### THE RANGE \_\_\_\_ OF OUR PRODUCTS \_\_\_









Casagrande 02 > 03

/01

### THE \_\_\_\_\_\_ \_HYDRAULIC PILING RIGS\_



- LONG LIFE EQUIPMENT
- > EFFICIENCY AND CONTROL
- RELIABILITY AND PERFORMANCE
- VERSATILITY
- SAFETY

Casagrande is a world leading supplier of foundation equipment. The piling rigs are designed to satisfy most of the necessities to execute modern foundation technologies. Suppling the right equipment and services to enable the contractor to achieve the best results on site is our objective. The main design specifications of our high quality piling rigs consider safety standards, reliability, performance, duration and resale value.



Casagrande 04 > 05

#### EQUIPMENT\_\_\_ RANGE

Casagrande provides a wide range of **high-performance equipment**, XP-2 advanced technology and operational competitiveness. From 30 T to 170 T for all kinds of foundation engineering jobs.

#### **Bored Piles**











Piling Rigs XP-2 series	B125	B175	B200	B240	B250
Max diameter - mm	1500	1500	1800	1800	2100
Max diam. under mast - mm	3000	3000	3100	3500	3400
Max depth - m	50	57	68	78	78
Max diameter CFA - mm	800	900	1000	1000	1200
Max depth CFA - m	23,6	28	29,7	27	31,8
Rotary head torque - kNm	135	175	210	263	263
Engine power - kW	186	209	246	283	336
Weight - t	40	44	65	69	86









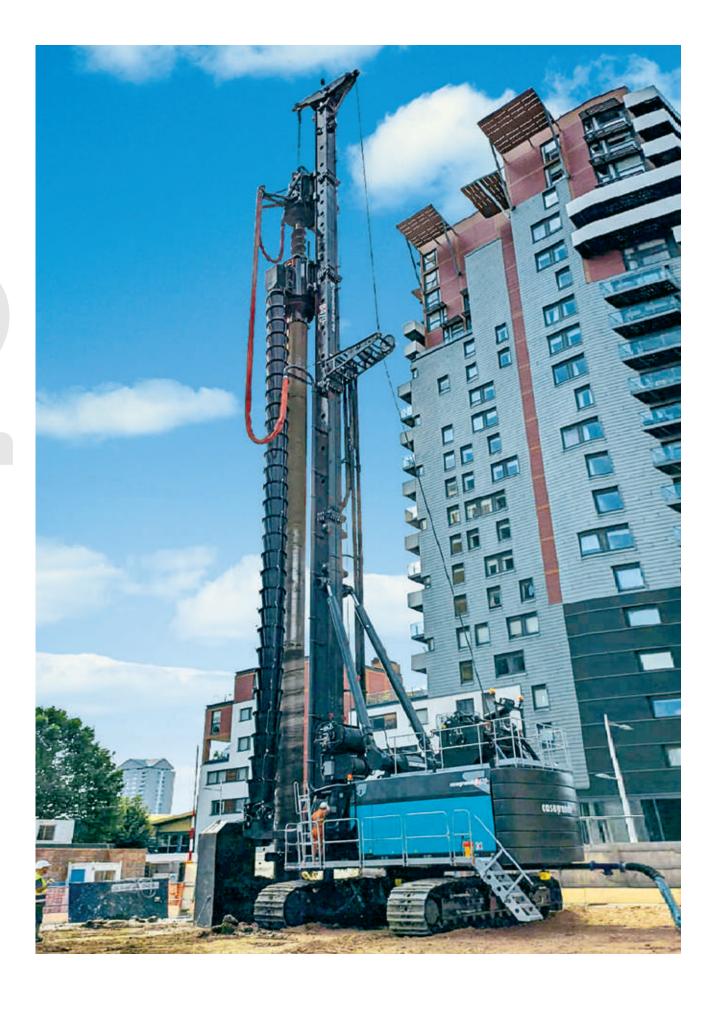


B275	B300	B360	B400	B420	B470
2100	2300	2700	2700	3500	3500
3400	4200	4500	4500	_	_
78	89,5	99	99	101	111
1200	1200	1200	1200	1200	1500
31,8	31,8	37	37	39	41
300	300	400	467	467	467
336	400	400	450	450	450/563
92	100	122	124	144	167

Casagrande 06 > 07

# THE \_\_\_\_\_\_ \_\_HYDRAULIC PILING RIGS\_





Casagrande 08 > 09

#### EQUIPMENT\_\_\_ RANGE

#### <u>Undermast</u>









Piling Rigs XP-2 series	B125	B160	B175	B200
Max diameter - mm	3000	3000	3000	3100
Max depth - m	49	49	49	48
Stroke - mm	3800	5200	5200	6000
Kelly bars max. length - mm	11000	11000	11000	11000

#### <u>Low Headroom</u>

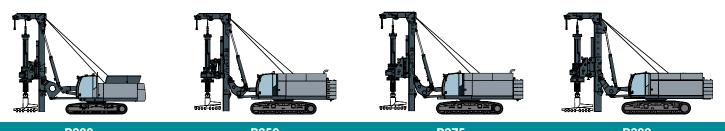






Piling Rigs XP-2 series	B125	B160	B175
Max diameter - mm	1500	1500	1500
Max depth - m	19,7	19,7	19,7
Stroke - mm	2200	2200	2200
Max height - mm	8500	8500	8500





B200	B250	B2/5	B300
2100	2100	2100	2600
21,1	20,5	20,5	20,2
2100	2100	2100	2500
8500	8500	8500	8500
			-

Casagrande 10 > 11

#### CASAGRANDE \_\_\_\_\_ \_\_\_CLASSIC LINE

The Casagrande **Classic Rigs**, designed from the tradition to give the specialist contractors equipment for performing foundation techniques in the geotechnical engineering such as bored piles, continuous flight auger and eventually diaphragm wall.

A comfortable cabin and simplified interface keeps the operator efficient and ready for high productivity.

The **hydraulic circuit** and the controls of the machine are based on traditional electro-hydraulic logic elements in order to be as easy as possible. The ideal operating weight allows easy transport and fast set up.





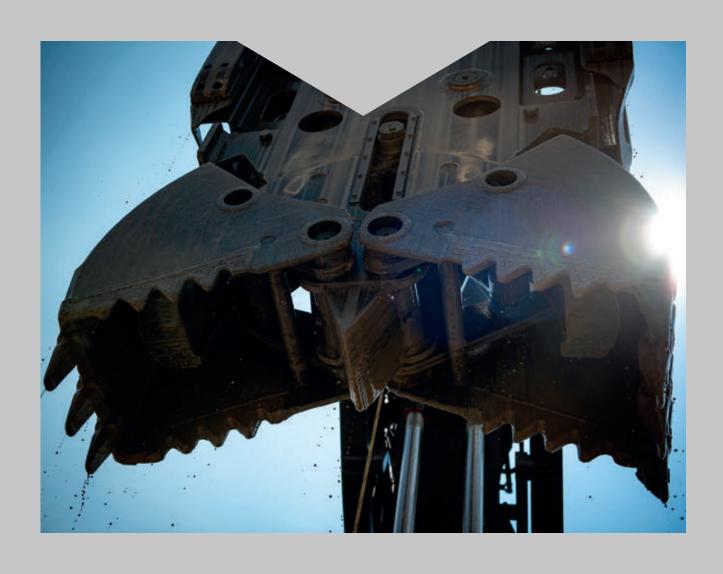
Piling Rigs C-Series	C20	C30	C35	C40
Max diameter - mm	1200	1200	1500	1500
Max depth - m	37	42	50	50
Max diameter CFA - mm	800	800	800	800
Max depth CFA - m	16,6	20,2	23,6	23,6
Rotary head torque - kNm	100	125	135	177
Engine power - kW	142	186	172	201
Weight - t	28	35	39,7	41,8



Casagrande 12 > 13

/02

## \_\_DIAPHRAGM \_\_\_\_WALL EQUIPMENT\_\_\_



- **FD HYDROMILLS**
- > KRC KELLY GUIDED GRABS
- ROPE SUSPENDED HYDRAULIC GRABS

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 from kelly guided grabs to rope suspended grabs.

Whenever the difficult soil condition or high productivity and shear accuracy are required the Casagrande Hydromill is a must.



Casagrande 14 > 15

#### EQUIPMENT\_\_\_ RANGE





#### FD hydromills

Model	FD70	FD70
Max Depth - m	50	120
Width of Trench - mm	760 ÷ 1500	760 ÷ 1500
Length of Trench - mm	2800/3150	2800/3150
Engine Power - kW	563	563
Weight - t	180	190

#### KRC Kelly Guided Grabs







Model	KRC1	KRC1	KRC2
Max Depth - m	30	30	35
Width of Trench - mm	400 ÷ 800	400 ÷ 800	500 ÷ 1500
Length of Trench - mm	2200 ÷ 2500	2200 ÷ 2500	2200 ÷ 3000
Engine Power - kW	186	209	246
Weight - t	41	42	62

#### Rope Suspended Hydraulic Grabs





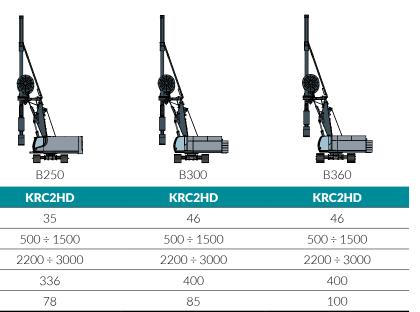


	В2

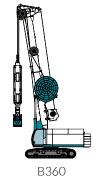
Model	KHD22	KHD25	KHD28
Max Depth - m	80	80	80
Width of Trench - mm	420 ÷ 800	600 ÷ 1500	600 ÷ 1500
Length of Trench - mm	2200 ÷ 2500	2200 ÷ 3200	2200 ÷ 3200
Engine Power - kW	246	336	400
Weight - t	~85	~90	~97

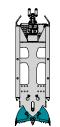


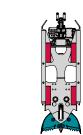


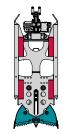


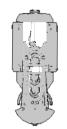












HYDRAULIC	HYDRAL
GRAB	GRAE

B360	HYDRAULIC GRAB	HYDRAULIC GRAB	HYDRAULIC GRAB	MECHANICAL GRAB
KHD28	KHD22	KHD25	KHD28	PM
80	-	-	-	-
600 ÷ 1500	420 ÷ 800	600 ÷ 1500	600 ÷ 1500	600 ÷ 1500
2200 ÷ 4000	2200 ÷ 2500	2500 ÷ 3000	2800 ÷ 4000	2500 ÷ 3200
400	-	-	-	-
~120	9 ÷ 16	12 ÷ 23	16 ÷ 30	10 ÷ 20

Casagrande 16 > 17

/03

# THE \_\_\_\_\_\_ HYDRAULIC DRILLING RIGS\_



- LONG LIFE EQUIPMENT
- VERSATILITY
- RELIABILITY AND PERFORMANCE
- **SAFETY**

Casagrande's expertise
manufacturing crawler drills
provides answers to all contractor's
needs in jobs such as micropiles,
anchors, tie-backs, grouting and
jet grouting. All the equipment can
be customized as well as installed
with all the latest safety systems
required. Extensive accessories such
as rod loaders, pumps and drilling
tools can be supplied.



Casagrande 18 > 19

#### EQUIPMENT\_\_\_ RANGE

Casagrande provides a wide range of **high-performance drilling rigs** equipment, advanced technology and operation competitiveness. From 6 T to 40 T satisfying all needs in geotechnical applications.











<b>Drilling Rigs XP-2 series</b>	C3	C3V	C3S	C4
Engine power - kW	100	100	100	100
Torque - kNm	15,2	15,2	14,8	12,2
Stroke - Single rotary head - m	3,2	3,5	3,85	4
Extraction/Crowd force - kN	50	120	100	50
Weight - t	6,5	7,7	8	8,5
Jet-grouting depth in single passage - m	✓	✓	✓	✓



Drilling Rigs XP-2 series	C5R	C5	C6	М9	С7
Engine power - kW	97	97	142	209	201
Torque - kNm	17	15,2	22	30	30
Stroke - Single rotary head - m	4	3,6	7,1	10	10
Extraction/Crowd force - kN	60	50	87	100	87
Weight - t	7,9 + 2,1	9	15	21	22
Jet-grouting depth in single passage - m	-	12	20	23	26



Drilling Rigs XP-2 series	C8	С9	C10	C12	C16
Engine power - kW	209	209	209	209	209
Torque - kNm	30	55	55	55	55
Stroke - Single rotary head - m	10	10	10	13	16
Extraction/Crowd force - kN	87	150	150	150	150
Weight - t	25	27	28	30	37
Jet-grouting depth in single passage - m	28	26	28	30,5	36

Casagrande 20 > 21







Casagrande 22 > 23

#### JET\_\_\_\_ \_\_ GROUTING EQUIPMENT\_

- HIGH PRESSURE PUMPS
- MIXING PLANT
- DRILL STRING







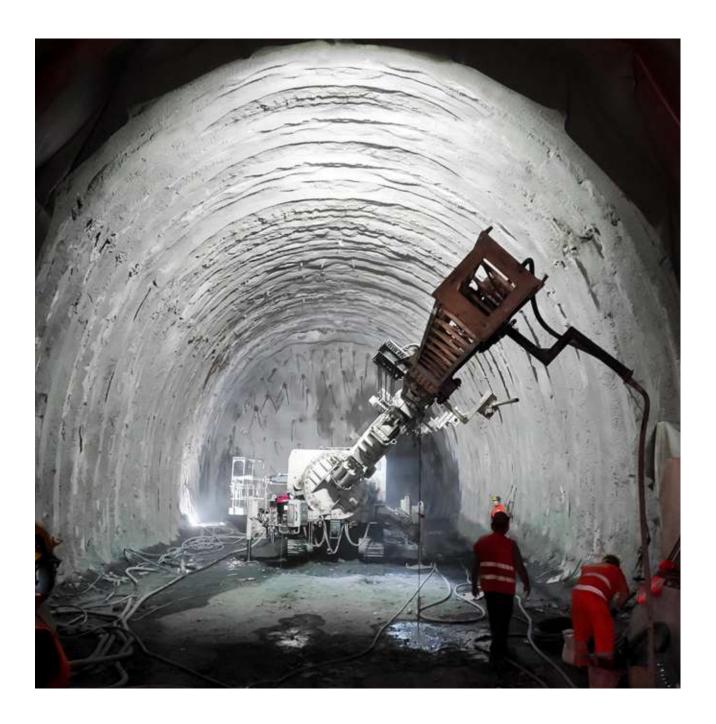








Casagrande 24 > 25





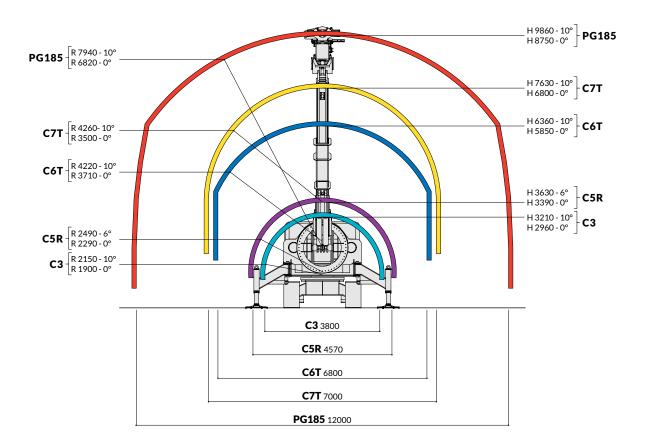
Casagrande's new range of tunnelling equipment is designed and built using the latest state-of the-art techniques. A range of machines engineered to satisfy the needs of the most demanding contractor with emphasis on performance, reliability and economy.



The equipment are used to construct an arch around the tunnel'speriphery ahead of the face.

The arch provides support in weak soil so that excavation may be carried out safely without the use of expensive temporary support systems, it also ensures that deformations are kept within acceptable limits.

## TUNNELLING \_\_\_\_\_ EQUIPMENT





Drilling Rigs XP-2 series	C3 XP-2	C5R XP-2	C6T XP-2	C7T XP-2	PG185 XP-2
Height center of ring gears - mm	1060	1150	740 ÷ 2140	520 ÷ 3300	1920
Radius of horizontal drilling - mm	1100 ÷ 1900	1350 ÷ 2290	2600 ÷ 3170	2700 ÷ 3500	2600 ÷ 6820
Stroke single rotary head - mm	2000	2150	4000	7300	18000
Weight - kg	~ 6500	~ 10000	~ 17000	~ 24000	~ 45000

Casagrande 26 > 27

#### MULTI \_\_\_\_ FUNCTION \_ RIG \_\_\_\_











Model	BASE CARRIER	VIBRATOR FOR SHEET PILES	PILE DRIVING WITH HYDRAULIC HAMMER	CFA CONTINUOUS FLIGHT AUGER
Diesel engine - kW	470	-	-	-
Max pile length - m	-	19,7	19,7	-
Max depth - m	-	-	-	25,7
Max diameter - mm	-	-	-	600
Weight - t	60	65	73	68



Model	DISPLACEMENT PILES	CASED CFA VdW	SOIL MIXING	CUTTING SOIL MIXING
Max depth - m	25,7	19,7	25,7	19
Max diameter - mm	-	500	1200	-
Trench - mm	-	-	-	1000 x 2800
Weight - t	68	68	68	72

# FOUNDATION\_\_\_\_\_ DRILLING TOOLS AND ACCESSORIES\_

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

**Buckets** 



**Augers** 



Core Barrels



Special Tools



**FDP** 



Tools Spare Parts





#### Casagrande S.p.A.

Via Malignani, 1 33074 Fontanafredda Pordenone (Italy)

T. +39 0434 9941 F. +39 0434 997009

info@casagrandegroup.com www.casagrandegroup.com