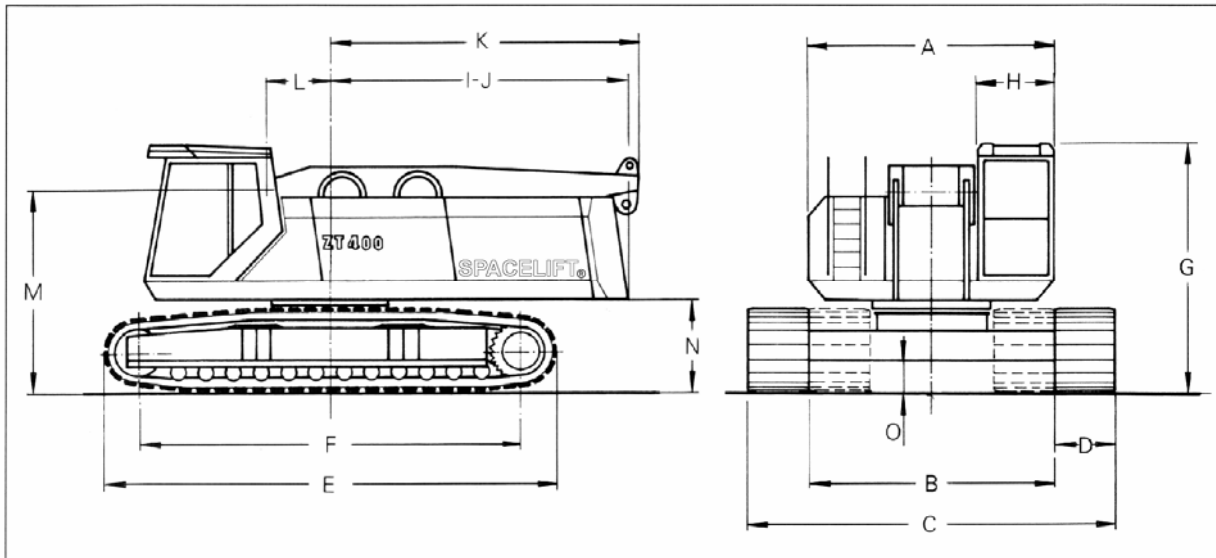
Heikantsestraat 15
4861 TH CHAAM
The Netherlands

P.O. Box 67
4860 AB CHAAM

Tel. +31 (0)161 491 953
Fax +31 (0)161 491 952

Internet address:
www.crane-house.com
E-mail address:
info@crane-house.com

Measurements



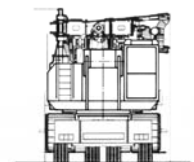
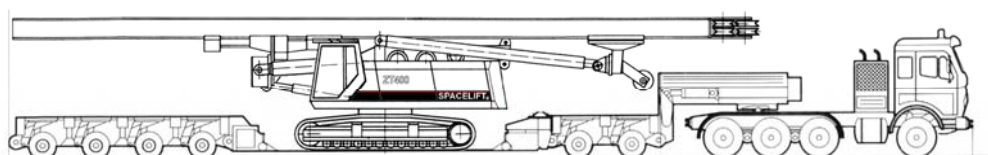
Dimensions

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

Transport dimensions

Transport height	3600 mm
Transport length with leader	18000 mm
Transport length with leader extension	24000 mm
Transport width	3200 mm

Transport weight	67 ton
Transport weight excl. counterweight	57 ton



Engine

Caterpillar 3406 DI-TA Diesel.
320 kW (ca. 480 PS) according to ISO standard 9249.

6-cylinders, 4-stroke water cooled Diesel engines, direct injection fuel system, Turbocharged, After cooler, Fuel saving Motor-Management-System switchable to 3 category; self supporting, economically, full load

Fuel tank of 800 liter with fuel tank level meter and refilling pump.

Slewing gear

According to working conditions two or three 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.

Hydraulic system

Hydraulic pumps for operate winches, travel, 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 operate a lot of different attachments as Vibrohammers, Hydraulic Freefall Hammers, Drilling systems, Oscillators, Rotators and other Foundation 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.

Winches

Winch categories:

		1.	2.	3.	4.
Line pull	kN	75	108	125	150
Rope diameter	Ø mm	19	23	24	26
Line speed 0 to	m/min.	130	120	110	100
Cap on 1 st layer		46	46	46	46

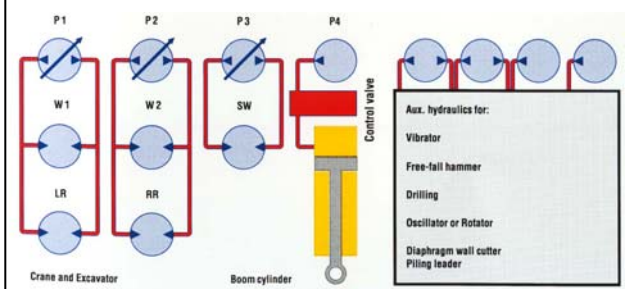
Crane winches

5,8 t	Line pull
8,8 t	Line pull
10 t	Line pull
12,5 t	Line pull
15,8 t	Line pull
18,5 t	Line pull
26 t	Line pull

Free-fall winches with clutches and brakes

7,5 t	Line pull
8,5 t	Line pull
10,8 t	Line pull
13 t	Line pull
15,5 t	Line pull
18,5 t	Line pull
21 t	Line pull

further combinations on request.



Undercarriage

The heavy duty long crawler undercarriage is made in tractor type design with triple grouser shoes and lifetime lubricated.

Hydraulically extendable crawler side frames guarantee acceptable transport dimensions and excellent operating conditions.

Independent hydraulic drive of crawlers for all kind of driving motions.

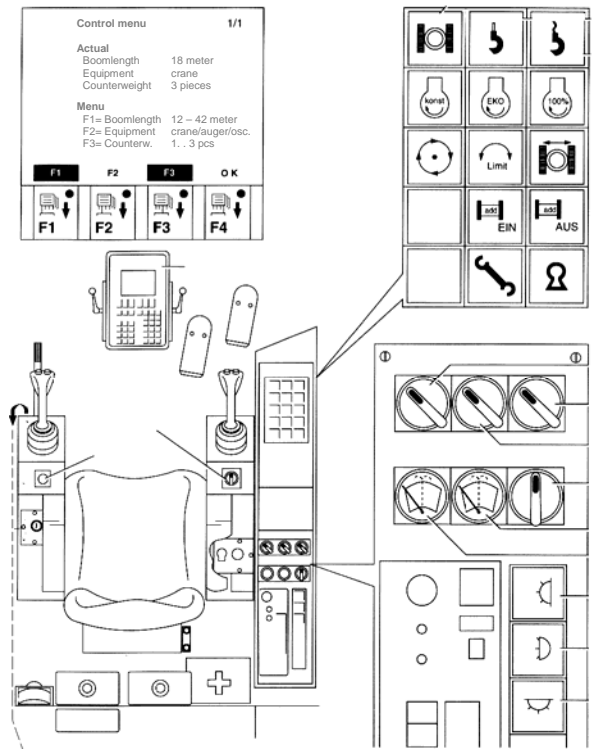
Travel speed:	2,2 km/h
Gradeability:	45 %
Ground pressure:	0,5 kg/cm ²

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.

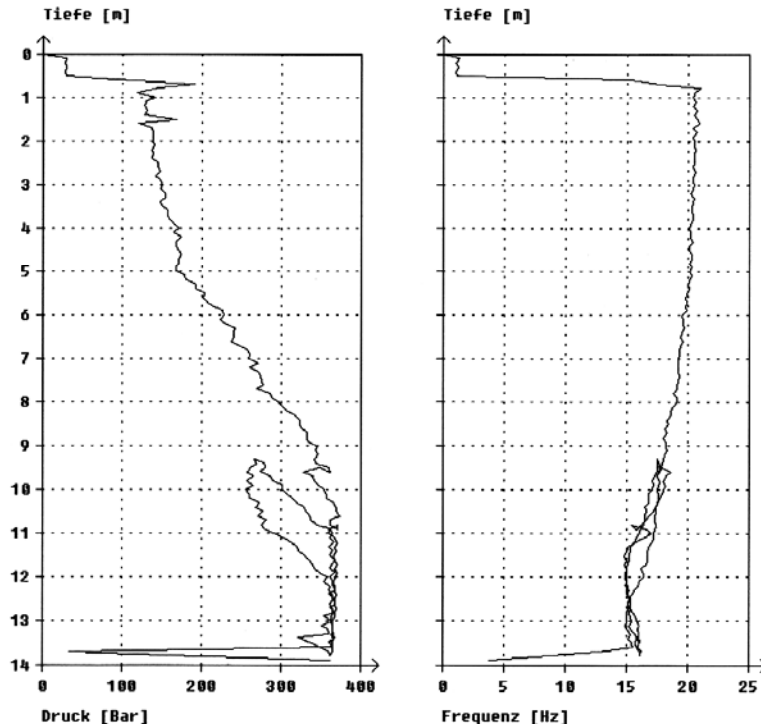
When working in the crane mode the actual datas of boom length, loads and angles are automatically displayed. If changes of these conditions occur the operator will be guided to program system inside preset safety standards.



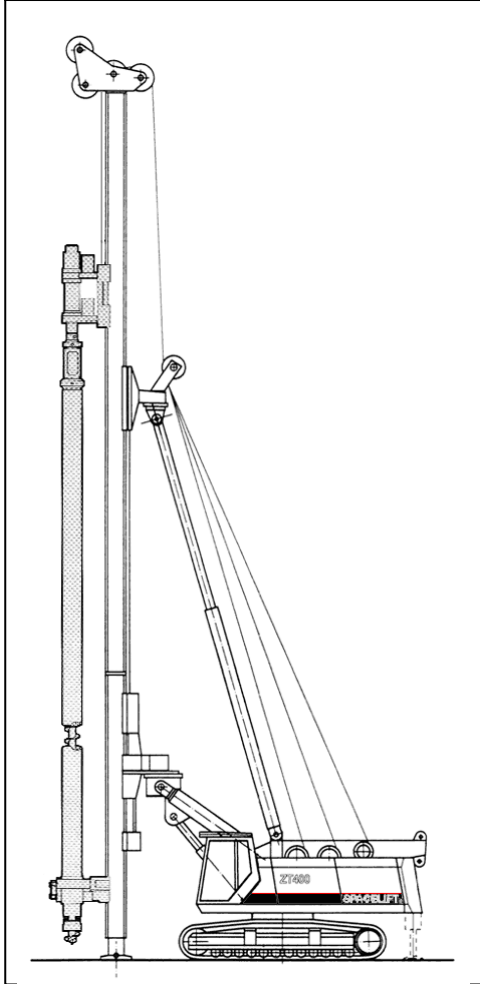
Operating Process Control optional

Spundwand Protokoll auf Bagger

Startzeit	16:03:56	Endzeit	16:14:41
Datum	02.02.1995	Zeit gesamt	10:45
Bohle/Stich	270	maximale Tiefe [m]	13.93
Suspension gesamt [l]	2609		



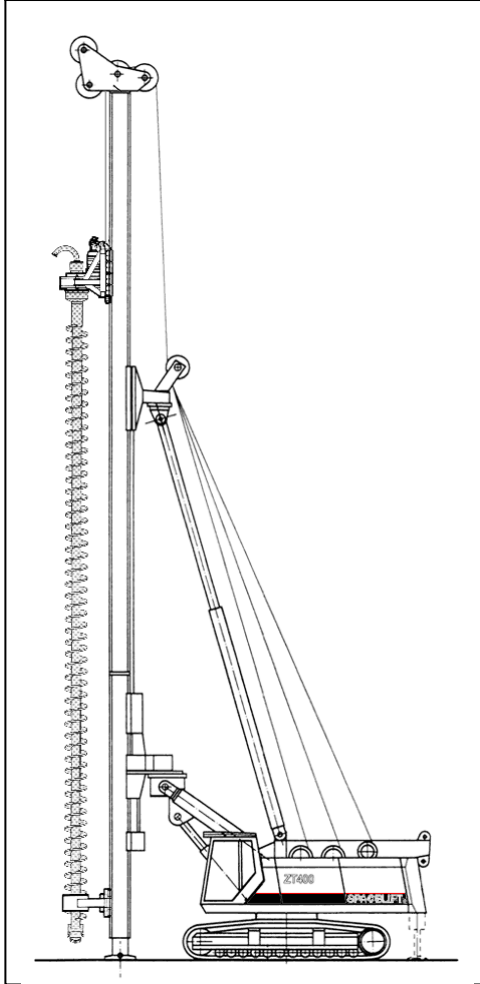
Vibratedrilling



Drilling with vibrating drill

- Optional

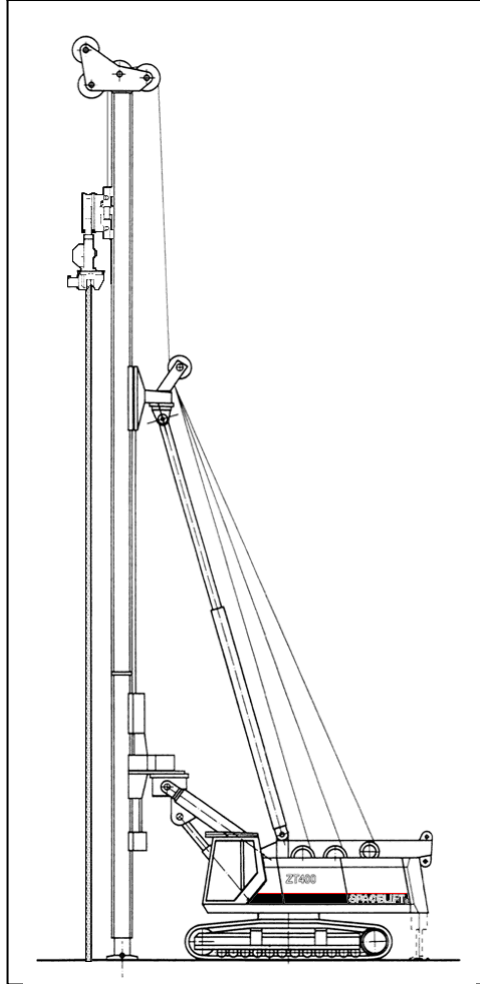
Auger



Endless drilling with auger

- Optional

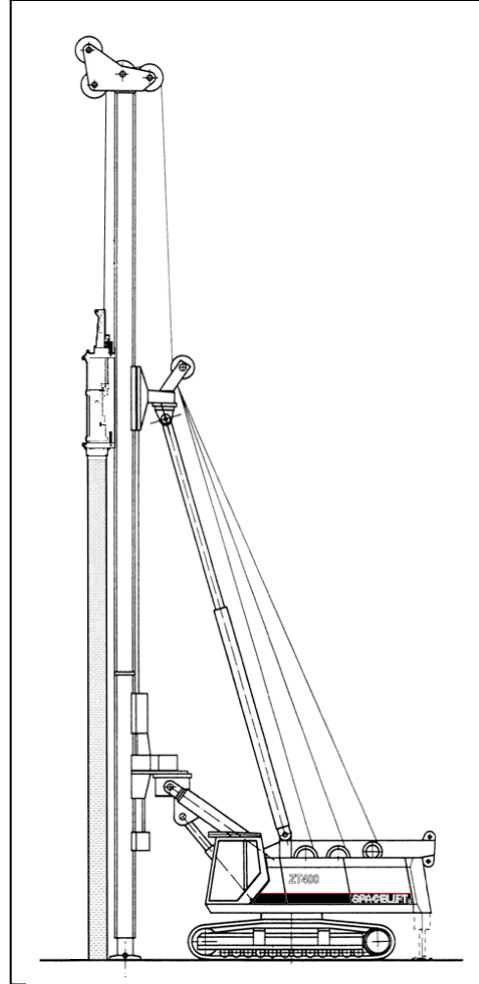
Vibrator



Dimension vibrator:

- Undercarriage ZT400
- Extra hydraulic for vibrator and vibrate control
- "Pull down" equipment present
- Establish constant tension possibility on joysticks
- Computer process control

Hydrohammer



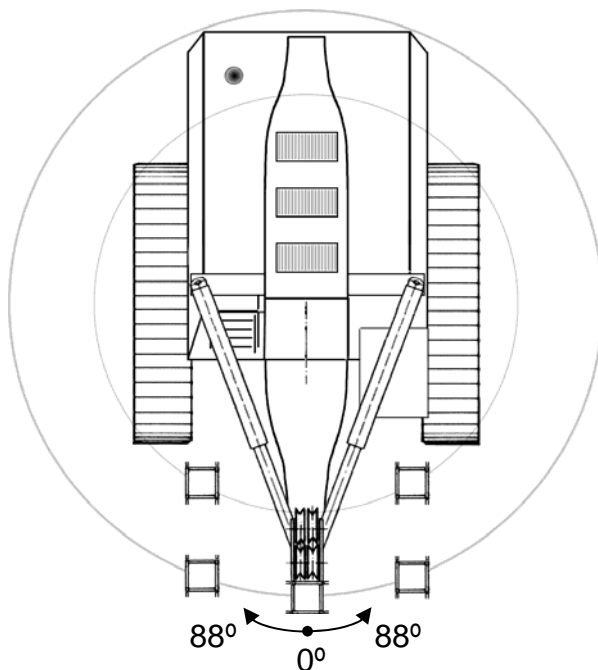
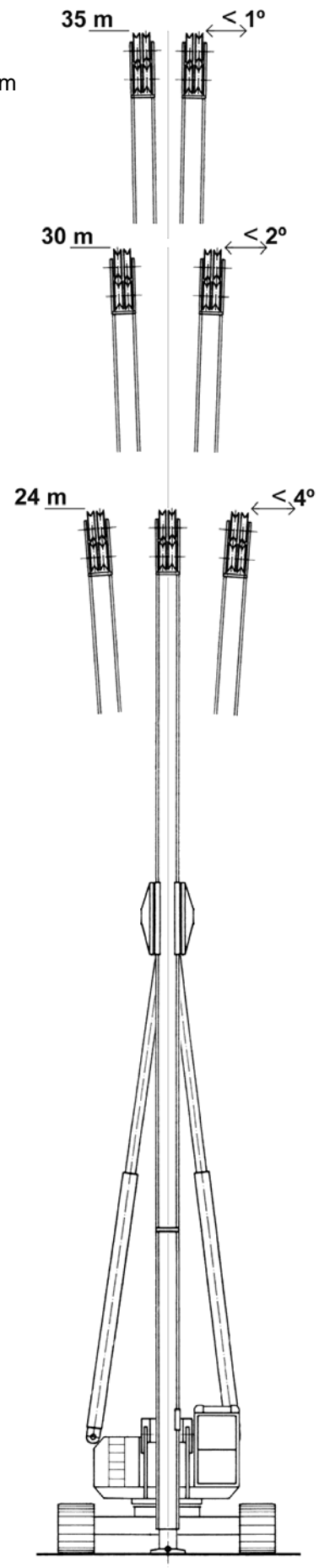
Dimension hydrohammer:

- Undercarriage ZT400
- Extra hydraulic for vibrator and vibrate control
- "Pull down" equipment present
- Establish constant tension possibility on joysticks
- Computer process control

All attachments are optional

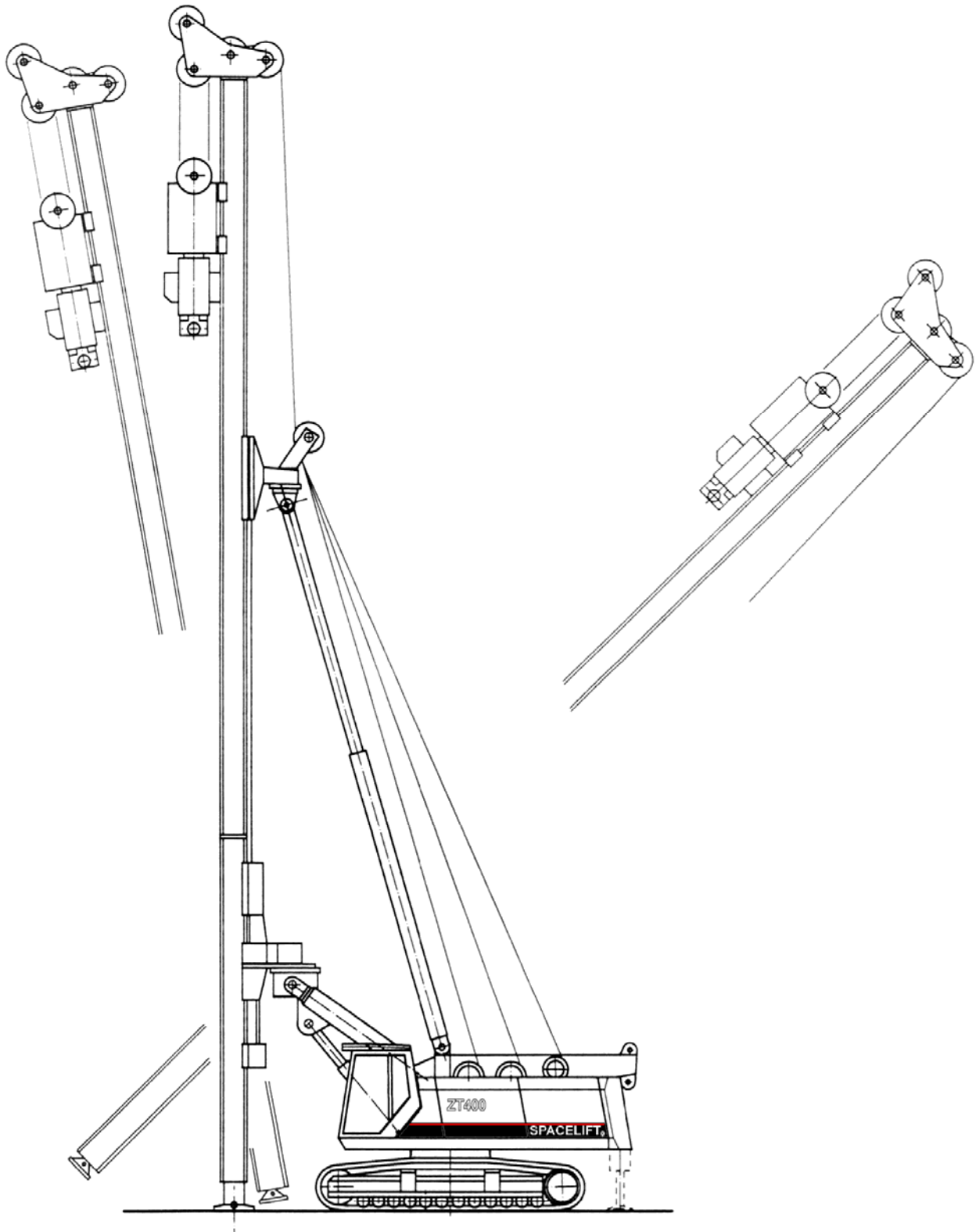
Leader possibilities

Leader length	24 m	30 m	35m
Reach from center of rotation	3,8 – 5,0 m	3,8 – 5,0 m	3,8 – 5,0 m
Load capacity of leader	30 t	30 t	25 t
Inclination			
- forward	5° (1:11)	2° (1:11)	1° (1:11)
- backward	45° (1:1)	10° (1:6)	5° (1:11)
- crossward	± 4°	± 2°	± 1°
Slewing of lead			
- left	90°	90°	90°
- right	90°	90°	90°
Outreach			
- above	1,8 m	1,8 m	1,8 m
- under	5,0 m	11,0 m	16,0 m
Permiss. pull on main winch	50 t	30 t	25 t
Permiss. down pull on winch	15 t	15 t	15 t
Permissible moment max.	30 mt	25 mt	15 mt
Standard winch assembly	- - - on request - - -		



Leader

- Undercarrier ZT400
- Behind outrigger optional
- Counterweight 10 tons standard
- Superstructure leader equipment
- Leader 24m, 30m, 35m
- Climbconstruction with safetyrails
- Pilerhead with 8 sheave
- Swerve-, angle-, height- positioning construction
- Hydraulic foot cylinder extendable 2 meter
- Cable length visible on display
- Leader angle adjust by display
- Self positioning parallel mending for leader
- Automatic adjustment leader direction



Mass hammer (ton) incl. piston, runner, conduction and monkey face			Maximum hoistload (ton)			
type	total block	piston	Takel	maximum load	no. part	maximum line pull
A	6,95	0,0	Block	26,0/39,0	2 / 3	13,0
B	7,50	2,3	Poles	26,0	2	13,0
C	7,85	0,0	Points	7,5	1	7,5
D	10,00	0,0				

Leader length	m	24,00	24,00	30,00	30,00	35,00	35,00
max. pile length		14,00	19,00	20,00	25,00	20,00	25,00
Worksituation	BLOCK	Permitted pilemass in tons					
Vertical piling 0°	A	7,50	7,50	7,50	7,50	7,34	3,52
	B	7,50	7,50	7,50	6,07	6,07	2,07
	C	7,50	7,50	7,50	5,70	5,77	1,70
	D	7,50	7,50	6,46	1,36	2,02	-
Vertical piling 2,85°	A	7,50	7,50	6,16	3,00	2,19	-
	B	7,50	7,50	5,01	1,68	1,03	-
	C	7,50	7,50	6,77	1,32	-	-
	D	7,50	5,88	1,20	-	-	-
Vertical piling 5,70°	A	7,50	6,20	2,10	-	-	-
	B	7,50	5,16	1,03	-	-	-
	C	7,39	4,85	2,68	-	-	-
	D	4,59	1,63	-	-	-	-
1° (57,29:1) forward	A	7,50	7,50	4,59	1,50	-	-
	B	7,50	7,50	3,41	-	-	-
	C	7,50	7,50	5,21	-	-	-
	D	7,50	4,29	-	-	-	-
5° (11,43:1) forward	A	7,50	4,16	-	-	-	-
	B	6,45	2,93	-	-	-	-
	C	6,17	2,61	-	-	-	-
	D	2,91	-	-	-	-	-
5° (11,43:1) backward	A	7,50	7,50	7,50	7,50	7,34	3,52
	B	7,50	7,50	7,50	6,07	6,07	2,07
	C	7,50	7,50	7,50	5,70	5,77	1,70
	D	7,50	7,50	6,46	1,36	2,02	-
10° (5,67:1) backward	A	7,50	7,50	7,50	7,50	7,34	3,52
	B	7,50	7,50	7,50	6,07	6,07	2,07
	C	7,50	7,50	7,50	5,70	5,77	1,70
	D	7,50	7,50	6,46	1,36	2,02	-

Load/pressure compare table Winch type 12,50 ton			
Pressure (bar)	1 part	2 part	3 part
320,00	12,50	25,00	37,50
300,00	11,72	23,44	35,16
275,00	10,74	21,48	32,23
250,00	9,77	19,53	29,30
225,00	8,79	17,58	26,37
200,00	7,81	15,63	23,44
175,00	6,84	13,67	20,51
150,00	5,86	11,72	17,58
125,00	4,88	9,77	14,65
100,00	3,91	7,81	11,72
75,00	2,93	5,86	8,79
50,00	1,95	3,91	5,86

Load/pressure compare table Winch type 7,50 ton			
Pressure (bar)	1 part	2 part	3 part
320,00	7,50	15,00	22,50
300,00	7,03	14,06	21,09
275,00	6,45	12,89	19,34
250,00	5,86	11,72	17,58
225,00	5,27	10,55	15,82
200,00	4,69	9,38	14,06
175,00	4,10	8,20	12,30
150,00	3,52	7,03	10,55
125,00	2,93	5,86	8,79
100,00	2,34	4,69	7,03
75,00	1,76	3,52	5,27
50,00	1,17	2,34	3,52

