

**Technical data**  
**Hydraulic crawler crane**

**HS 885 HD**  
Litronic®

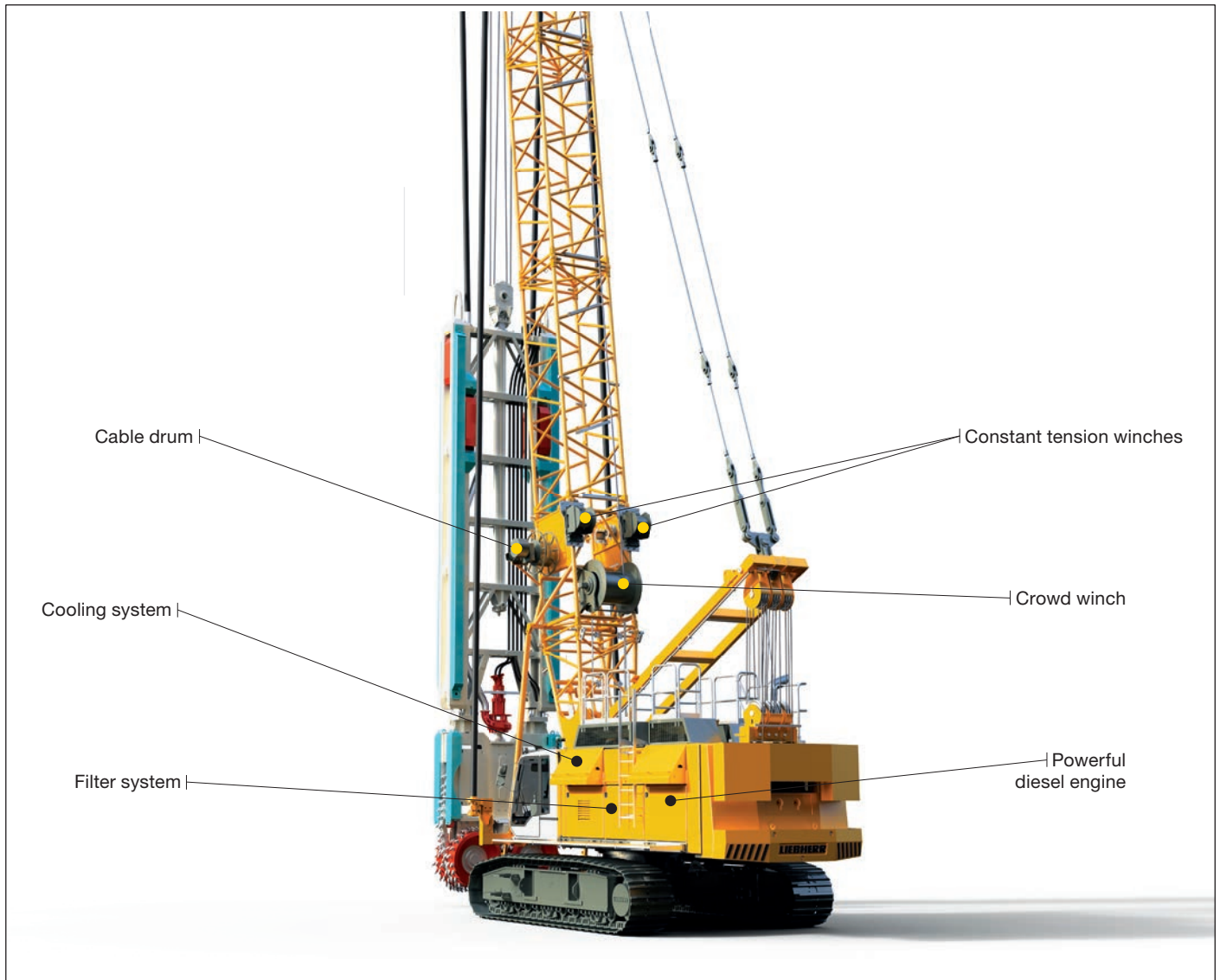
**With Casagrande hydromills FD60 and FD100**



**LIEBHERR**

# Concept and characteristics

## HS 885 HD with hydromill



### Multi-function crane with optional free-fall winches:

- Hydromill crane
- Grab crane
- Service crane

### Engine:

- Powerful diesel engine – 670 kW (898 hp).
- No additional power pack required for hydromill.
- Less investment.
- Less operational costs.
- Less maintenance costs.

### Cooling system:

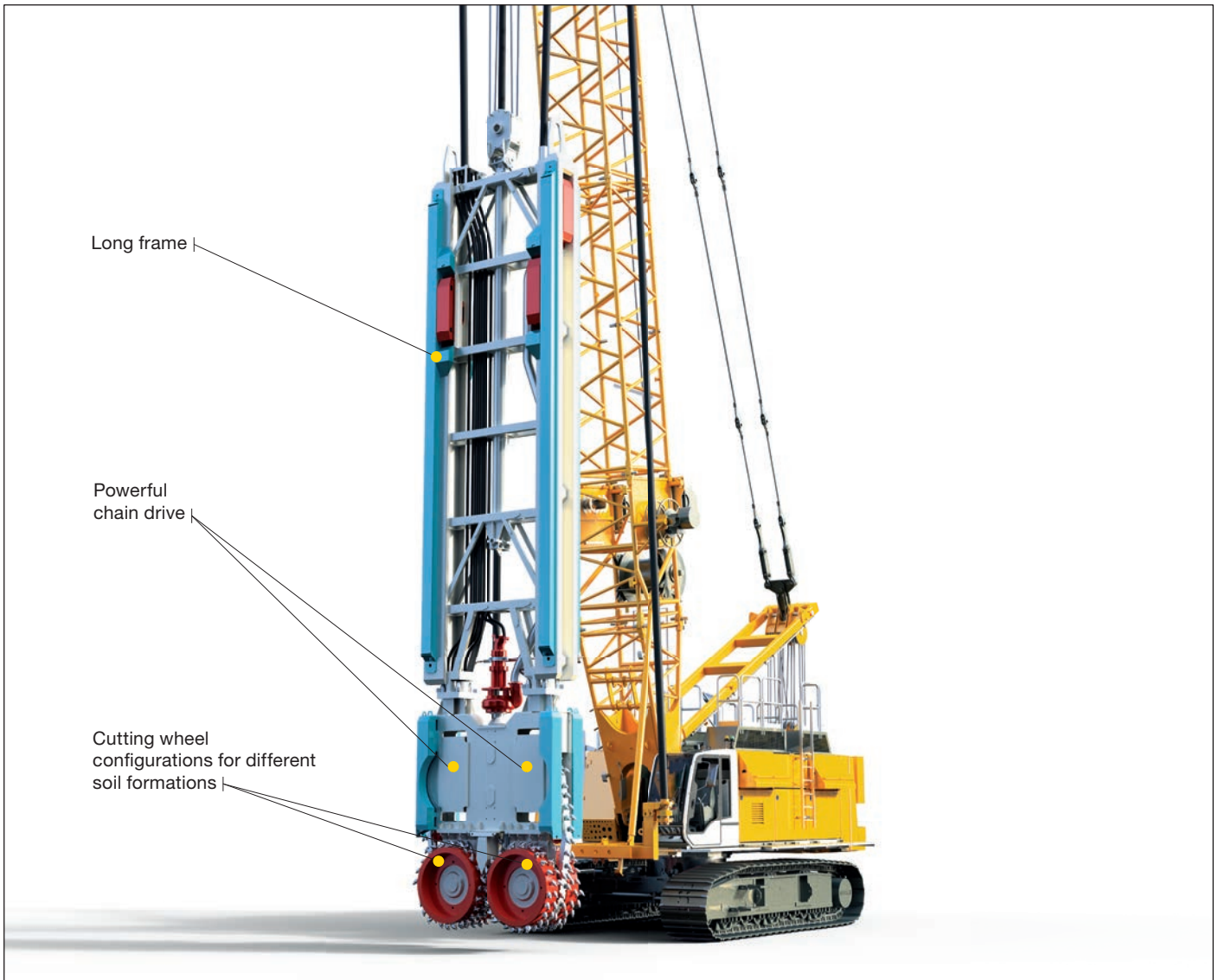
- High cooling capacity.
- Operation at ambient temperature of up to 45°C at full engine power.
- Operation at ambient temperature of up to 50°C at 500 kW engine power.

### Hydraulic system:

- Maximum safety for hydraulic system through filtration of all hydraulic flows returning from hydromill.
- Lower risk of contamination with mud.
- Prevents downtime and expensive repairs.

# Concept and characteristics

## HS 885 HD with hydromill



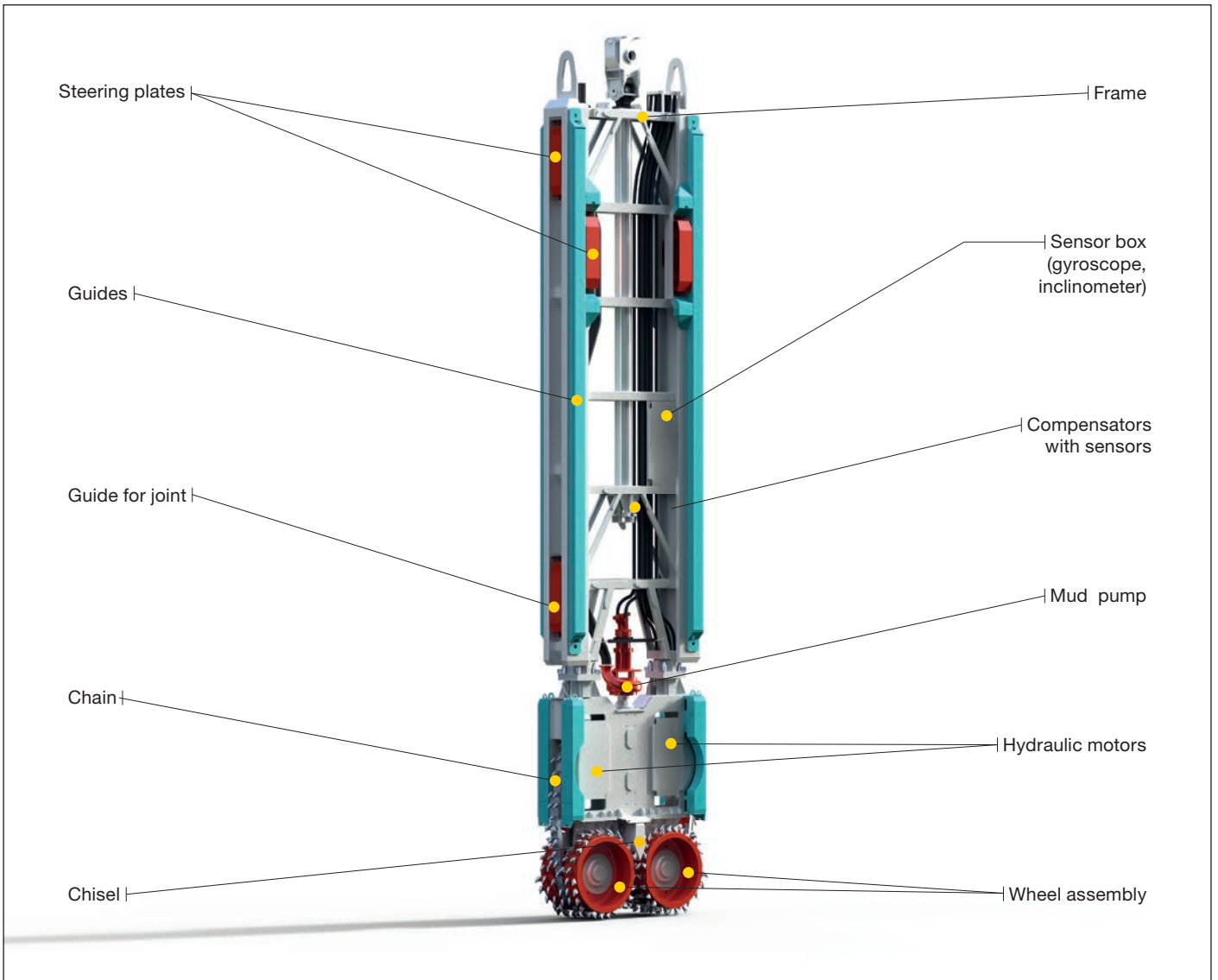
### Hydromill:

- Heavy construction of hydromill allows excellent penetration of difficult soils.
- Long frame provides outstanding guidance and verticality.
- Inclinometer with gyroscope to measure and indicate verticality and orientation. Verticality control via steering plates.

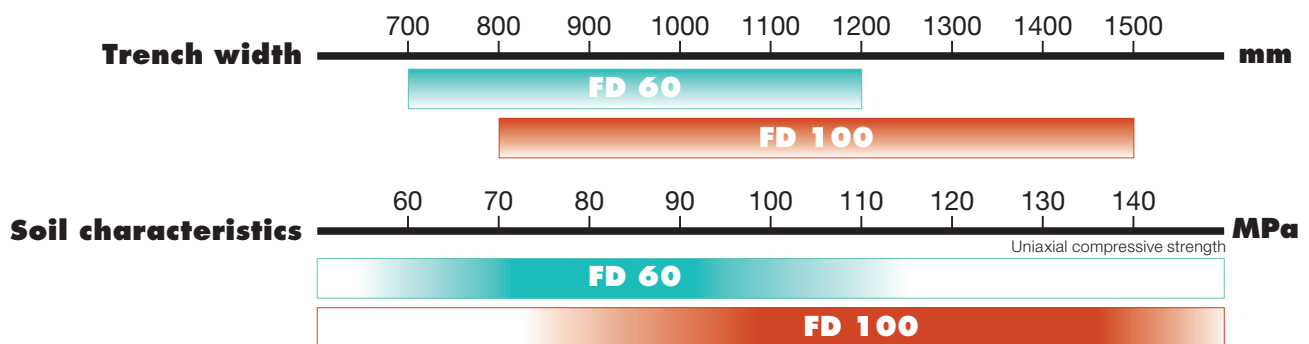
### Hydromill drive system:

- Powerful chain drive provides high torque and speed for the cutting wheels.
- Chain tensioner works as shock absorber.
- Full-face excavation through chain drive increases production rate.
- Chain drive allows cutting of panel joint.
- Cutting wheel configurations for different soil formations available.
- No gearbox required to power the cutting wheels. Quick exchange. Low maintenance costs.

# Set-up hydromill



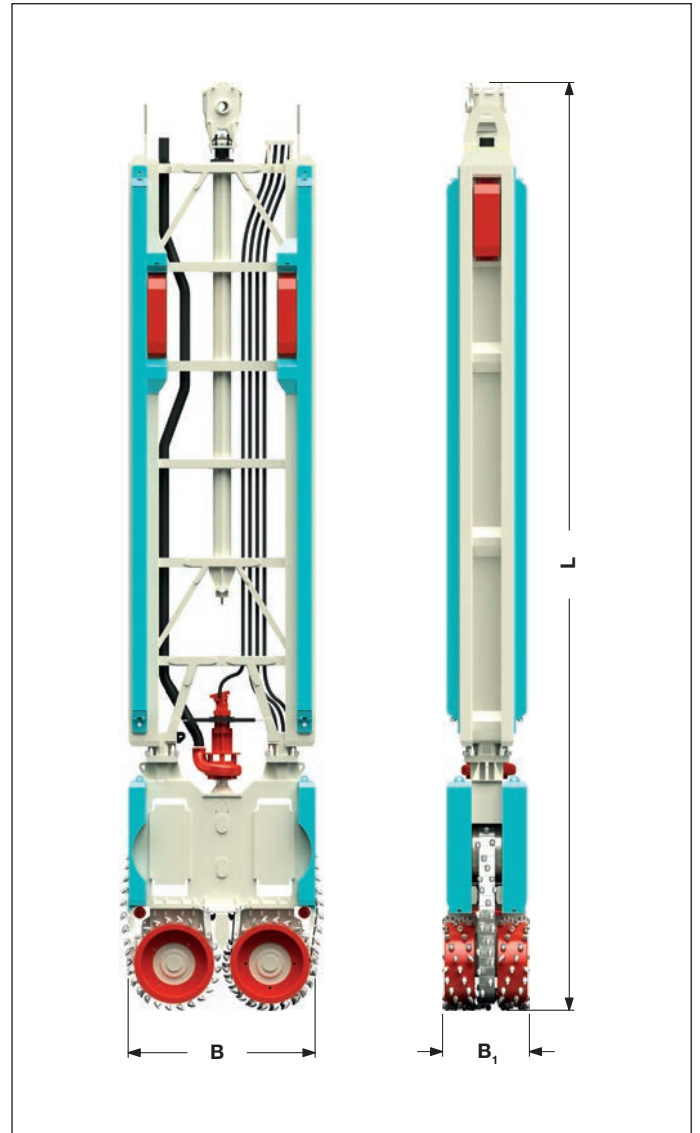
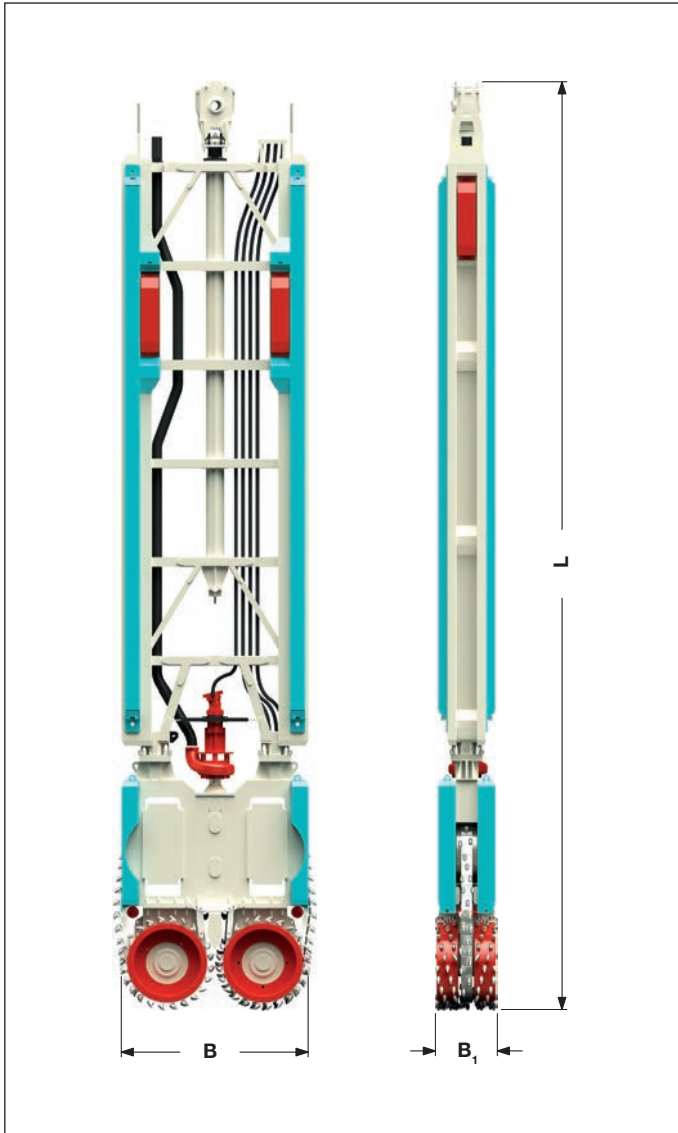
# Hydromill selection



# Hydromill options

## FD 60

## FD 100



### FD 60

Trench length (B)	Trench width (B <sub>1</sub> )	Length (L)	Weight
mm	mm	mm	t
3200*	700 - 1200	15400	33 - 37

Torque at wheel axle	Wheel speed	Suction pump
kNm	rpm	m <sup>3</sup> /h
2 x 67	0 - 30	450

### Verticality control

X axis	Y axis
Wheels and steering plates	Steering plates

\*) Other trench widths upon request.

### FD 100

Trench length (B)	Trench width (B <sub>1</sub> )	Length (L)	Weight
mm	mm	mm	t
3200*	800 - 1500	15400	38 - 45

Torque at wheel axle	Wheel speed	Suction pump
kNm	rpm	m <sup>3</sup> /h
2 x 99	0 - 27	450

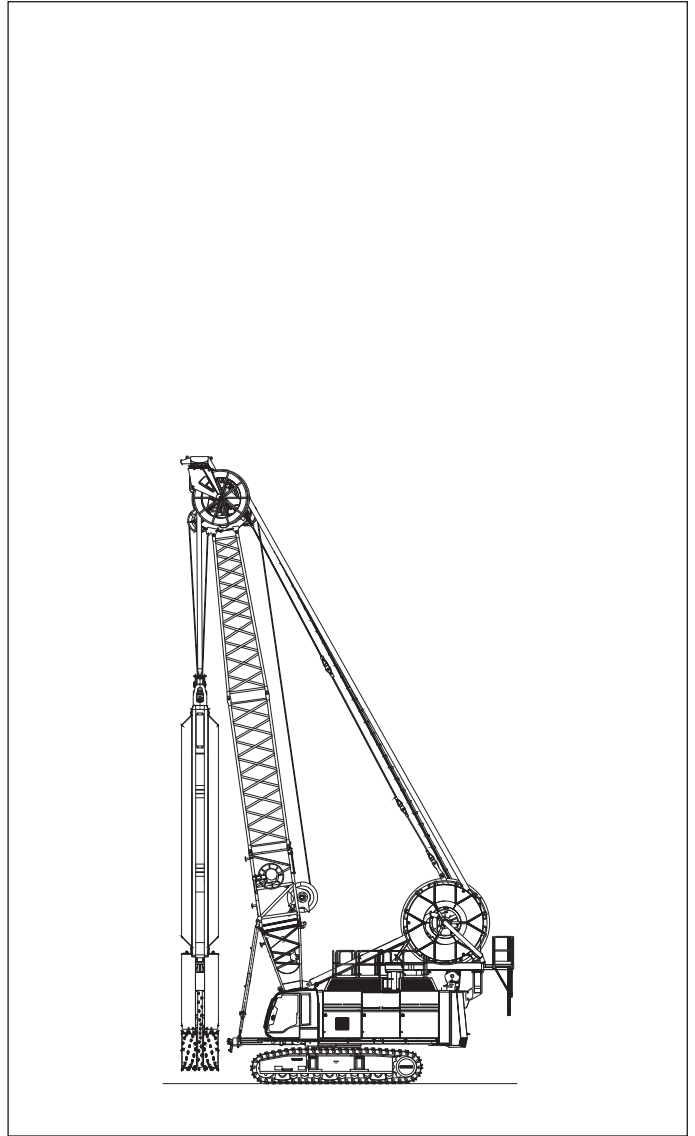
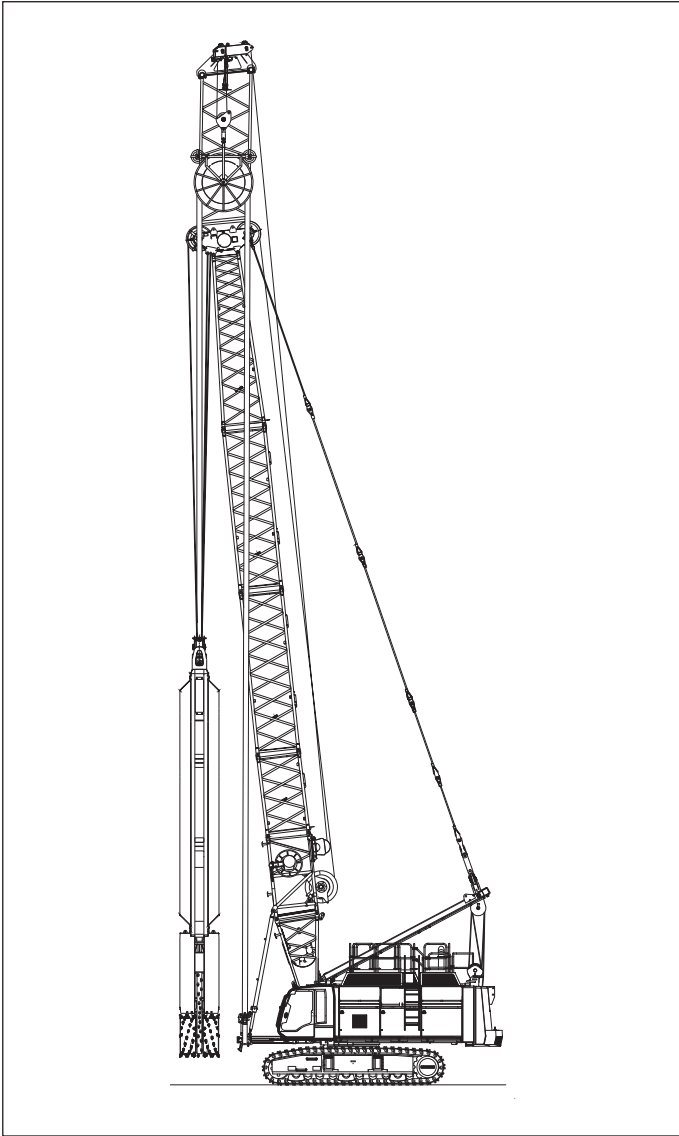
### Verticality control

X axis	Y axis
Wheels and steering plates	Steering plates

# Configuration and excavation depth

## Hose Tension System HTS

## Hose Drum System HDS



FD 60		FD 100	
Trench width	Excavation depth	Trench width	Excavation depth
700 mm	70 m		
800 mm	70 m	800 mm	64 m
1000 mm	64 m	1000 mm	64 m
1200 mm	64 m	1200 mm	58 m
		1500 mm	58 m

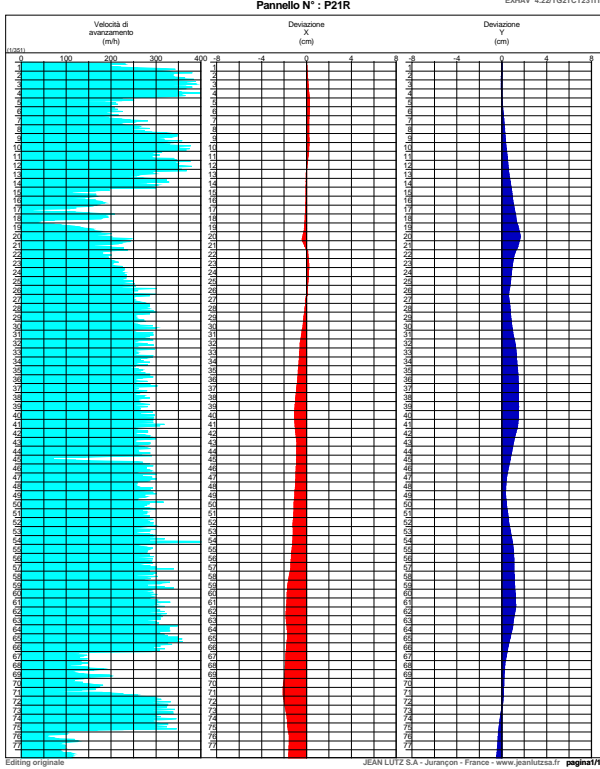
FD 60		FD 100	
Trench width	Excavation depth	Trench width	Excavation depth
700 mm	100 m		
800 mm	100 m	800 mm	100 m
1000 mm	100 m	1000 mm	100 m
1200 mm	100 m	1200 mm	100 m
		1500 mm	100 m

Excavation depths		
Excavation depth	Boom length	Vertical extension
58 m	29 m	6 m
64 m	32 m	6 m
70 m	35 m	6 m

# Control system and data recording

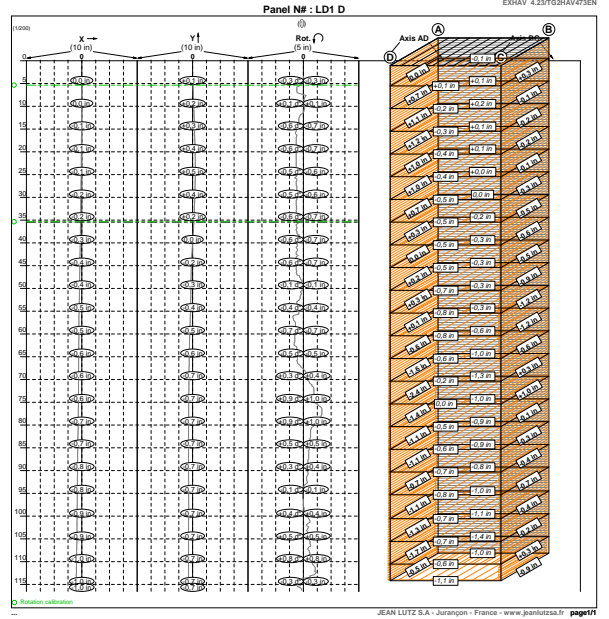
## Data evaluation - verticality

<b>FD90 CASAGRANDE</b>		<b>C20</b> (Contratto N° C20)	
DIAFRAMMI CON LA BENNA A FRESA			
Parametri e traiettorie in perforazione			
Data inizio : 03/20/2010	Data Fine : 03/20/2010	Larghezza benna : 1,20 m	
Ora inizio : 16.00.37	Ora Fine : 17.03.24	Lunghezza benna : 3,00 m	
		Profondità max. : 77,92 m	



## Data evaluation - orientation

<b>FORDRILL</b>		<b>LIBERTY</b> (Contract N° : LIBERTY)	
CUTTING WHEELS DIAPHRAGM WALL			
Depth and deviation according to depth			
Start date : 16/04/2011	End date : 16/04/2011	Width bucket : 3,94 ft	
Begin time : 08:14:24	End time : 09:23:40	Length bucket : 10,33 ft	
		Bottom level : 116,53 ft	



Control unit in operator's cab

Verticality measurement and recording

Control panel hydromill

Monitor hydromill

Monitor crawler crane

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