



**casagrande**

**B125 XP**

**XP**

**B 125**

**HYDRAULIC PILING RIG**

**ATTREZZATURA IDRAULICA PER PALI**



# TECHNICAL SPECIFICATIONS

DATI TECNICI

**B 125**  
HYDRAULIC PILING RIG

XP

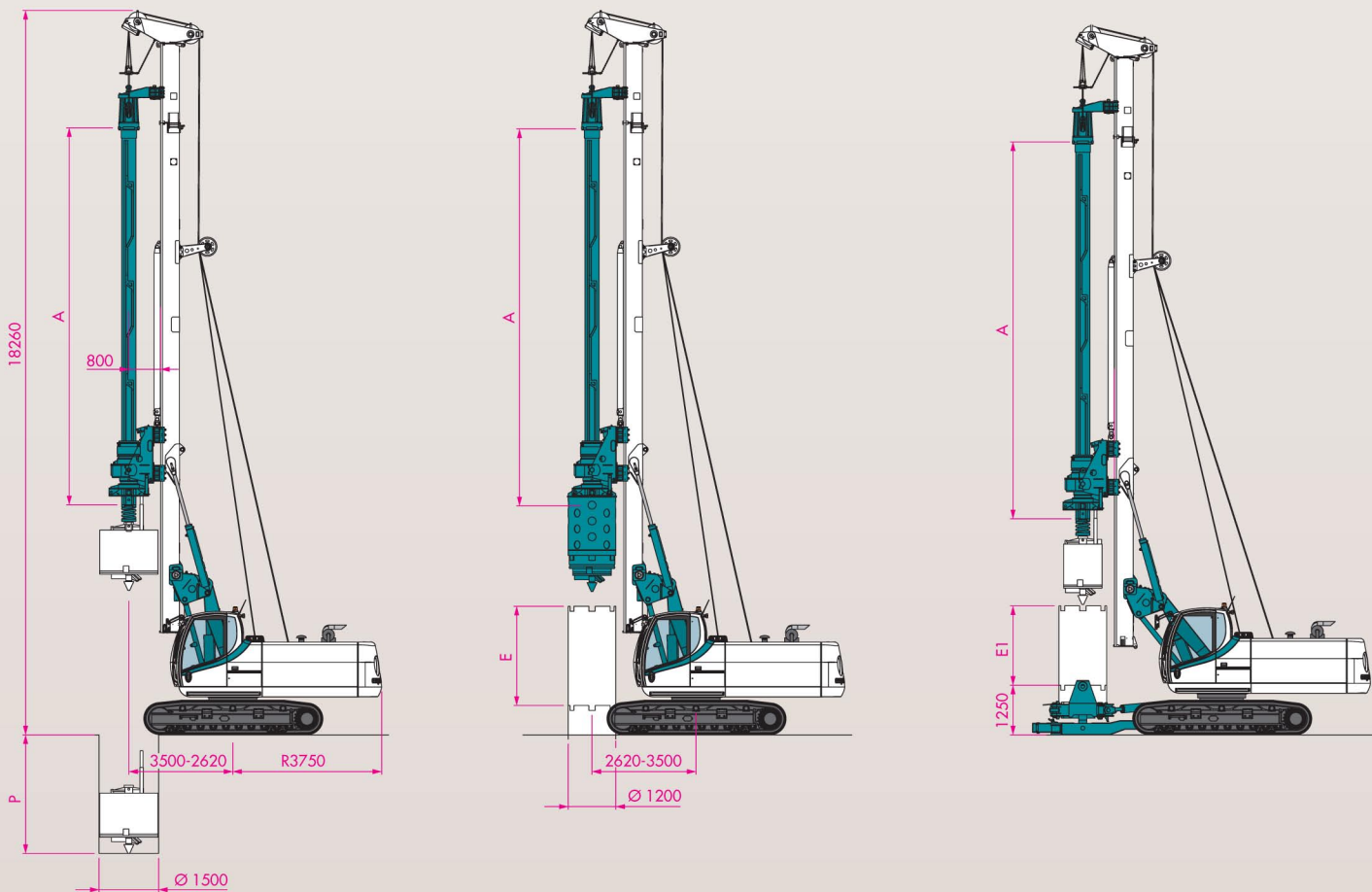
<b>PILING</b>		<b>PALI</b>	
Max depth		Profondità max	50 m
Max diameter with casing - Crowd ram		Diametro max con tubo - Martinetto pull-down	1500 mm
Max diameter with casing - Crowd winch		Diametro max con tubo - Argano pull-down	1200 mm
Max diameter with casing oscillator		Diametro max con morsa giracolonna	1000 mm
<b>C.F.A. CONTINUOUS FLIGHT AUGER</b>		<b>ELICA CONTINUA C.F.A.</b>	
Max depth		Profondità max	23 m
Max diameter		Diametro max	800 mm
<b>SOIL MIXING</b>		<b>SOIL MIXING</b>	
Max depth		Profondità max	19 m
Max diameter		Diametro max	1000 mm
<b>DIAPHRAGM WALL</b>		<b>DIAFRAMMI</b>	
Max depth		Profondità max	30 m
Max length of trench		Lunghezza max scavo	2500 mm
Max width of trench		Larghezza max scavo	800 mm
<b>UNDERCARRIAGE</b>		<b>CARATTERISTICHE CARRO</b>	
Width with retracted/extended tracks		Larghezza con cingoli chiusi/ aperti	2500/3700 mm
Tracks length		Lunghezza cingoli	4510 mm
Shoes width		Larghezza pattini	600 mm
<b>ENGINE</b>		<b>MOTORE</b>	
Model		Modello	<b>CUMMINS</b> <b>QSB 6.7 (EPA/COM III) Aftercooler</b>
Power at 2200 rpm		Potenza a 2200 giri	164 kW
Hydraulic power		Potenza idraulica	140 kW
<b>MAIN WINCH</b>		<b>ARGANO PRINCIPALE</b>	
Nominal line pull on 1 <sup>st</sup> layer		Tiro nominale 1° strato	160 kN
Max line speed		Velocità max fune	72 m/min
<b>AUXILIARY WINCH</b>		<b>ARGANO AUSILIARIO</b>	
Max line pull		Tiro max	70 kN
Max line speed		Velocità max fune	63 m/min
<b>MAIN WINCH FOR KRC USE</b>		<b>ARGANO PRINCIPALE USO KRC</b>	
Max line pull		Tiro max	135 kN
Max line speed		Velocità max fune	93 m/min
<b>ROTARY HEAD</b>		<b>TESTA ROTARY</b>	
Max torque		Coppia max	<b>H12 SX *</b> 112 kNm <b>H12</b> 125 kNm
Max drilling speed		Velocità max lavoro	70 rpm 33 rpm
Discharge speed		Velocità di scarico	97 rpm 120 rpm
<b>CROWD RAM</b>		<b>MARTINETTO PULL-DOWN</b>	
Max line pull		Tiro max	148 kN
Max crowd		Spinta max	114 kN
Stroke		Corsa	3800 mm
<b>CROWD WINCH</b>		<b>ARGANO PULL-DOWN</b>	
Max line pull		Tiro max	240 kN
Max crowd		Spinta max	240 kN
Stroke		Corsa	12600 mm
<b>MAST INCLINATION</b>		<b>INCLINAZIONE MAST</b>	
Forward   Backward   Lateral		Avanti   Indietro   Laterale	3°   15°   ±3
<b>WEIGHT</b>		<b>PESO</b>	
Weight in working condition		Attrezzatura in condizioni di lavoro	~ 41 t

\* For Soil Mixing application / Per impiego Soil Mixing

# PILING ARRANGEMENT - PDC

## ALLESTIMENTO PALI - PDC

CROWD RAM - MARTINETTO PULL-DOWN



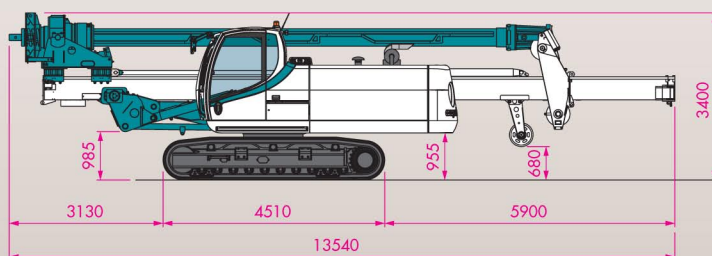
### DRILLING DEPTH

### PROFONDITÀ DI SCAVO

Nominal kelly bars length	Larghezza nominale aste		<b>A</b>	<b>7500</b>	<b>9500</b>	<b>11000</b>
Kelly bars 4 element	Aste a 4 elementi	m	<b>P</b>	26	34	40
Kelly bars 5 element	Aste a 5 elementi	m	<b>P</b>	32	42	50
Casing length	Lunghezza tubo	mm	<b>E</b>	2500	2500	—
Casing length with oscillator	Lunghezza tubo con morsa	mm	<b>E<sub>1</sub></b>	2000	2000	—

# TRANSPORT DIMENSIONS

## DIMENSIONI DI TRASPORTO



### WEIGHT • PESO

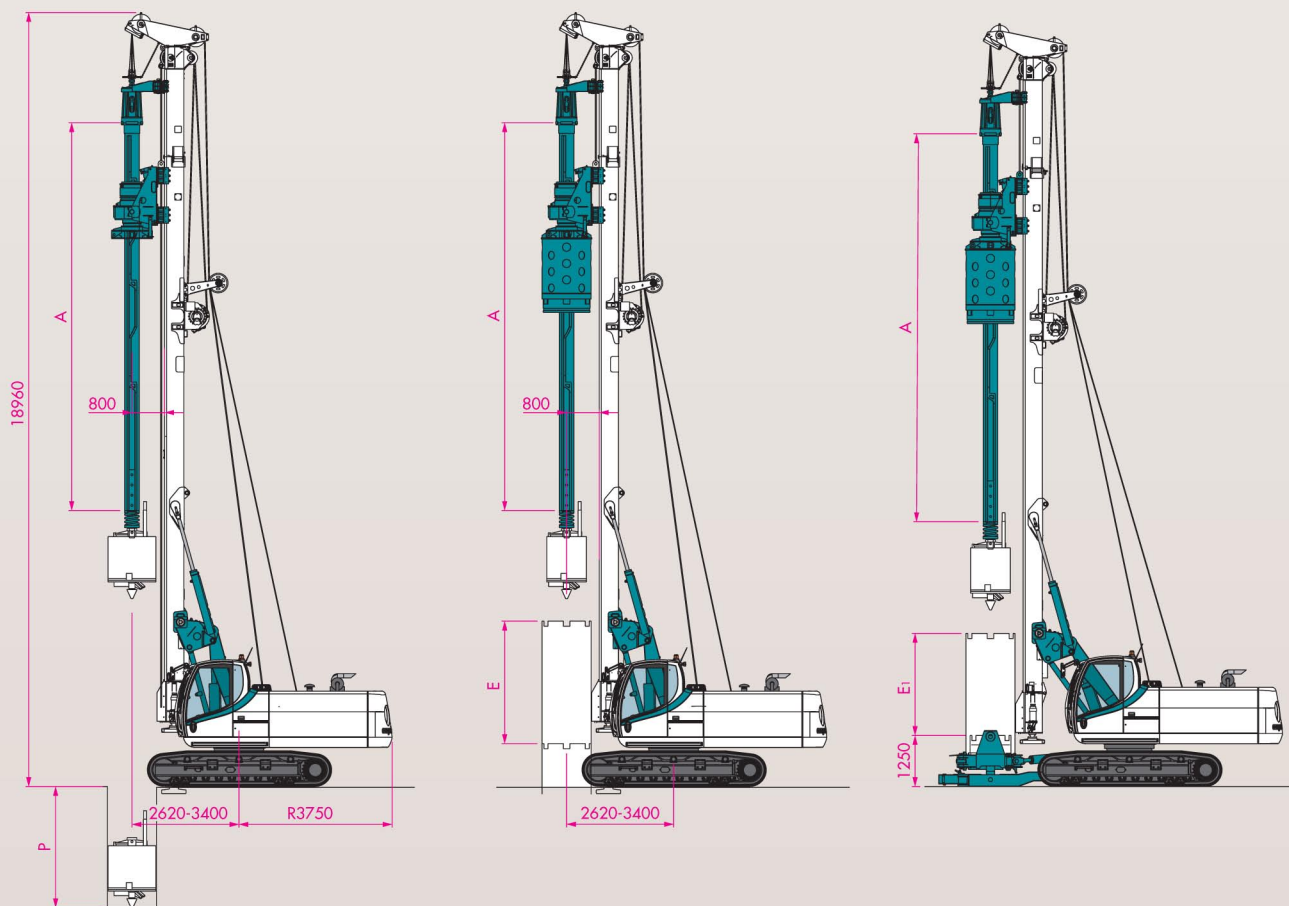
~ 41 t

with kelly bars • con aste 9500

# PILING ARRANGEMENT - PDW

ALLESTIMENTO PALI - PDW

CROWD WINCH - ARGANO PULL-DOWN



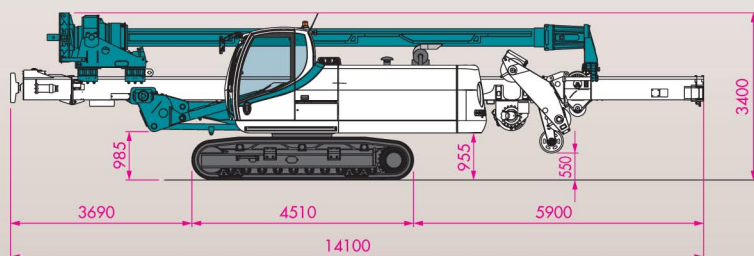
## DRILLING DEPTH

## PROFONDITÀ DI SCAVO

Nominal kelly bars length	Larghezza nominale aste		<b>A</b>	<b>7500</b>	<b>9500</b>	<b>11000</b>
Kelly bars 4 element	Aste a 4 elementi	m	<b>P</b>	25	33	39
Kelly bars 5 element	Aste a 5 elementi	m	<b>P</b>	32	42	50
Casing length	Lunghezza tubo	mm	<b>E</b>	5000	3000	1500
Casing length with oscillator	Lunghezza tubo con morsa	mm	<b>E<sub>1</sub></b>	4500	2500	—

# TRANSPORT DIMENSIONS

DIMENSIONI DI TRASPORTO



## WEIGHT · PESO

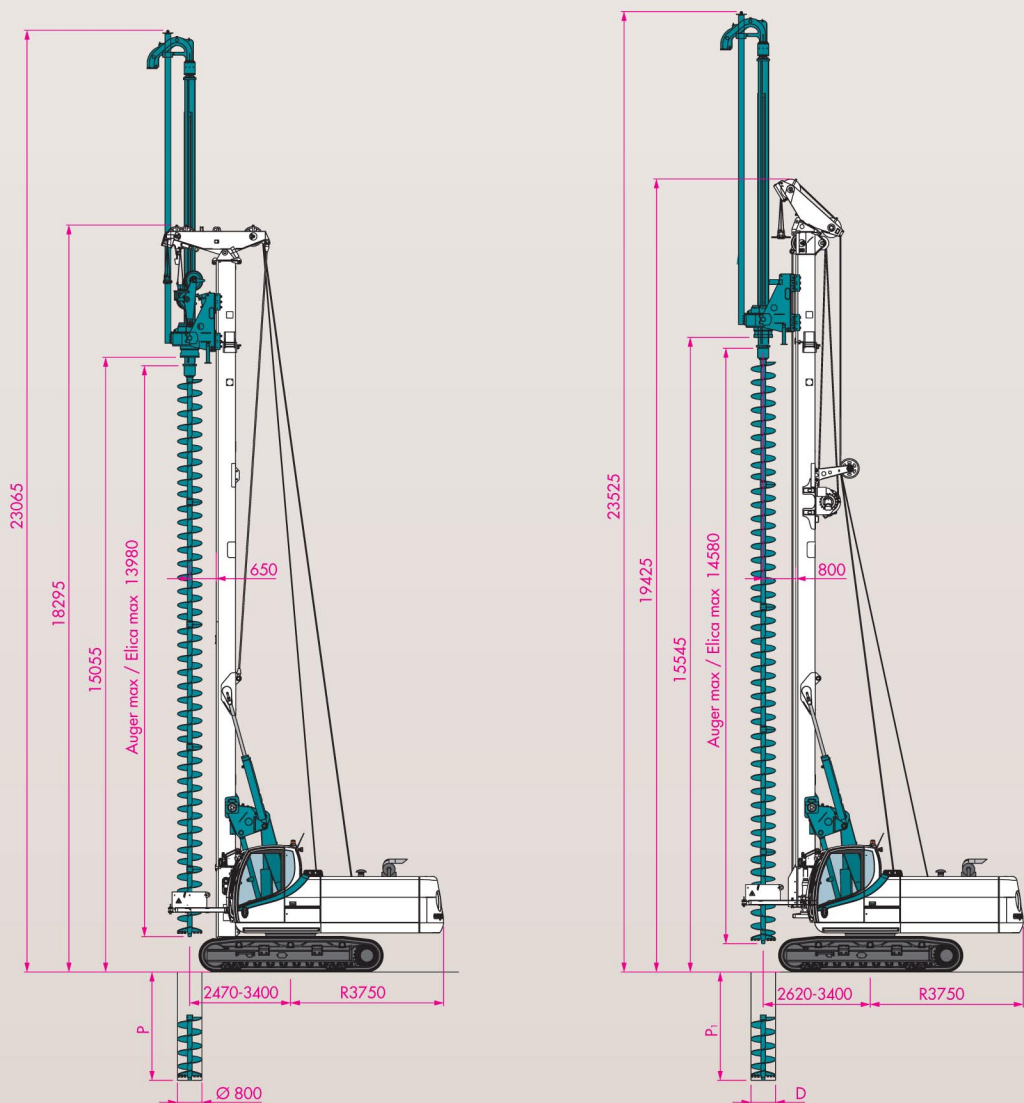
~ 42 t

with kelly bars · con aste 9500

# C.F.A. ARRANGEMENT

ALLESTIMENTO C.F.A.

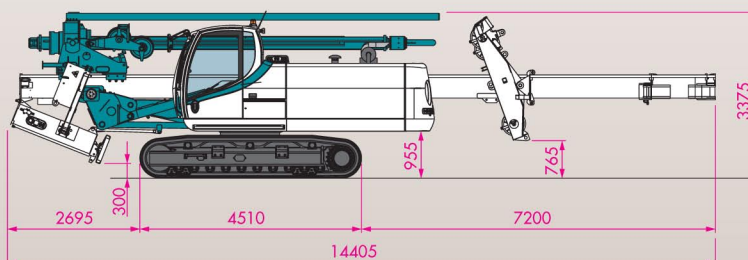
QUICK CFA VERSION - VERSIONE CFA RAPIDO



DRILLING DEPTH	PROFONDITÀ DI SCAVO		CFA	QUICK CFA
Max Diameter	Diametro max	Ø	<b>D</b> 800	800
Max depth with rotating auger cleaner	Profondità max con pulisci elica rotante	m	<b>P</b> 21,6	<b>P<sub>1</sub></b> 17
Max depth with star auger cleaner	Profondità max con pulisci elica stellare	m	<b>P</b> 22,7	<b>P<sub>1</sub></b> 18
Extraction force	Forza di estrazione	kN	280	—
Extraction / crowd force	Forza di estrazione / spinta	kN	—	240/240

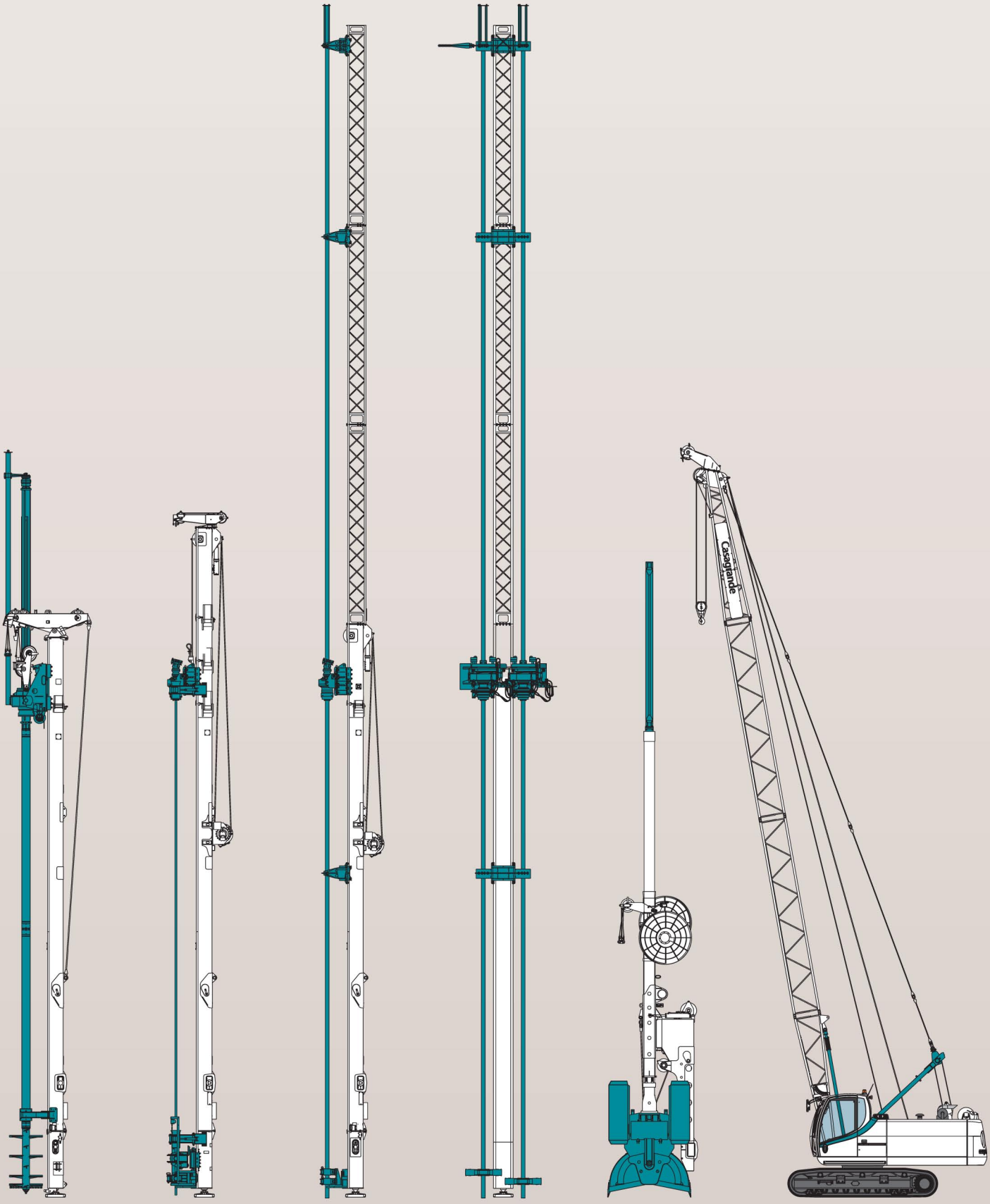
## TRANSPORT DIMENSIONS

DIMENSIONI DI TRASPORTO



**WEIGHT • PESO**

~ 37 t



**SOIL MIXING**  
Depth 19 m  
Ø 1000 mm

**MICROPILING**  
Stroke 16 m  
Ø 90 ÷ 406 mm

**JET GROUTING**  
Depth 68 m  
with rod loader  
Ø 90 ÷ 406 mm

**BI-JET GROUTING**  
Depth 32 m  
Ø 40 ÷ 254 mm

**KRC  
DIAPHRAGM WALL**  
Depth 30 m  
Trench 800 x 2500 mm

**CRANE**  
Max lifting capacity 30 t  
Radius 2,8 m

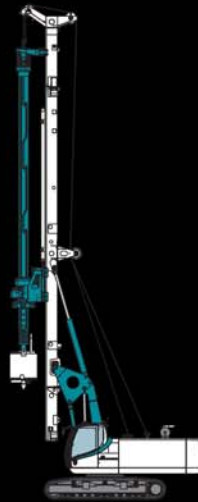
# CASAGRANDE HYDRAULIC PILING RIGS RANGE



B125XP



B175XP



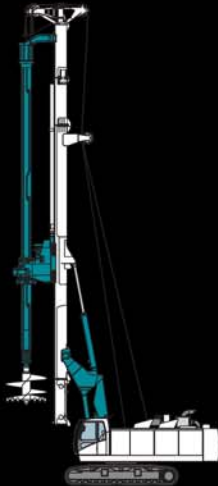
B200XP



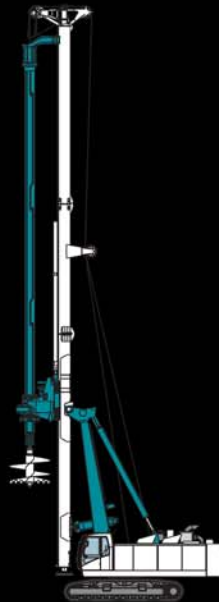
B250XP



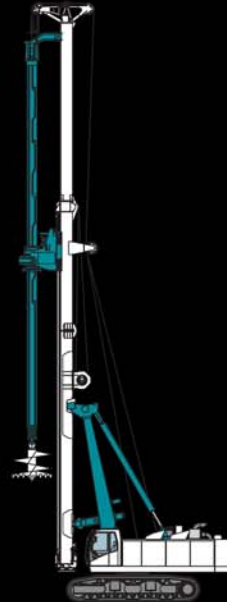
B300XP



B400



C850



C900

All data contained in this brochure are indicative and does not take power losses into account. All data can be changed without notice.  
Tutti i dati riportati su questo catalogo sono indicativi e non considerano perdite di carico. Tali dati possono variare senza preavviso.



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group 





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**ATTREZZATURA IDRAULICA**  
***HYDRAULIC RIG***

**B125XP 3A/4F**

**cod. 8.118064-00**

Data:  
Date:  
20/04/2015

Compilato da:  
Filled in by:  
CAPO PROGETTO

Approvato da:  
Approved by:  
RESP. PROGPERF



# ATTREZZATURA IDRAULICA/HYDRAULIC RIG

## B125XP 3A/4F

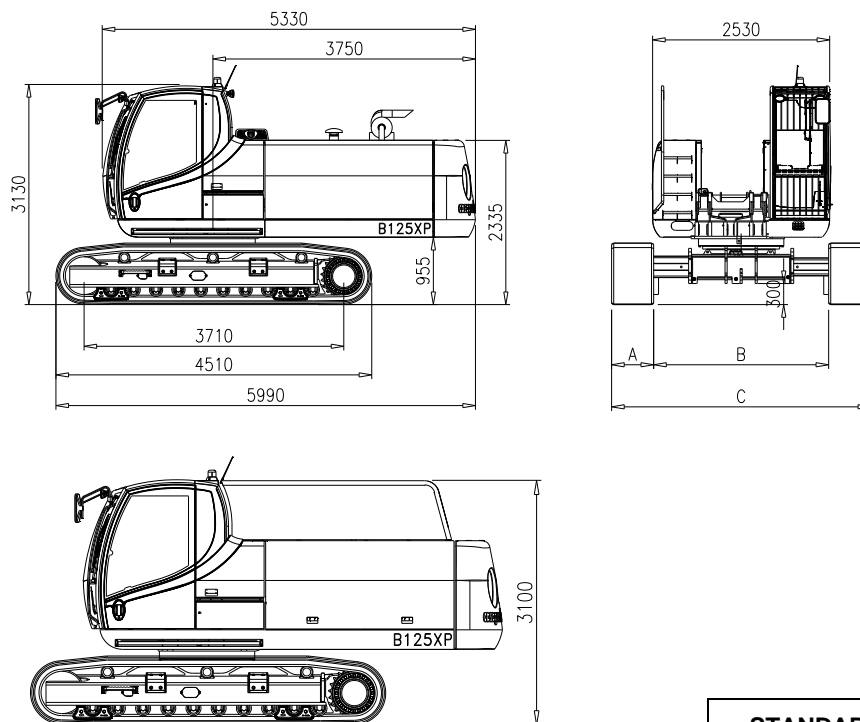
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### CARRO / CRAWLER

#### DIMENSIONI CARRO / CRAWLER DIMENSIONS



		STANDARD	OPZIONE OPTIONAL
<b>A</b>	Larghezza cingoli <i>Width of track shoes</i>	600 mm	800 mm
<b>B</b>	Larghezza interna cingoli <i>Clearance between tracks</i>	Cingoli chiusi / <i>Closed tracks</i> 1300 mm Cingoli aperti / <i>Open tracks</i> 2500 mm	1250 mm 2300 mm
<b>C</b>	Larghezza esterna sottocarro <i>Overall width of undercarriage</i>	Cingoli chiusi / <i>Closed tracks</i> 2500 mm Cingoli aperti / <i>Open tracks</i> 3700 mm	2850 mm 3900 mm
	Massa macchina base senza attrezzatura <i>Weight of base carrier without piling attachment</i>	~ 24300 kg	~ 24500 kg

NOTA: Tutte le masse indicate a scheda sono riferite alla versione 3A. La versione 4F ha una massa superiore di 500 kg  
 NOTE: All indicated weights are referred to the 3A version. The 4F version weights 500 kg more.

#### CARATTERISTICHE TECNICHE CARRO / CARRIER TECHNICAL FEATURES

Motore / <i>Diesel engine</i>	EU Stage 3A EPA Tier 3	EU Stage 4 EPA Tier 4F
Modello / <i>Model</i>	Cummins QSB 6.7	Cummins QSB 6.7
Tipo / <i>Type</i>	Common Rail <i>Common Rail</i>	Common Rail con SCR e DOC <i>Common Rail with SCR and DOC</i>
Potenza di utilizzo <i>Rated power</i>	164 kW / 2200 rpm	168 kW / 2200 rpm
Sistema di raffreddamento motore <i>Engine cooling system</i>	Circolazione di liquido refrigerante <i>Coolant liquid circulation</i>	Circolazione di liquido refrigerante <i>Coolant liquid circulation</i>
Consumo specifico a pieno carico <i>Fuel consumption at full load</i>	218 g/kWh	213 g/kWh
Emissioni allo scarico a norme <i>Exhaust emissions in accordance with</i>	EU Stage 3A EPA/CARB Tier 3	EU Stage 4 EPA/CARB Tier 4F
Capacità serbatoio gasolio <i>Fuel tank capacity</i>	280 l	280 l
Tipo di gasolio / <i>Fuel type</i>		EN 590 Zolfo < 15 mg/kg ASTM D 975 Grade 1-D S15
Capacità serbatoio urea <i>Urea tank capacity</i>	-	57 l



# ATTREZZATURA IDRAULICA/HYDRAULIC RIG

## B125XP 3A/4F

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### Sottocarro standard / Undercarriage

Classe D4 / Class D4  
 Suole a 3 barre / 3 grouser type shoes  
 1+1 Pedane di accesso ribaltabili / 1+1 Foldaway steps

	STANDARD	OPZIONE OPTIONAL
Velocità di traslazione / <i>Travel speed</i>	1,78 km/h	
Forza di traino / <i>Traction force</i>	241 kN	

NOTA: L'utilizzo del sottocarro opzionale comporta un aumento di 200 kg dei pesi rispetto a quanto riportato nelle pagine successive

NOTE: Using an optional undercarriage leads to weights raised by 200 kg referring to what is indicated on the following pages

### Torretta / Upperstructure

Velocità di rotazione / <i>Slewing speed</i>	0÷3,2 RPM (*)
Zavorra / <i>Counterweight</i>	4500 kg

(\*) Limitata a 1,6 RPM in allestimento CFA / Limited to 1,6 RPM in CFA arrangement

### Impianto idraulico / Hydraulic System

POMPE PRINCIPALI VARIABILI MAIN VARIABLE DISPLACEMENT PUMPS	Pompa/Pump	P1	P2
	Portata/ Flow	l/min	210
Pressione max./ Max. pressure	bar	350	350
PORTATE UTILIZZABILI CON LE FUNZIONI PRINCIPALI FLOWS TO MAIN FUNCTIONS (l/min)	Argano princ./ Main winch	180	180
	Argano aux./ Auxiliary winch	180	
	Traslazione/Tracking	180	180
	Rotazione torretta/Slewing		80
PORTATE UTILIZZABILI CON LE ATTREZZATURE ROTARY FLOWS TO PILING EQUIPMENT (l/min)	Rotary, benna idraulica/Hydraulic grab	180	180
	Pull-down veloce/Fast pull-down	180	
	Pull-down lavoro/Pull-down work		63
	Morsa/Casing oscillator	180	180
Capacità serbatoio olio idraulico / Hydraulic oil tank capacity	330 l		



# ATTREZZATURA IDRAULICA/HYDRAULIC RIG

## B125XP 3A/4F

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**DATA**  
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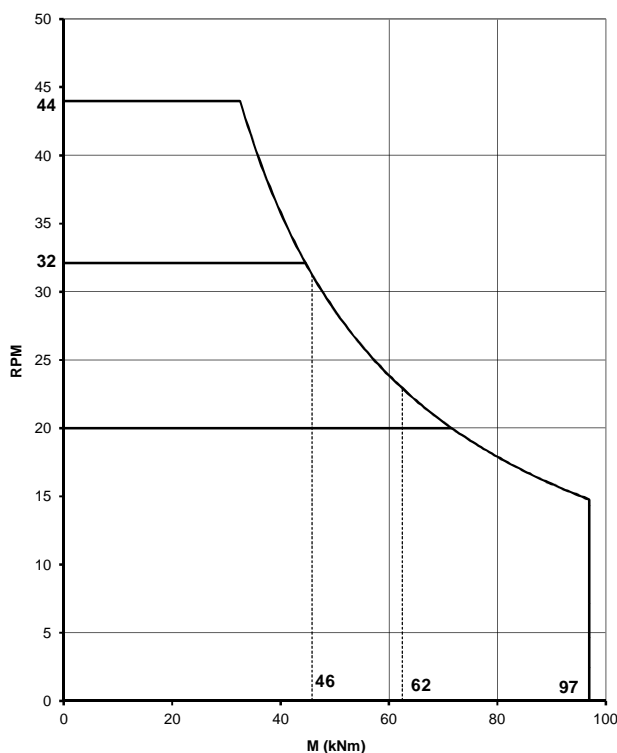
### ARGANI / WINCHES

Argano principale controllato <i>Controlled main winch</i>	Classe FEM  <i>FEM classification</i>	Tiro nominale al 1° strato  <i>Nominal line pull on 1<sup>st</sup> layer</i>  [kN]	Tiro effettivo al 1° strato  <i>Effettive pull on 1<sup>st</sup> layer</i>  [kN]	Velocità fune <i>Max rope speed</i> [m/min]		Diametro fune  <i>Rope diameter</i>  [mm]	N. max. strati  <i>Max number of layers</i>	Capacità fune  <i>Drum capacity</i>  [m]
				1° strato 1 <sup>st</sup> layer	2° strato 2 <sup>nd</sup> layer			
Casagrande	M5-L2-T5	160	135	72	78	24	2	86

Argano principale a caduta libera <i>Free fall main winch</i>	Classe FEM  <i>FEM classification</i>	Tiro nominale al 1° strato  <i>Nominal line pull on 1<sup>st</sup> layer</i>  [kN]	Tiro effettivo al 1° strato  <i>Effettive pull on 1<sup>st</sup> layer</i>  [kN]	Velocità fune <i>Max rope speed</i> [m/min]		Diametro fune  <i>Rope diameter</i>  [mm]	N. max. strati  <i>Max number of layers</i>	Capacità fune  <i>Drum capacity</i>  [m]
				1° strato 1 <sup>st</sup> layer	3° strato 3 <sup>rd</sup> layer			
Zollern 6.25 KG	M5-L2-T5	135	114	88	105	24	3	82

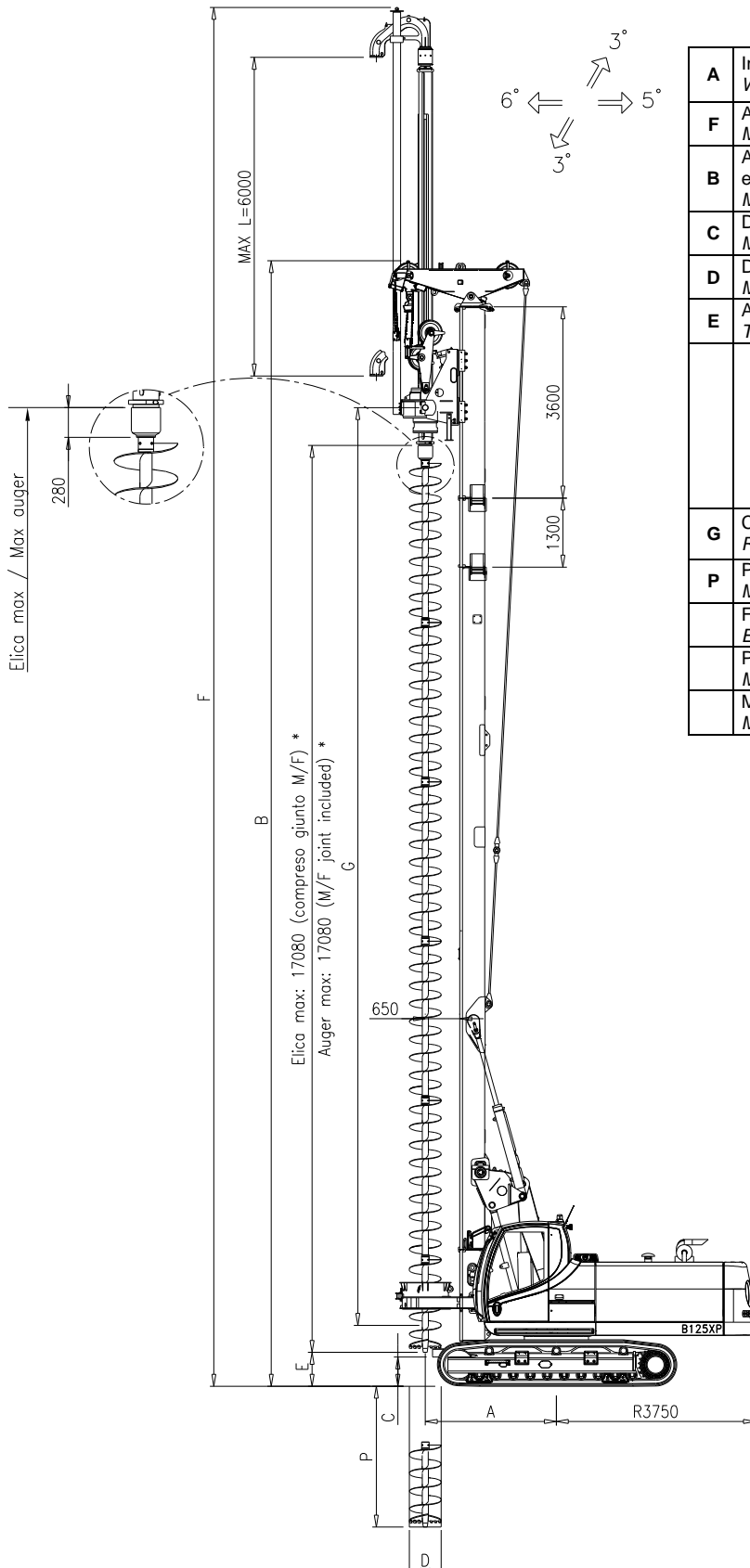
Argano ausiliario controllato <i>Controlled auxiliary winch</i>	Classe FEM  <i>FEM classification</i>	Tiro nominale al 1° strato  <i>Nominal line pull on 1<sup>st</sup> layer</i>  [kN]	Tiro effettivo al 1° strato  <i>Effettive pull on 1<sup>st</sup> layer</i>  [kN]	Velocità fune <i>Max rope speed</i> [m/min]		Diametro fune  <i>Rope diameter</i>  [mm]	N. max. strati  <i>Max number of layers</i>	Capacità fune  <i>Drum capacity</i>  [m]
				1° strato 1 <sup>st</sup> layer	3° strato 3 <sup>rd</sup> layer			
Casagrande	M6-L3-T5	83	70	65	76	18	3	81

**ROTARY IDRAULICA H12.44 /  
ROTARY HEAD H12.44**



### CFA L

### ALLESTIMENTO CFA-L / CFA-L ARRANGEMENT

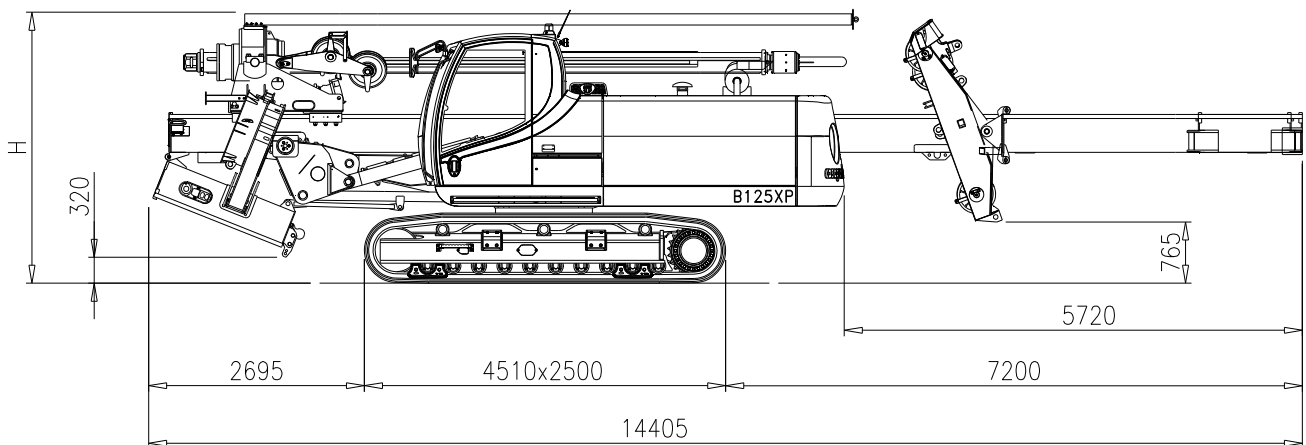


A	Interasse di perforazione <i>Working radius</i>	min. *	max.
		2470	3200
F	Altezza max. da terra <i>Max. heigth</i>	26	
B	Altezza max. da terra senza prolunga elica <i>Max. heigth without auger extension</i>	21,2	
C	Distanza mast da terra <i>Mast distance from the ground</i>	550	
D	Diametro max. perforazione <i>Max. drilling diameter</i>	800 **	
E	Altezza utensile da terra <i>Tool height off ground</i>	640	
		Con centratore aperto e pulisci elica stellare <i>With open centering device</i>	Con pulisci elica rotante <i>With rotating auger cleaner</i>
G	Corsa rotary <i>Rotary stroke</i>	17,3	16,1
P	Profondita' max. con prol. 6 m <i>Max. depth with 6 m extension</i>	22,6	21,4
	Forza di estrazione <i>Extraction force</i>	450 kN	
	Peso massimo elica <i>Max. auger weight</i>	5000 kg	
	Massa media attrezzatura <i>Mean weight of rig</i>	44500 kg ***	

- \* Con pulisci elica stellare, interasse min. 3100 mm  
*With star type auger cleaner, min. working radius 3100 mm.*
- \*\* Con pulisci elica rotante, diam. min. di perforazione 450 mm  
*With rotating auger cleaner, min. drilling diameter 450 mm*
- \*\*\* Con pulitore rotante, prolunga 6 m. elica 5000 kg  
*With rotating auger cleaner, 6 m auger extension, 5000 kg auger*

Interasse <i>Working radius</i>	Altezza <i>Height</i>	Profondità <i>Depth</i>
A		
2470	0	0
3200	-335	+335

### Dimensioni di trasporto CFA-L / CFA-L Transport feature

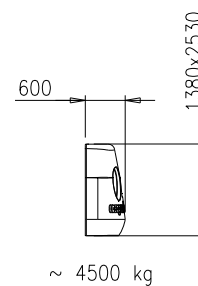
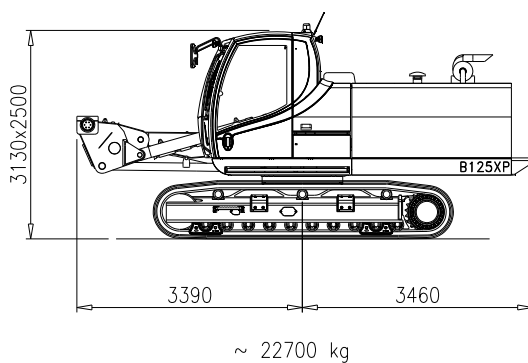
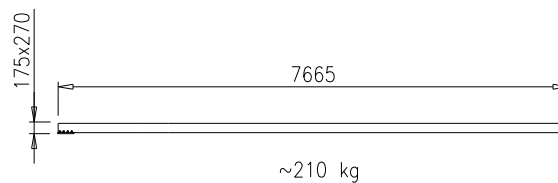
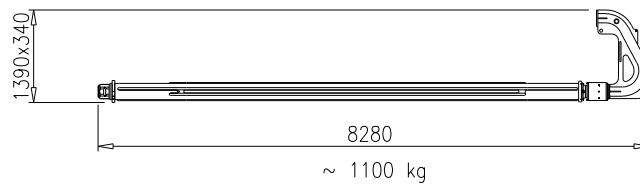
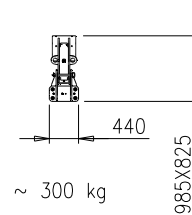
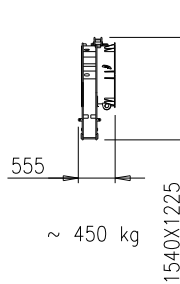
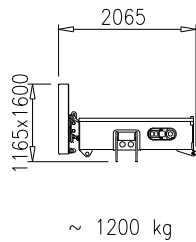
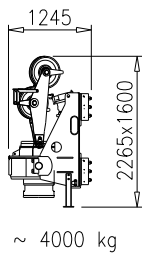
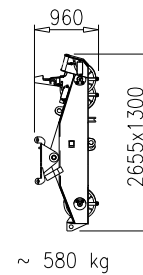
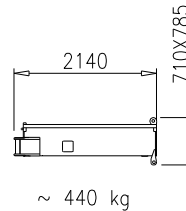
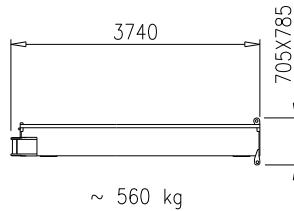
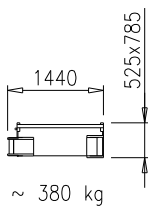
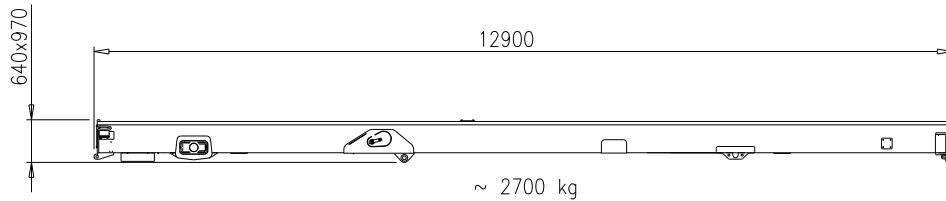


Massa attrezzatura in trasporto: ~ kg 38500  
 Mass of equipment in transport: ~ kg 38500

	Versione argano principale 160 kN controllato <i>With controlled 160 kN main winch</i>	Versione argano principale 135 kN caduta libera <i>With free fall 135 kN main winch</i>
H	3375	3575

### Dimensioni e pesi trasporto delle parti principali / *Transport scheme*

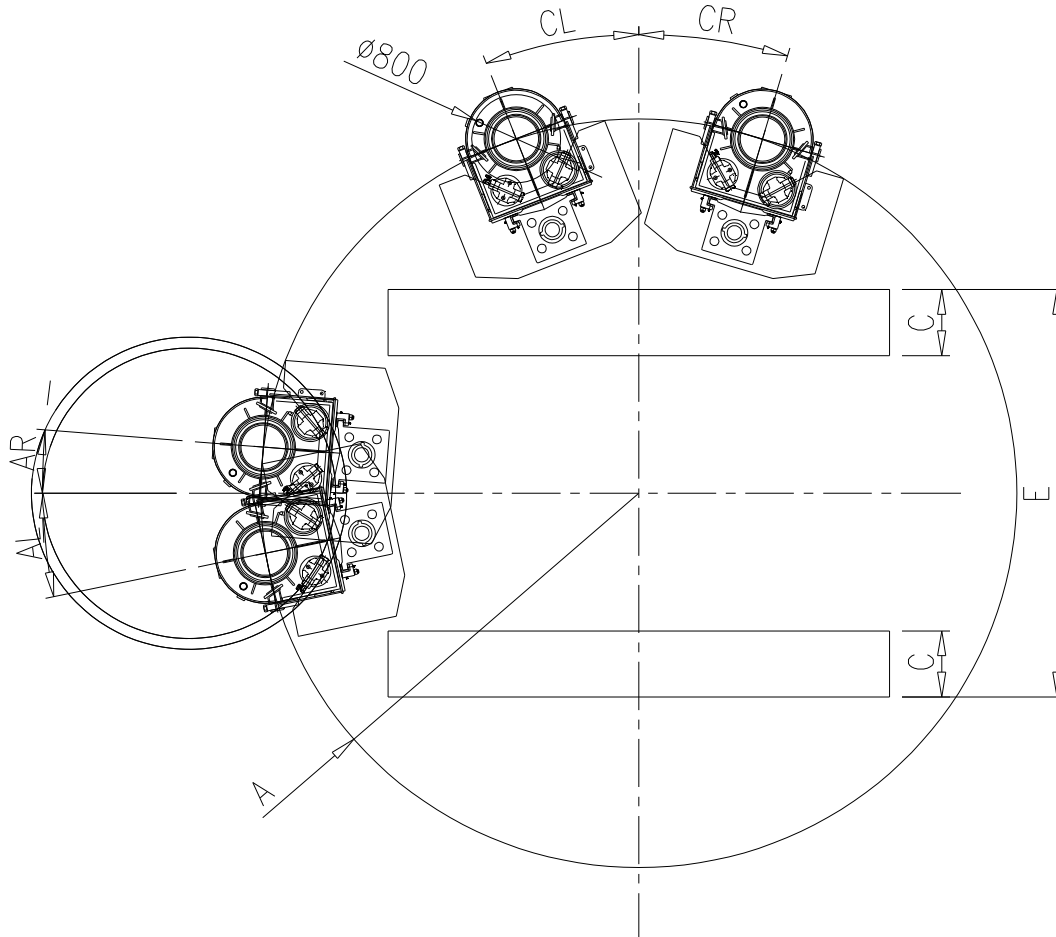
#### CFA / CFA-L / SOILMIXING





### SETTORI OPERATIVI / WORKING RANGE

#### CFA / CFA-L / SOILMIXING



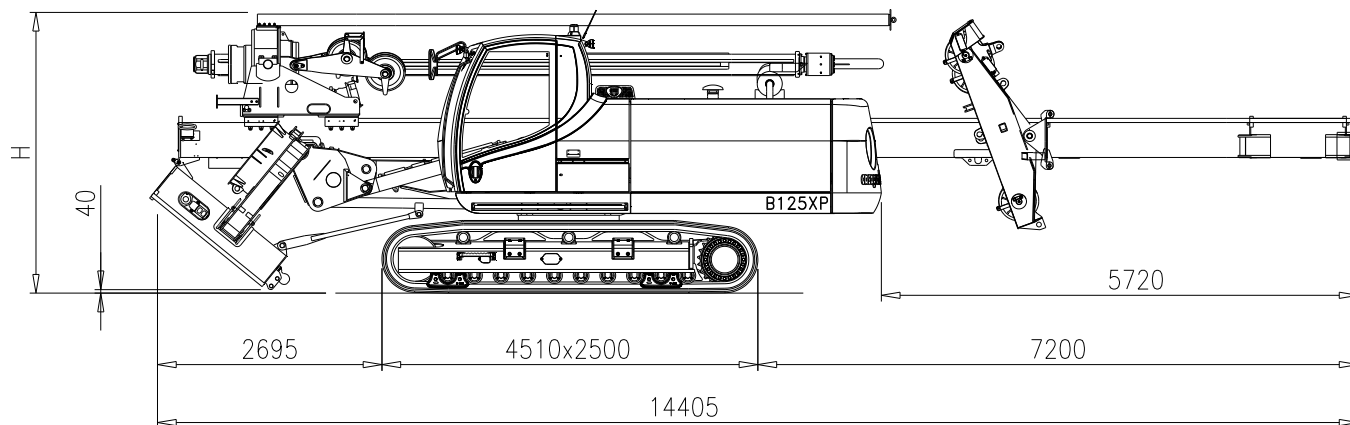
	CFA		CFA-L	
	A = 3400 (2620)		A = 3200 (2620)	
	STANDARD	OPZIONE	STANDARD	OPZIONE
<b>C</b>	600	800	600	800
<b>E</b>	3700	3900	3700	3900
<b>AR</b>	4° (5°)	3° (2°)	5° (5°)	2° (2°)
<b>AL</b>	11° (12°)	10° (10°)	12° (12°)	10° (10°)
<b>CR</b>	17° (*)	11° (**)	5° (*)	**
<b>CL</b>	21° (*)	16° (**)	8° (*)	**

\* Min. interasse di lavoro 3140 mm. / *Min. working radius 3140 mm*

\*\* Min. interasse di lavoro 3240 mm. / *Min. working radius 3240 mm*

### CFA CON PULISCI ELICA STELLARE CFA WITH STAR TYPE AUGER CLEANER

#### Dimensioni di trasporto / Transport feature



Massa attrezzatura in trasporto: ~ kg 36100 (con prolunga L=6000)  
 Mass of equipment in transport: ~ 36100 kg (with L=6000 mm extension)

	Versione argano principale 160 kN controllato <i>With controlled 160 kN main winch</i>	Versione argano principale 135 kN caduta libera <i>With free fall 135 kN main winch</i>
H	3375	3575



**ATTREZZATURA IDRAULICA/HYDRAULIC RIG**

**B125XP 3A/4F**

**CODICE**  
8.118064-00

**DATA**  
20/04/2015

**pag.**  
9/09

**REVISIONE / REVISION**

DATA EMISSIONE / ISSUE DATA: 20/04/2015