

# FOUNDATION EQUIPMENT

THE RANGE OF OUR PRODUCTS

PILING RIGS B250XP B125XP B360XP B200XP B300XP XP SERIES HYDRAULIC CRAWLER D TOWER MILL EXPERIENCE INNOVATION DIAPHRAGM WALL FD60 PLUS FD100 JET C8XP C9XP C6XP C7XP C5XP GROUTING C16XP KRC DIAPHRAGM WALL EQUIPMENT



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# HYDRAULIC PILING RIGS

## XP SERIES

The new line of high performance products featuring state-of-the-art technology and operational competitiveness. The XP series equipment provides tangible benefits to the customer. This is the result of Casagrande's many years of specialist expertise and experience, complemented by cutting-edge engineering solutions, dedicated electronics, and innovative design. With improved performance, widespread efficiency, flexibility, and strong attention to safety, the XP Series is the logical next step in the evolution of the Casagrande range, already appreciated all over the world.

## SMART POWER MANAGEMENT SYSTEM

An innovative control system has been developed for the XP Series - Smart Power Management (SPM) – which allows intelligent engine power management to improve performance and productivity of the machinery. The SPM system monitors the instantaneous power flows in real time and allocates the full available power to the job duties. In this way, the operational functions always have the maximum possible power available. Higher power to the rotary means a higher drilling RPM with the same torque; higher power to the winch means having higher speed at the same pull. The result is intelligent power management and an increase of the machine's efficiency.

## FULL LOAD SENSING, ALL THE POWER WHERE NEEDED

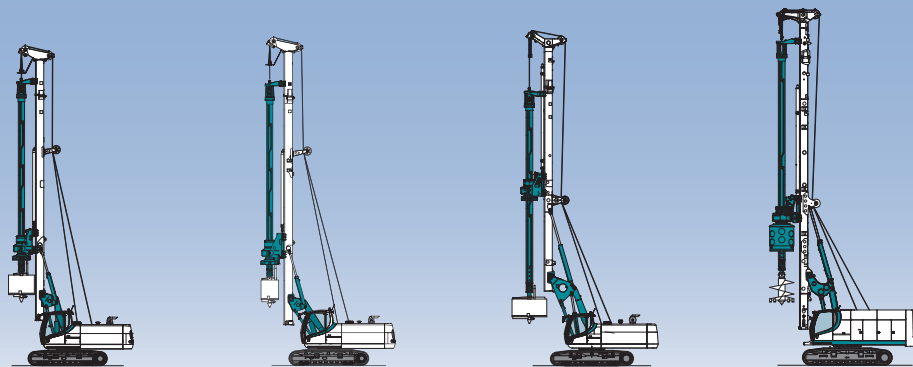
The hydraulic power systems of the XP Series adopt Full Load Sensing (FLS) technology. Different from the common hydraulic managing systems, the FLS, through the back-action involving pumps and distributors, pressurize only the required amount of oil instantly requested by users. It allows managing the power request and reducing dissipations, achieving a fuel saving up to the 25% (calculated on the basis of a theoretical working cycle).

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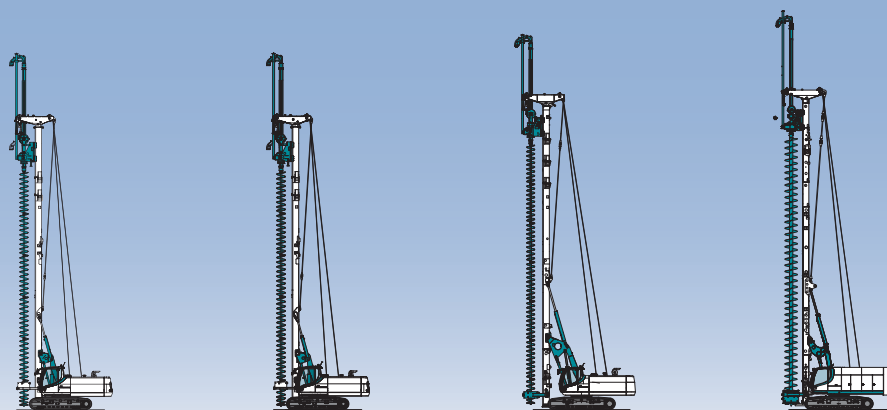


**BORED PILES**



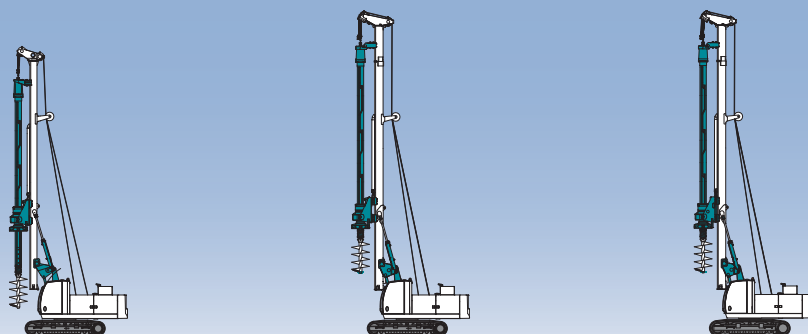
MODEL		B125 XP	B175 XP	B200 XP	B250 XP2
Max Diameter	mm	1500	1500	1800	2000
Max Depth	m	50	57	67	78
Max Diameter Undermast	mm	3040	3040	3200	3400
Rotary Head	kNm	125	175	210	263
Engine Power	kW	164	194	239	336
Weight	t	41	42,5	63	83

**C.F.A. PILES**

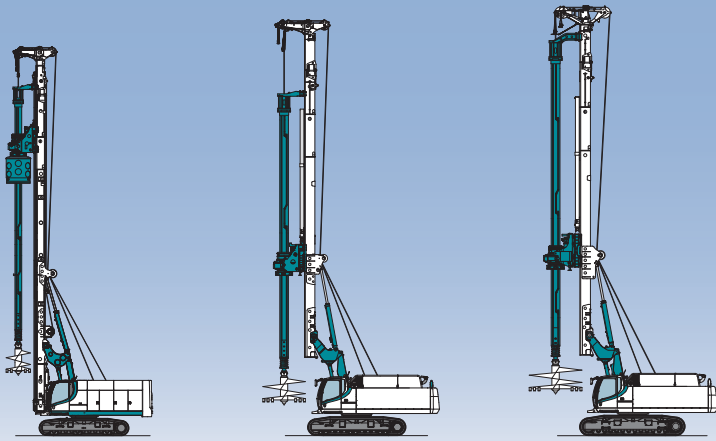


MODEL		B125 XP	B175 XP	B200 XP	B250 XP2
Max Diameter	mm	800	900	1000	1200
Max Depth	m	23	25,5	26	29
Rotary Head	kNm	125	175	210	263
Weight	t	41	42	67	83

**BORED PILES**



MODEL		C30	C35	C40
Max Diameter	mm	1200	1500	1500
Max Depth	m	42	50	50
Engine Power	kW	164	164	194
Weight	t	34	37	40,5



**B275 XP2**

**B300 XP**

**B360 XP**

2000

2200

2700

78

89

89

3400

4200

4200

300

300

400

336

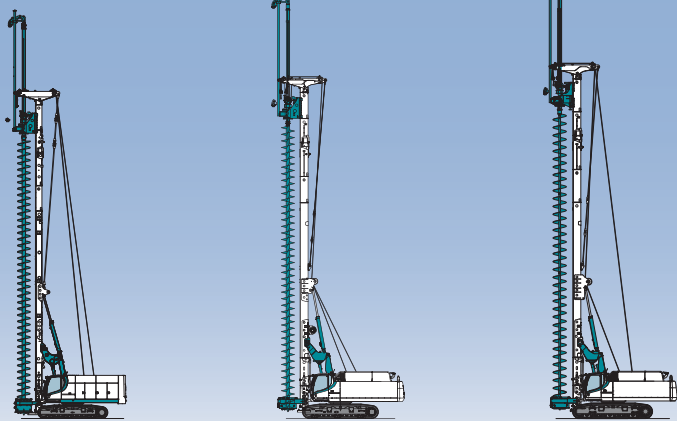
399

399

90

100

120



**B275 XP2**

**B300 XP**

**B360 XP**

1200

1200

1200

29

29

34

300

300

400

90

100

120





## DIAPHRAGM WALL EQUIPMENT

### FD HYDROMILLS

Are designed by Casagrande to match today's demands of diaphragm wall construction. Whenever the challenge of difficult soil condition, high productivity and shear accuracy are made in diaphragm walling, the Hydromills can cope.

### THE NEW CASAGRANDE KG25

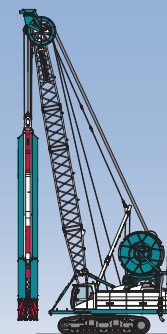
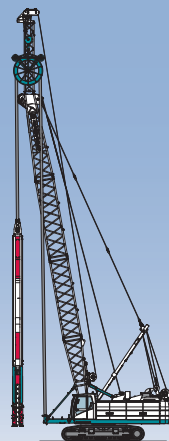
Is a machine dedicated to the construction of diaphragm walls. As a result of the compact design, the telescopic semi-kelly and rotation system, the KG25 is ideal for use in narrow spaces and to construct diaphragm walls with different alignments.

### KELLY KRC2 HD

Casagrande started manufacturing equipment for diaphragm walls in 1963. Over the years, it has developed a complete range of machines in order to satisfy all the contractor's requirements. Requests for a special machine to excavate efficiently in medium hard to soft soil led to the development of the Kelly KRC2 HD.

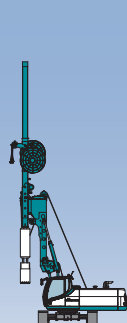


## FD HYDROMILL

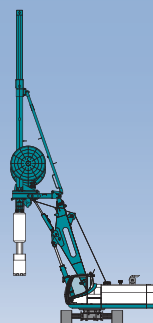


model		FD60	FD100
Max Depth	m	64	100
Width of Trench	mm	700 - 1200	800 - 1500
Length of Trench	mm	3150	3150
Engine Power	kW	480	480
Weight	t	154	163

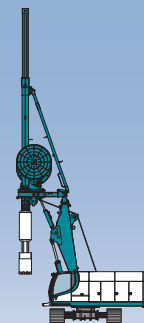
## DIAPHRAGM WALL EQUIPMENT



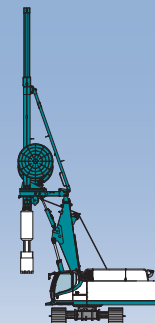
B125 XP



B200 XP



B250 XP2



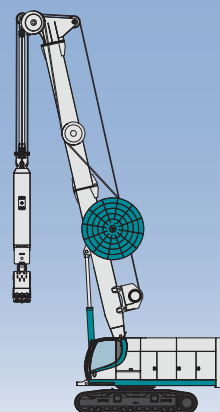
B300 XP

model		KRC1	KRC2	KRC2HD	KRC2HD
Max Depth	m	30	35	35	46
Max width of Trench	mm	800	1200	1500	1500
Length of Trench	mm	2500	3000	3000	3000
Engine Power	kW	164	239	336	399
Weight	t	40	62	78	85

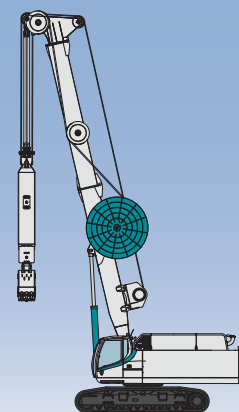
## DIAPHRAGM WALL EQUIPMENT



KG25



KG - B250 XP2



KG - B300 XP

model		KG25	KG - B250 XP2	KG - B300 XP
Max Depth	m	80	80	80
Max width of Trench	mm	2500-3200	2500-3200	2500-3200
Length of Trench	mm	500-1500	500-1500	500-1500
Engine Power	kW	239	336	399
Weight	t	~85	~90	~97





G HYDRAULIC GRAB

PM MECHANICAL GRAB

-

-

2500 ÷ 3200

2500 ÷ 3200

500 ÷ 1500

600 ÷ 1500

-

-

14 ÷ 23

10 ÷ 20



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## HYDRAULIC CRAWLER DRILLS

### THE LATEST RANGE OF XP RIGS

Casagrande is the world's leading supplier of small diameter drilling and minipiling rigs for the ground engineering industry. The latest range of XP rigs offers the contractor class leading performance, PLC controlled power distribution in order to increase performance and to reduce fuel consumption, and improved access for maintenance and full diagnostic capability.

### FULL LOAD SENSING

The hydraulic system is "Full Load Sensing" with electro-proportional control arrangement; a smart software allows the set-up to be personalized according to the project requirements. Thanks to the XP technology and the powerful engine, our rigs are designed to be extremely versatile with a large range of rotary and percussive drilling heads for all operations including the new, patented, Casagrande EP rotaries.

### MAST ARTICULATION

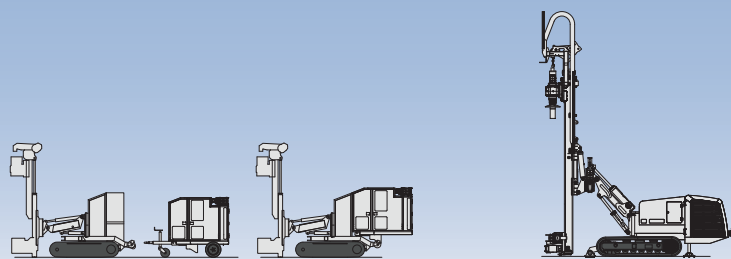
Our powerful and highly maneuverable rigs with excellent mast articulation are ideal for a wide range of operations such as anchoring, soil nailing, drilling, jet grouting, augered minipiling and many others.

### CONTROL CONSOLE

Operating solutions for everyone: Rigs are designed thinking of the operators who prefer either the radio-control or the more traditional hydraulic control panel. In both cases, there's an on board display control console.

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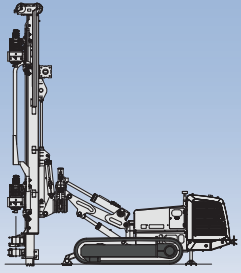


MODEL		CP5 XP2	C5 XP
Engine Power	kW	<b>75</b>	<b>85</b>
Torque up to	kNm	<b>15,2</b>	<b>15,2</b>
Weight	t	<b>8,5 (2,3 + 6,2)</b>	<b>8,5</b>



MODEL		C9 XP	C10 XP2
Engine Power	kW	<b>194</b>	<b>194</b>
Torque up to	kNm	<b>55</b>	<b>55</b>
Weight	t	<b>27</b>	<b>28</b>





**C6 XP**

**C6 XP2**

**C7 XP**

**C8 XP2**

**115**

**119**

**168**

**194**

**20**

**20**

**30**

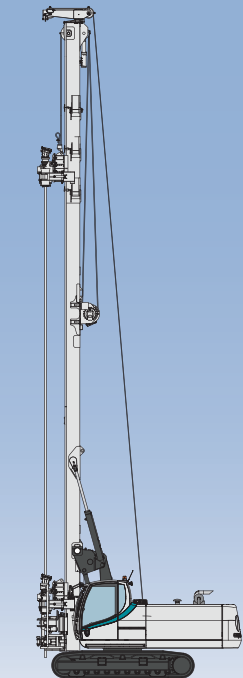
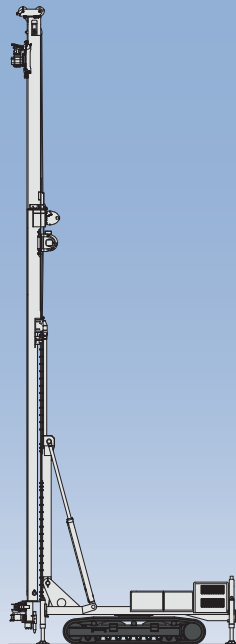
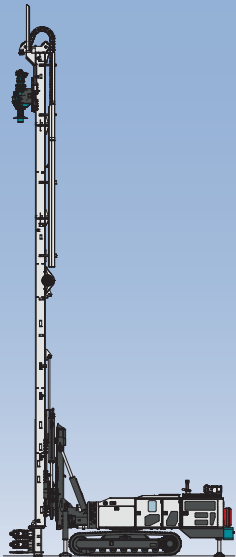
**30**

**13,5**

**15**

**22**

**24**



**C12 XP2**

**C16 XP**

**B125 XP**

**194**

**194**

**164**

**55**

**55**

**55**

**30**

**37**

**37**

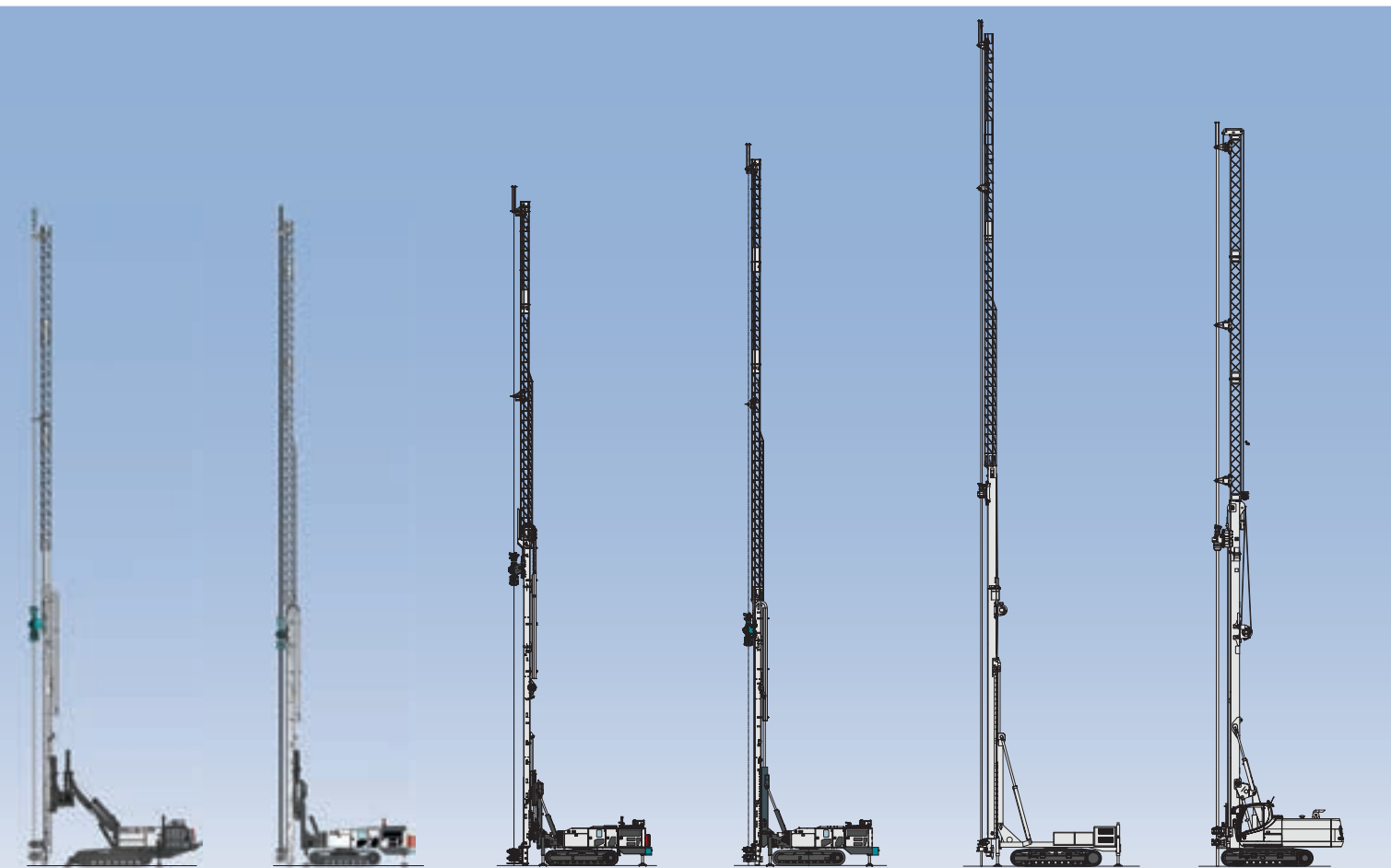


JET GROUTING

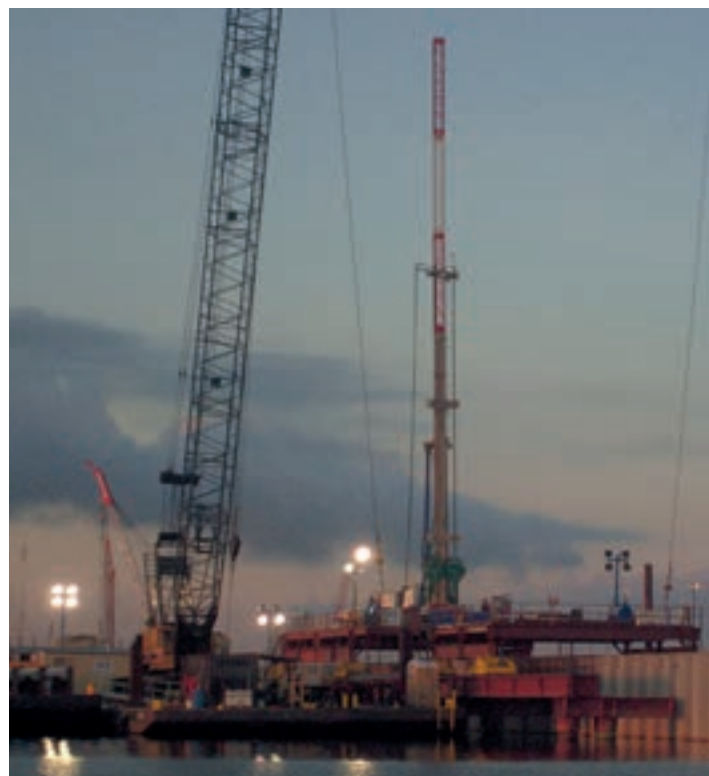


MODEL		C5 XP	C6 XP2	C7 XP	C8 XP2
Kinematics type		Front the wall	Front the wall	Front the wall	Fixed
Extension type		Lattice	Sliding lattice	Lattice	Lattice
Torque	Nm	12160	15210	15200	15200
Chuck (max. Ø)	mm	114	114/200	114/200	114/200
Stroke	mm	3350	7100	9700	9700
Rod Loader *		-	-	n.2/L 8,5 m	n.2/L 8,5 m
Max Depth	m	12	19	26,6/43,6*	28/45*
Weight	t	8,5	19	24	27

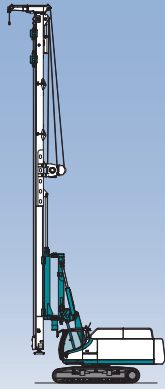




C9 XP	C10 XP2	C12 XP2	C12 XP2-JET	C16 XP	B125 XP
Front the wall	Fixed	Fixed	Fixed	Fixed	Pantograph
Lattice	Lattice	Lattice	Lattice	Lattice	Lattice
15200	15200	15200	15200	15200	20000
114/200	114/200	114/200	114/200	114/200	114/200
9700	9700	12700	9700	16000	13500
n.2/L 8,5 m	n.2/L 8,5 m	n.2/L 9 m	n.2/L 8,5 m	n.2/L 9 m	n.3/L 12 m
26,6/43,6*	28/45*	28,5/46,5*	30,5/47,5*	36/54*	32/68*
24	24	31	31	35	37

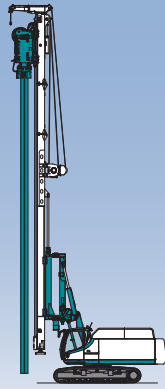


V16-19



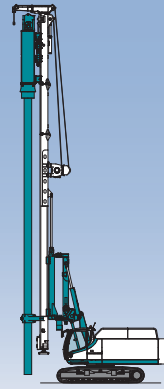
BASE CARRIER

Diesel engine  
**470 kW**  
 Weight  
**60 t**



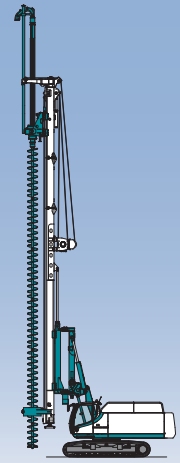
VIBRATOR FOR SHEET PILES

Max. pile length  
**19,7 m**  
 Weight  
**65 t**



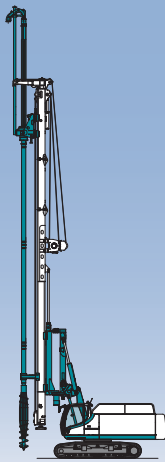
PILE DRIVING WITH HYDRAULIC HAMMER

Max. pile length  
**19,7 m**  
 Weight  
**73 t**



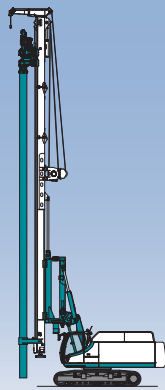
CFA CONTINUOUS FLIGHT AUGER

Max. depth  
**25,7 m**  
 Max. diam.  
**600 mm**  
 Weight  
**68 t**



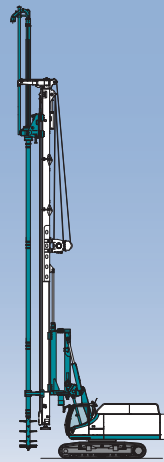
DISPLACEMENT PILES

Max. depth  
**25,7 m**  
 Weight  
**68 t**



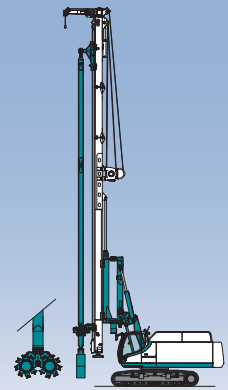
CASED CFA VdW

Max. depth  
**19,7 m**  
 Max. diam.  
**500 mm**  
 Weight  
**68 t**



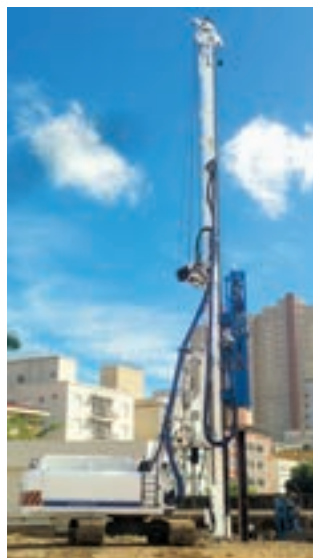
SOIL MIXING

Max. depth  
**25,7 m**  
 Max. diam.  
**1200 mm**  
 Weight  
**68 t**



CSM CUTTING SOIL MIXING

Max. depth  
**19 m**  
 Trench  
**1000x2800 m**  
 Weight  
**72 t**







# FOUNDATION DRILLING TOOLS AND ACCESSORIES

The search for high performance, combined with the search for ever better reliability, has always been the real and recognizable philosophy of Casagrande in construction sites around the world.

Numerous efforts have been made, over the years, by engineers and workers of Casagrande to offer to its customers the best power tool suitable to the excavation.

This concept combined with the competent advice received from our customers and our operators, together with the continuous activity and research of our technicians in all type of work on construction sites and in soils around the world, has recently led to the creation of our new range XP, which for us means simply EXTRA PERFORMANCE.

In order to obtain the best of the new innovations hydraulic installed on the machine and transfer properly to the ground, we have created a new and complete range of drilling tools and accessories.

The Gold Line and the Silver Line tools have been introduced as two product lines with the goal of even better satisfying various requirements of customers. In details the two lines are manufactured accordingly to the XP torque and soil-rock hardness.

Both lines of drilling tools have some basic principles in common, which are dealt with utmost priority, such as:

- Quality
- High performance
- Greatest reliability
- Highest safety levels
- Lowest maintenance
- Long lifetime
- Customized design

Short delivery times can be met even for special tools or components. Highly flexible production line, experienced technicians pleased to assist you on site and extensive stocks are prerequisites for this.



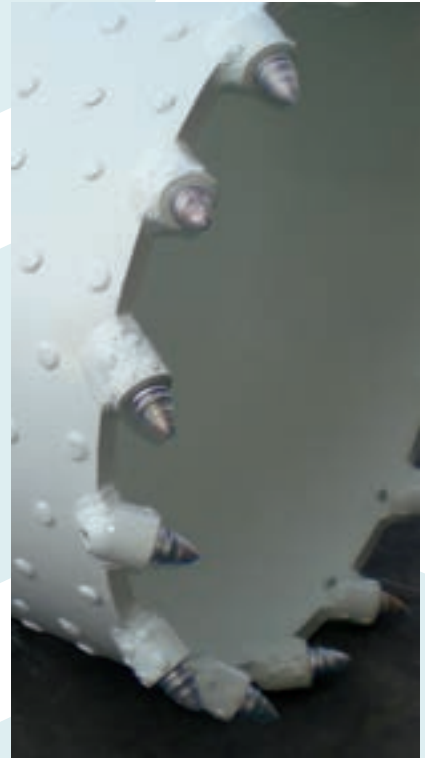
## BUCKETS



## AUGERS



## CORE BARRELS



## SPECIAL TOOLS



## FDP (Full Displacement Piles)



## TOOLS SPARE PARTS





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