Crane - Kran
Grue - Grua - Gru

AMCO VEBA
A HYVA GROUP COMPANY

VR85

RACCOLTA TECNICA

TECHNICAL BOOK

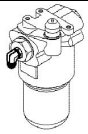
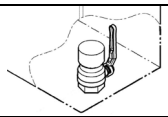
Rev. 14 (05/2017)

CARATTERISTICHE GENERALI
TECHNICAL DATA

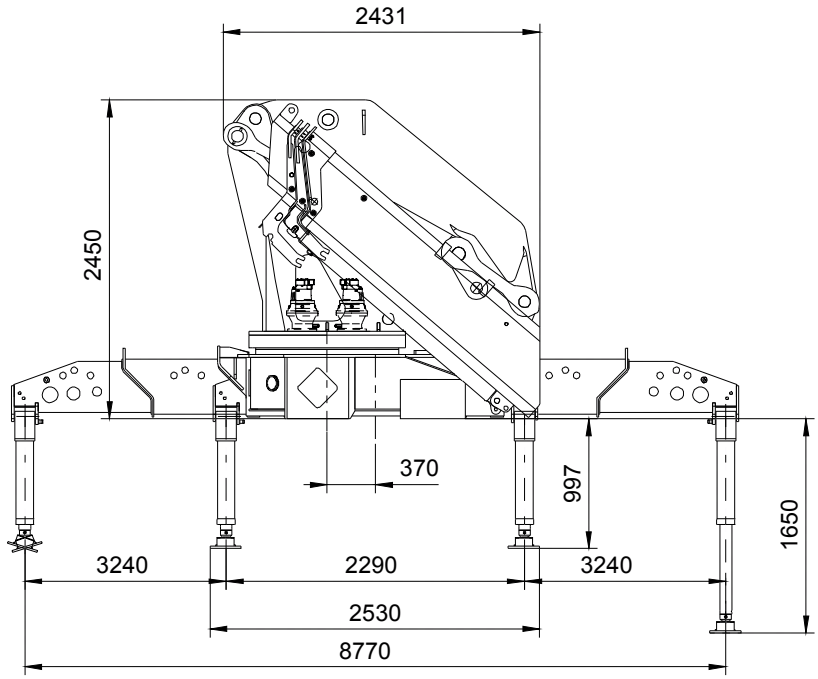
Momento dinamico max (daNm) Max dynamic moment		90500
	Versione	**Q_{max}**
Portata max (kg) Max load	2S	17100
	4S	16250
	6S	15150
	8S	14750
	10S	13750
	6SJ6	15150
	8SJ4	14750
	Versione	**M**
Massa in ordine di lavoro (kg) Crane weight	2S	7450
	4S	8100
	6S	8700
	8S	9250
	10S	9650
	6SJ6	10200
	8SJ4	10100

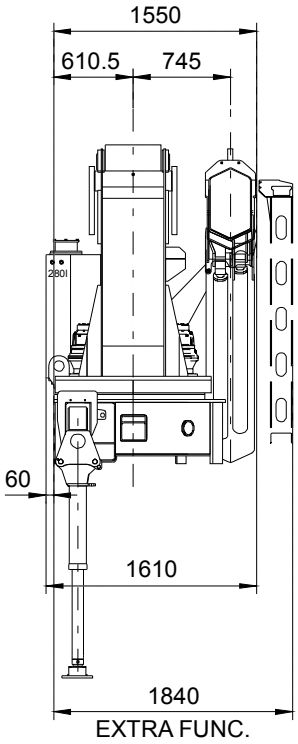
ALTRI DATI TECNICI

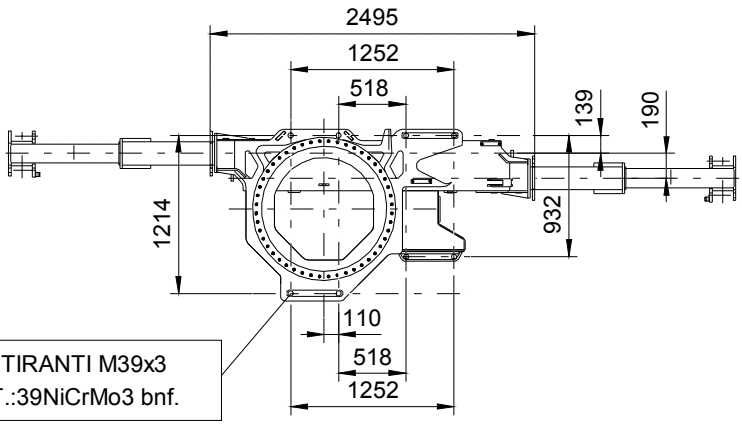
Reazione massima sullo stabilizzatore Max force on the stabilizer leg	21420 daN
Carico massimo trasmesso al suolo da stabilizzatori standard Max standard stabilizer pressure on the ground	47.3 daN/cm^2
Pressione massima di esercizio Max working pressure	315 bar
Portata massima di olio (Necessaria pompa a cilindrata variabile) Max oil flow to main relief valve (Load sensing pump needed)	100 L/min
Capacità serbatoio olio Oil tank capacity	280 L
Coppia di rotazione Slewing moment	6900 daNm
Angolo di rotazione Slewing angle	Continua *Endless*
Potenza assorbita Absorbed power	60 kW 80 HP
Normativa di calcolo Design standard	DIN 15018 EN 12999

Raccordi di collegamento con pompa Fittings for connection with pump		
Linea di pressione distributore Control valve pressure line		**M** 1"1/16**JIC**
Linea di aspirazione serbatoio Tank suction line		**F** 2" **BSP**

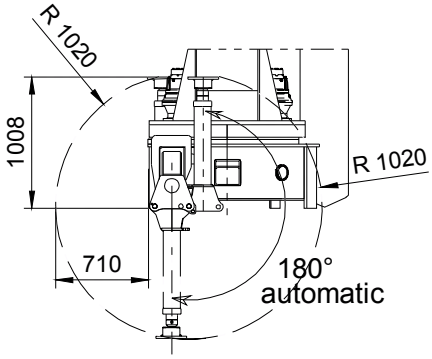
DIMENSIONI DI INGOMBRO
DIMENSIONS
VR85 2S



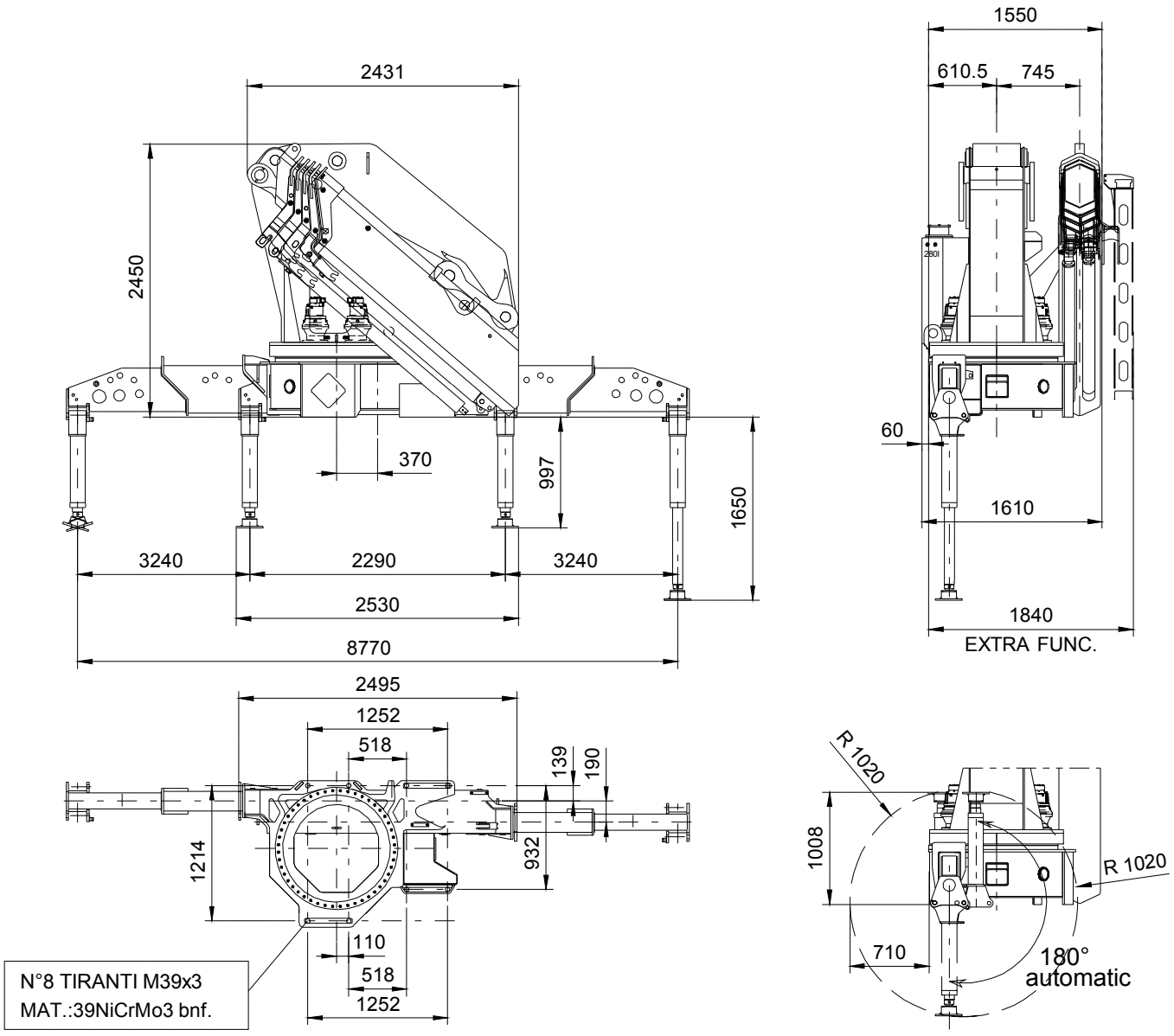




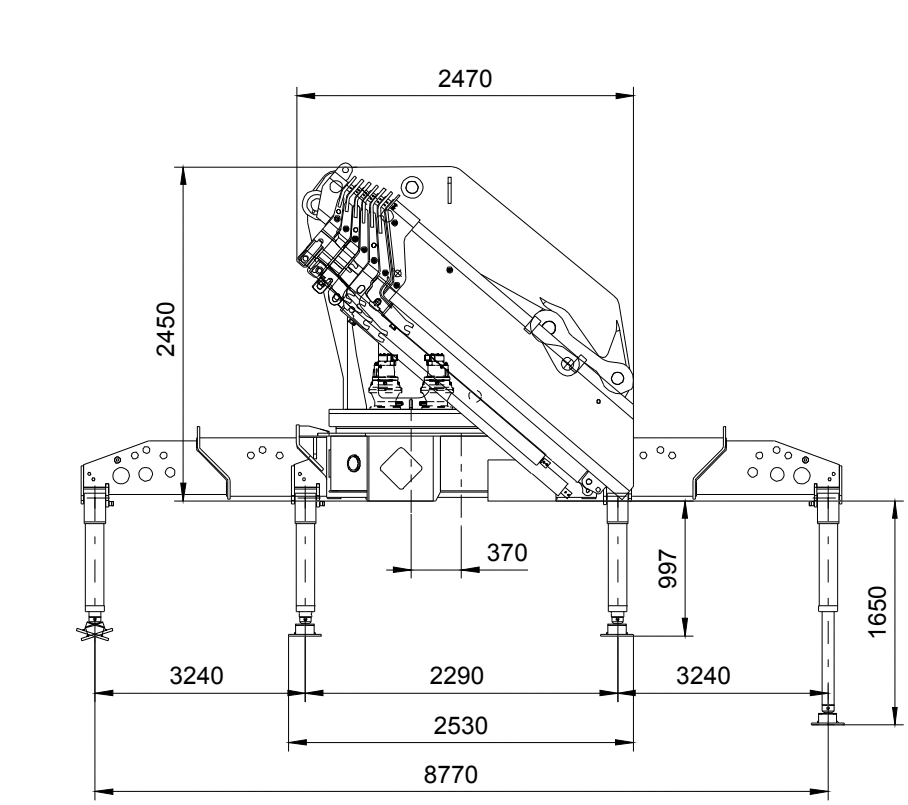
N°8 TIRANTI M39x3
MAT.:39NiCrMo3 bnf.

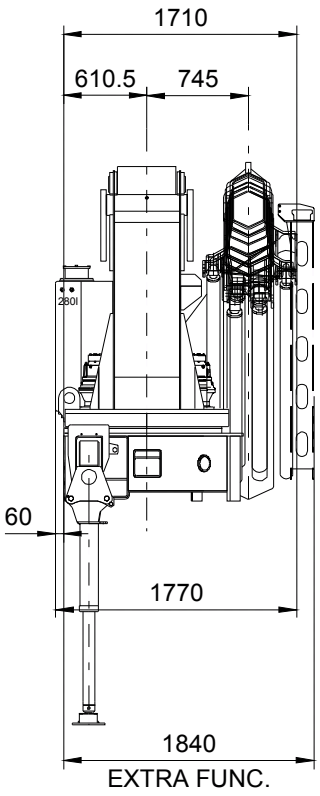


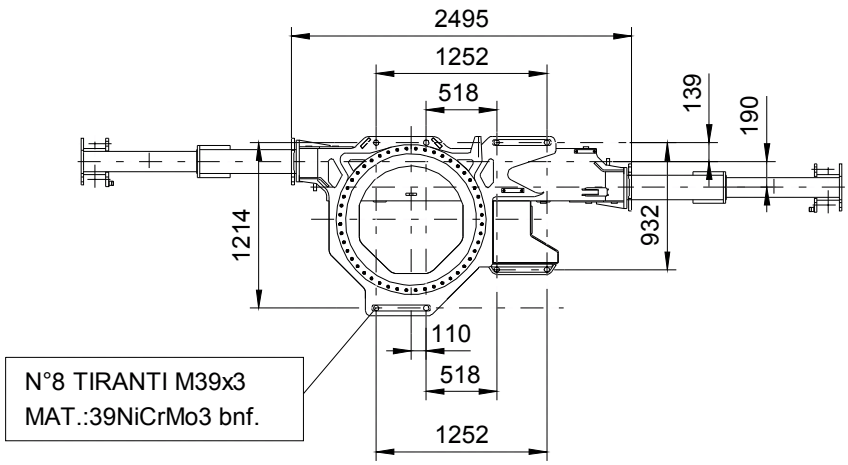
DIMENSIONI DI INGOMBRO
DIMENSIONS
VR85 4S

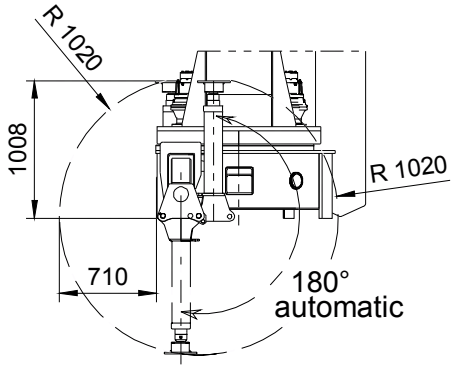


DIMENSIONI DI INGOMBRO
DIMENSIONS
VR85 6S

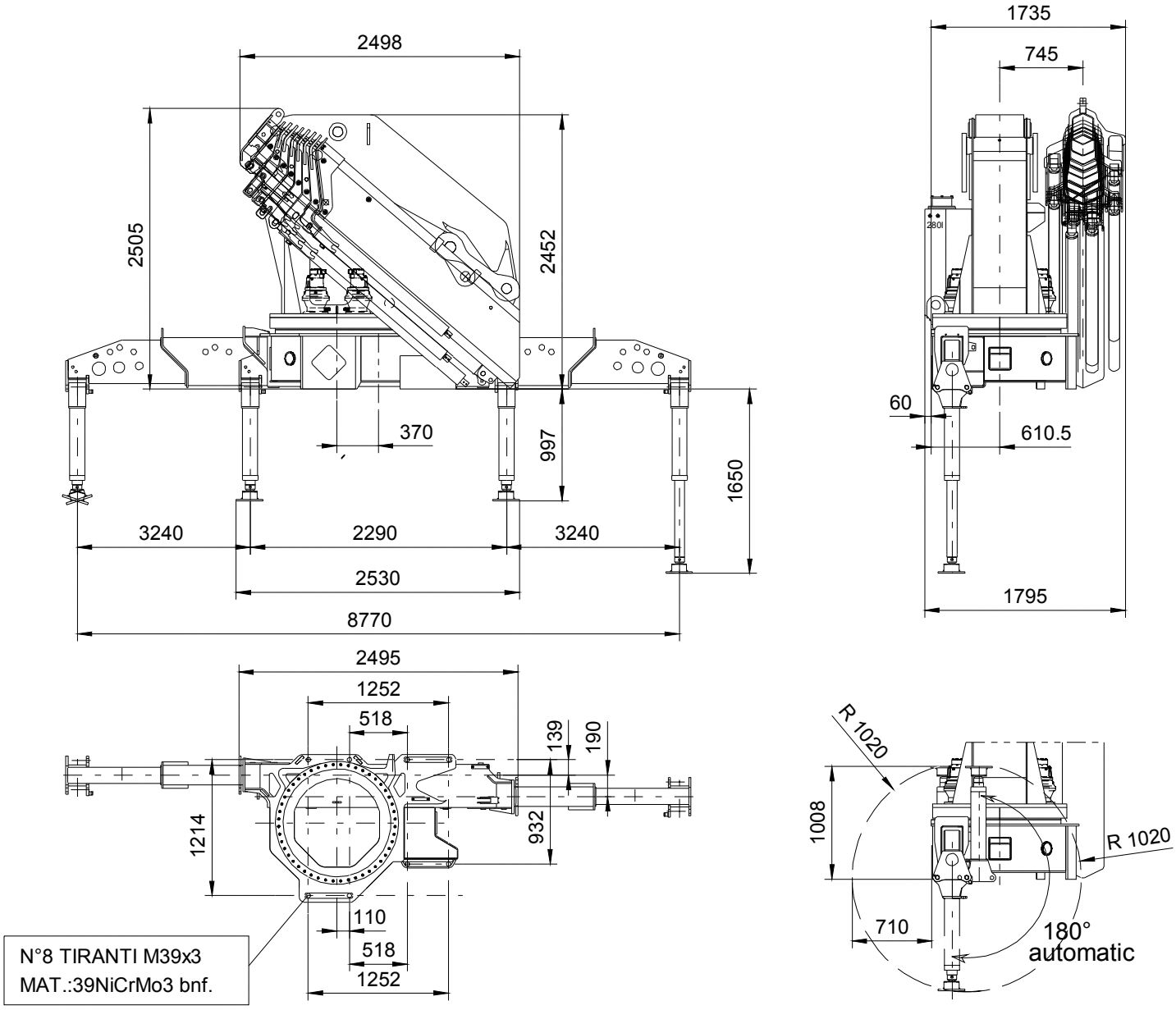




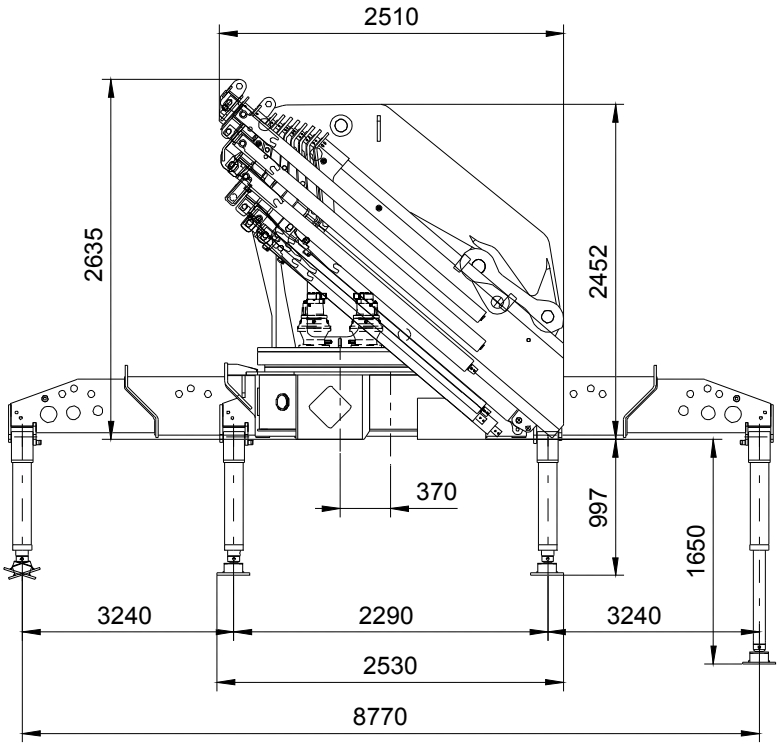


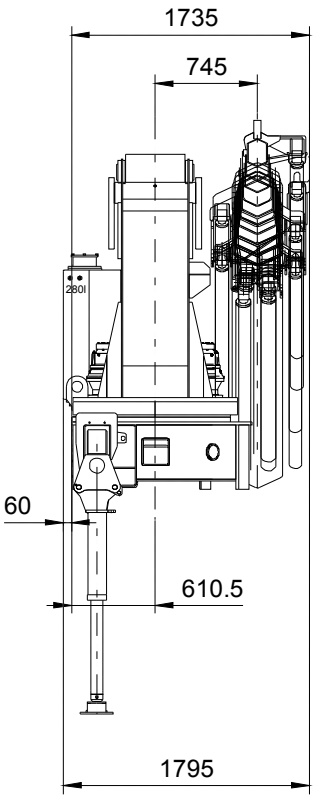


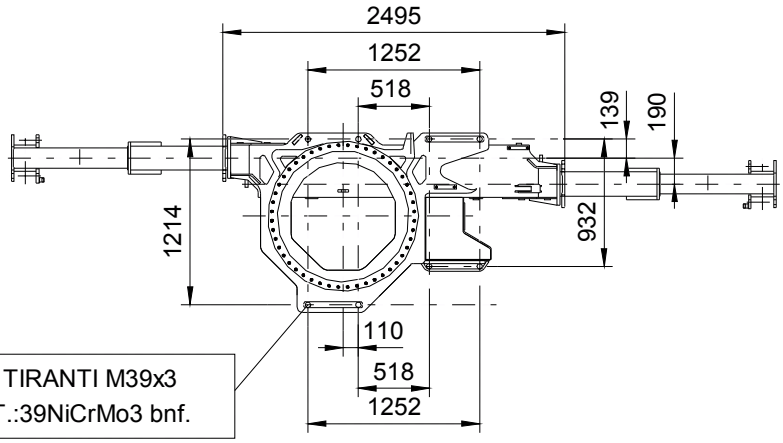
DIMENSIONI DI INGOMBRO
DIMENSIONS
VR85 8S



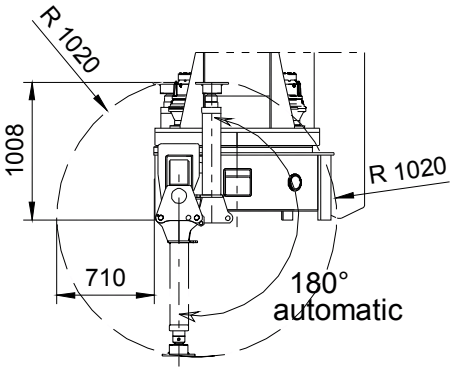
DIMENSIONI DI INGOMBRO
DIMENSIONS
VR85 10S



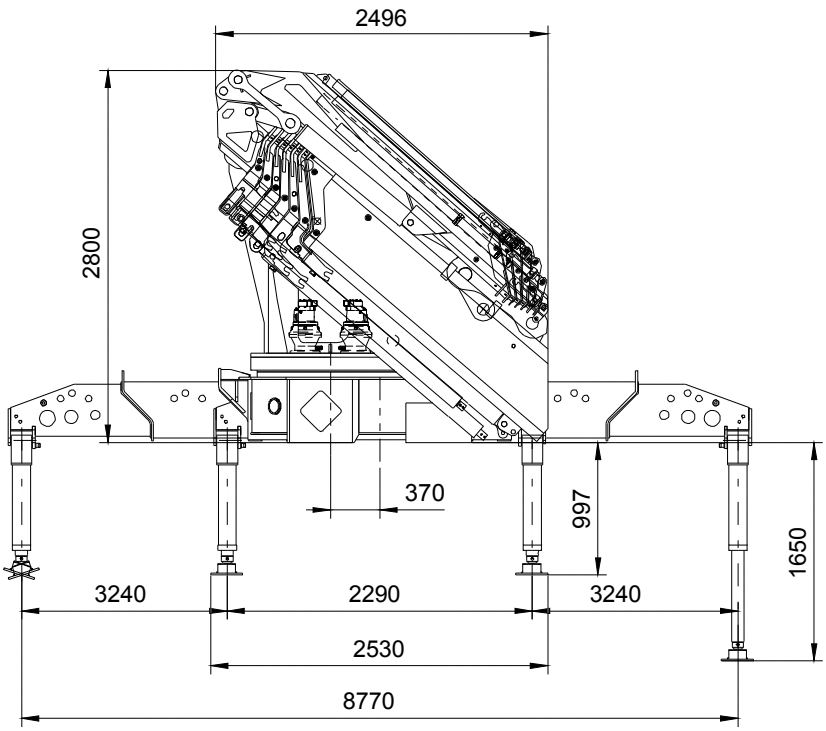


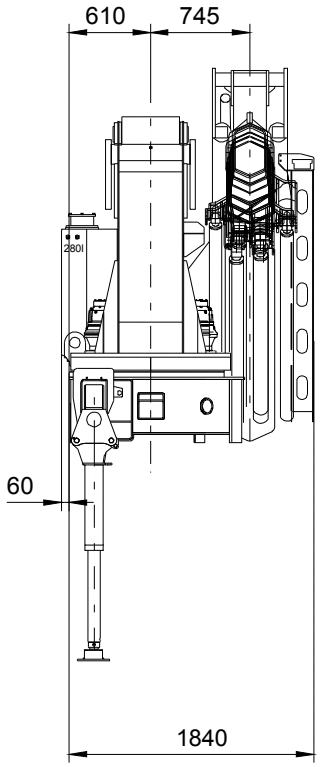


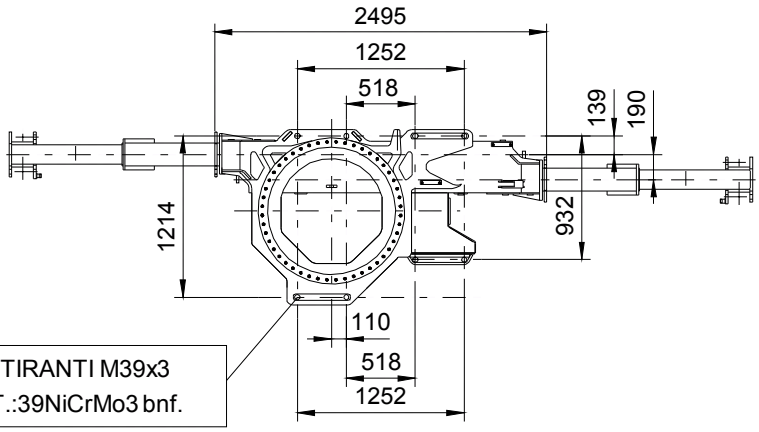
N°8 TIRANTI M39x3
MAT.:39NiCrMo3 bnf.



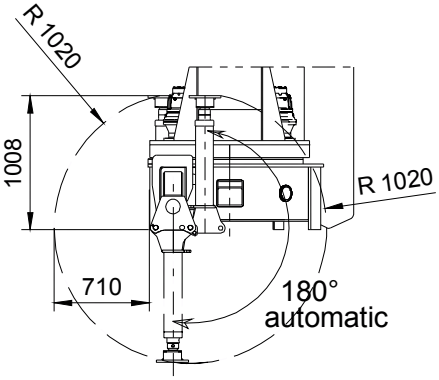
DIMENSIONI DI INGOMBRO
DIMENSIONS
VR85 6SJ6



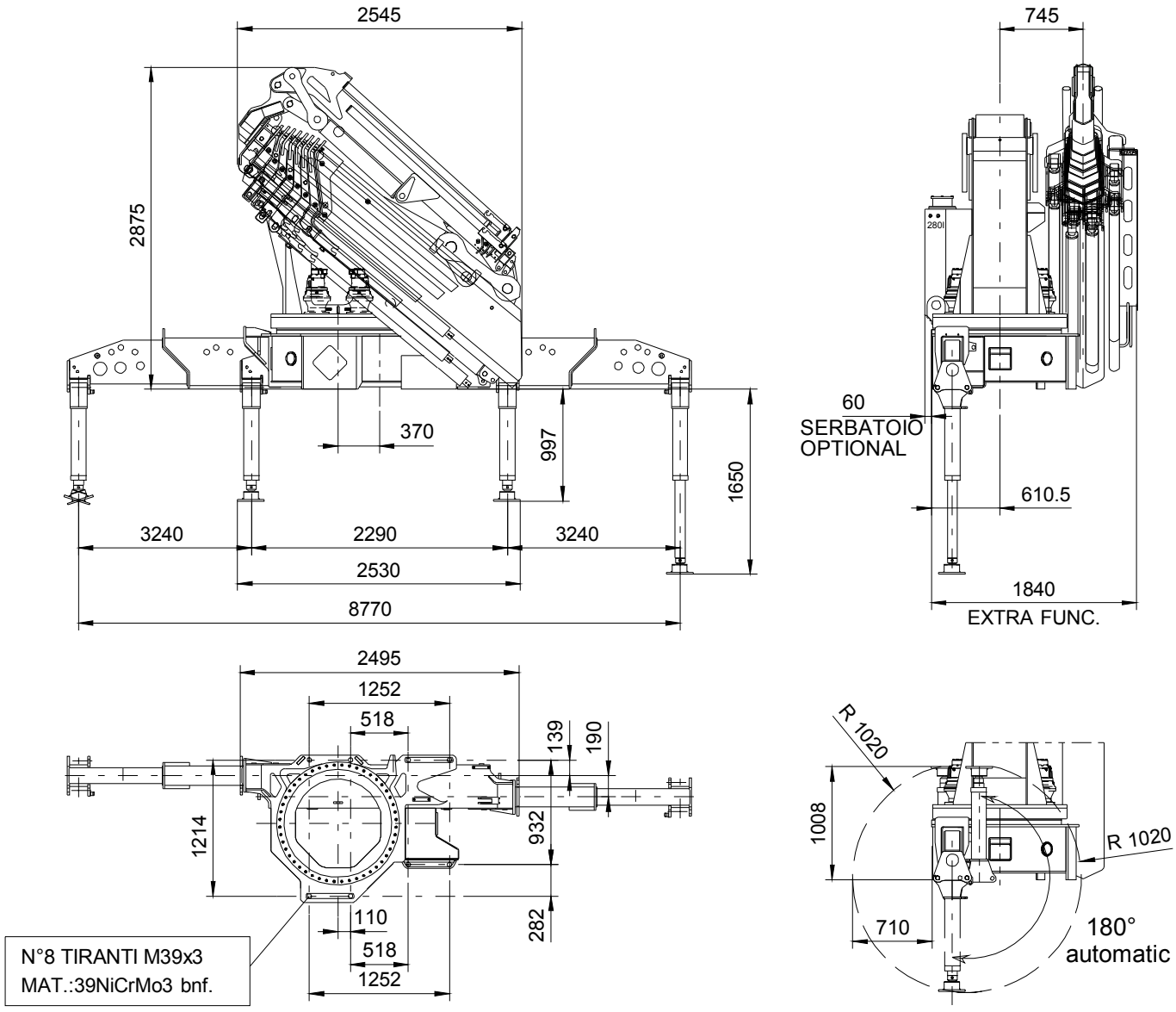




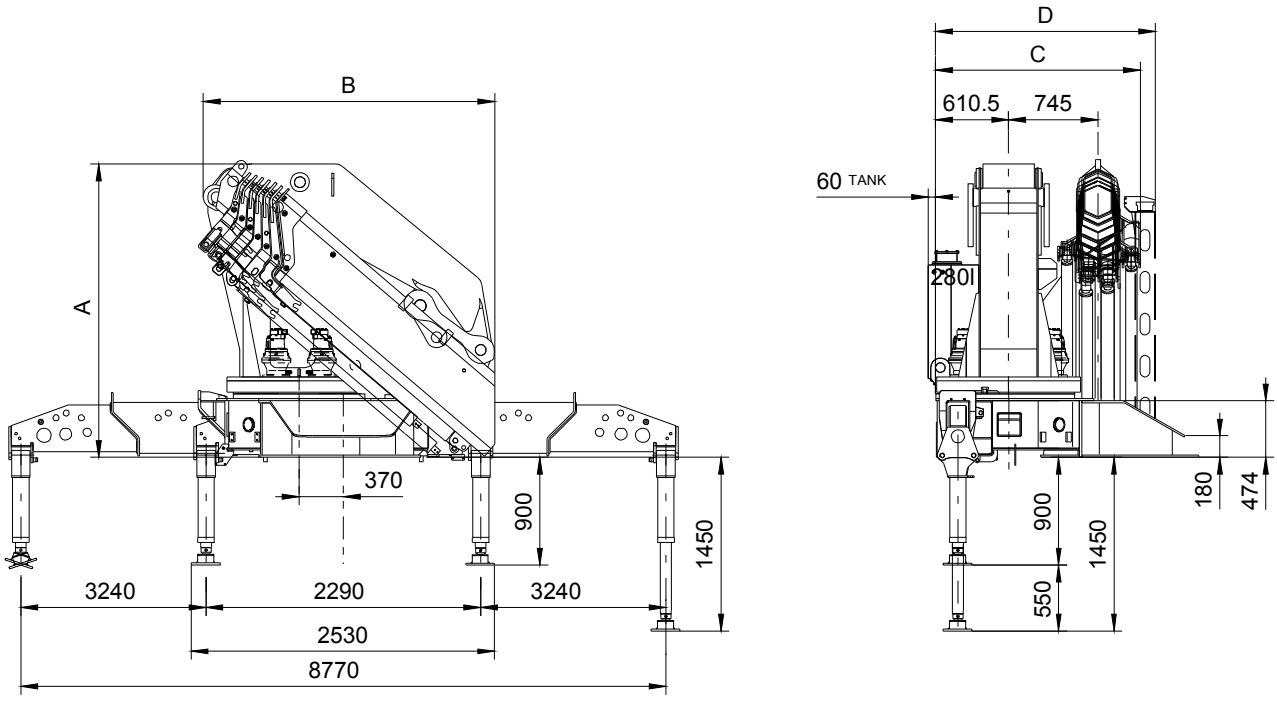
N°8 TIRANTI M39x3
MAT.:39NiCrMo3 bnf.

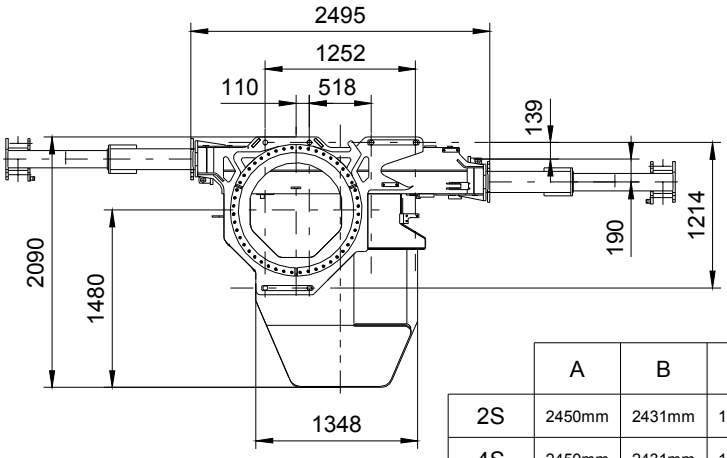


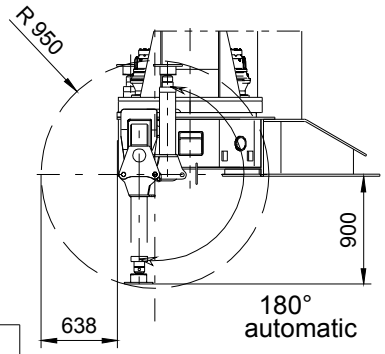
DIMENSIONI DI INGOMBRO
DIMENSIONS
VR85 8SJ4



DIMENSIONI DI INGOMBRO
DIMENSIONS
VR85 CON BASAMENTO INTEGRATO
VR85 WITH INTEGRATED BASE

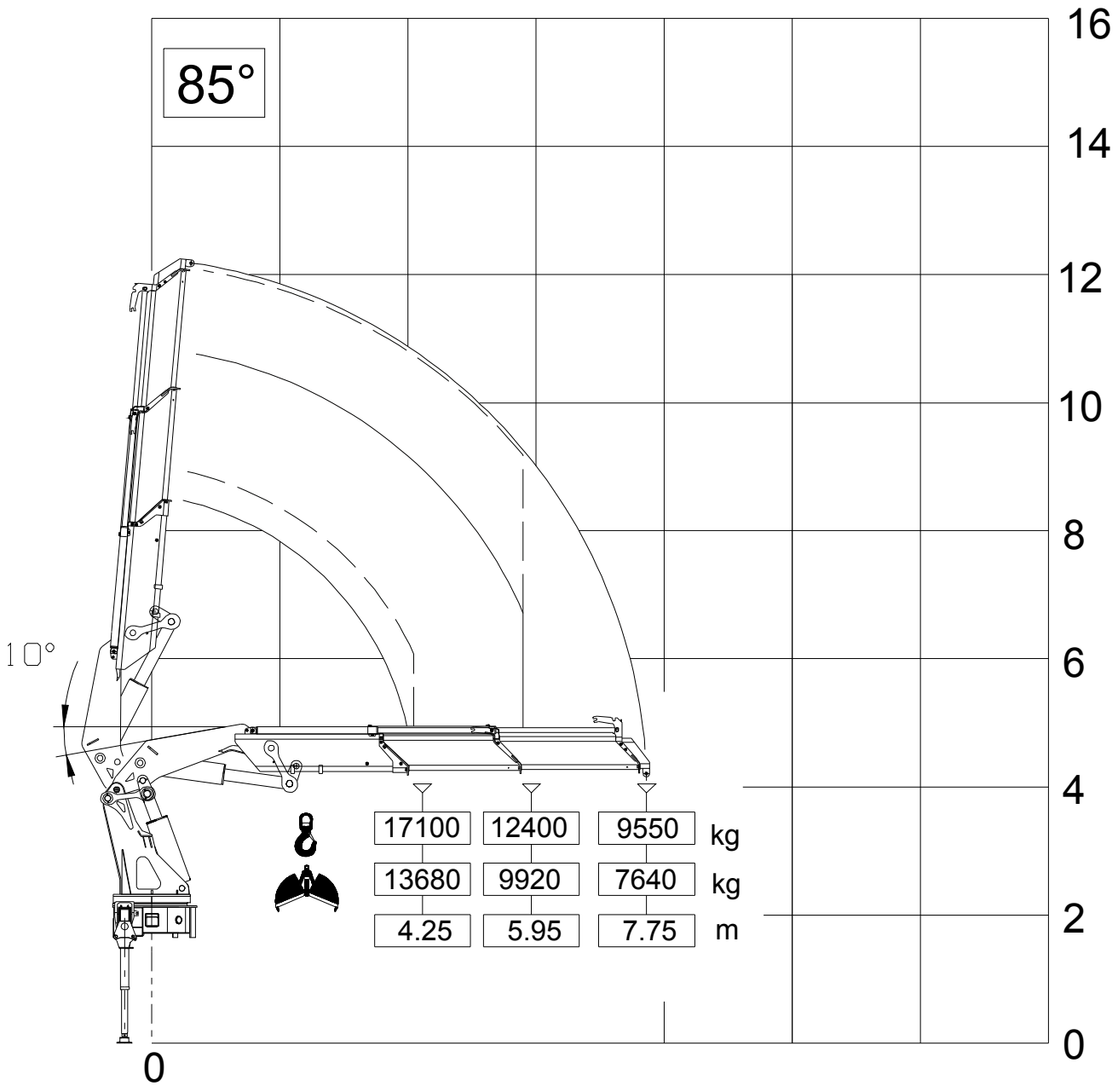






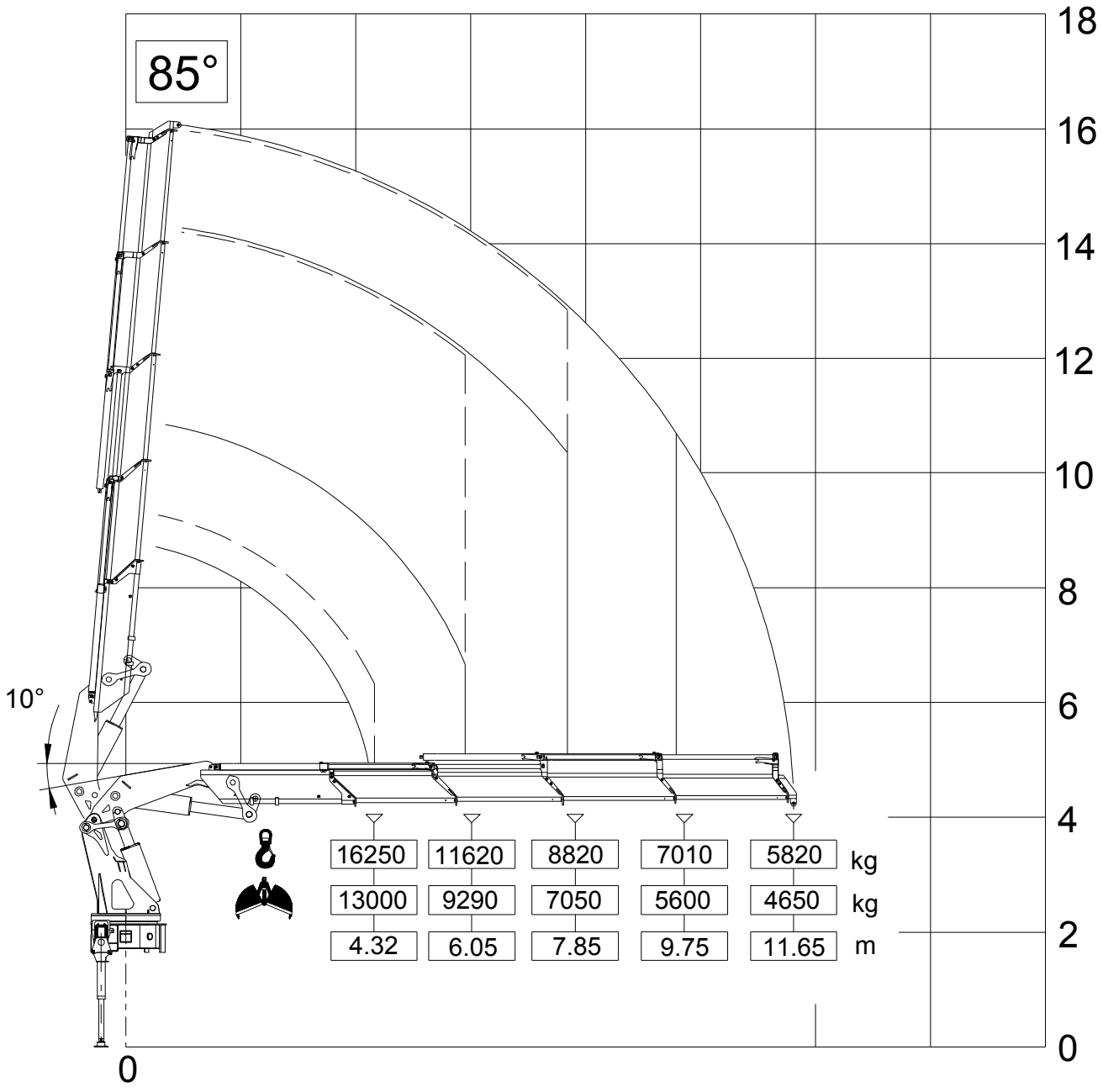
	A	B	C	D
2S	2450mm	2431mm	1550mm	1840mm
4S	2450mm	2431mm	1550mm	1840mm
6S	2450mm	2470mm	1710mm	1840mm
8S	2505mm	2498mm	1735mm	---
10S	2635mm	2510mm	1735mm	---
6S-J6	2800mm	2496mm	---	1840mm
8S-J4	2875mm	2545mm	---	1840mm

DIAGRAMMA PORTATE
LOAD DIAGRAM
VR85 2S



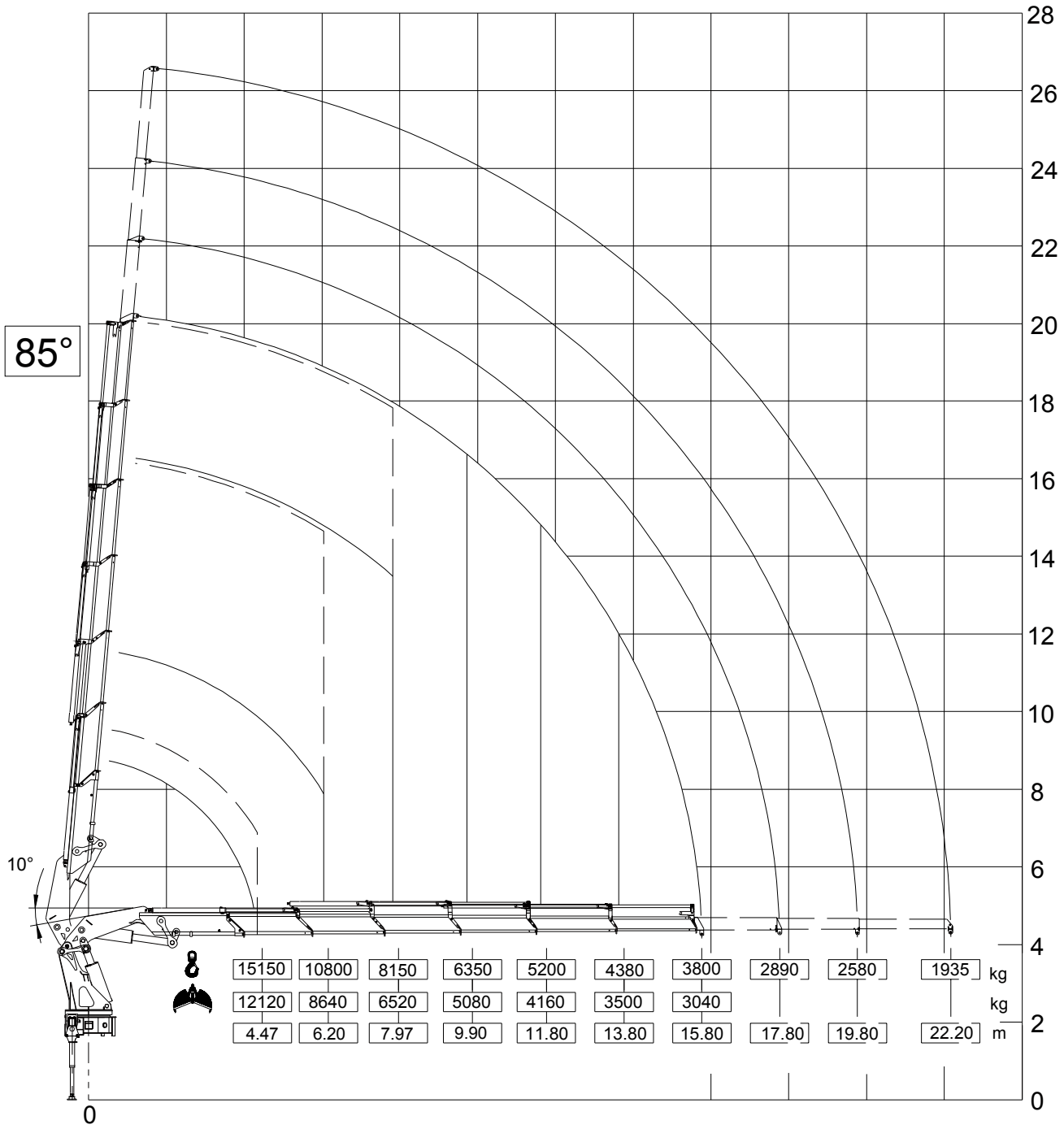
———	Curve di carico con valvola rigenerativa attivata Load curves with regenerative extension valve activated	– – –	Curve di carico con valvola rigenerativa disattivata (EES) Load curves with regenerative extension valve deactivated (EES)

DIAGRAMMA PORTATE
LOAD DIAGRAM
VR85 4S



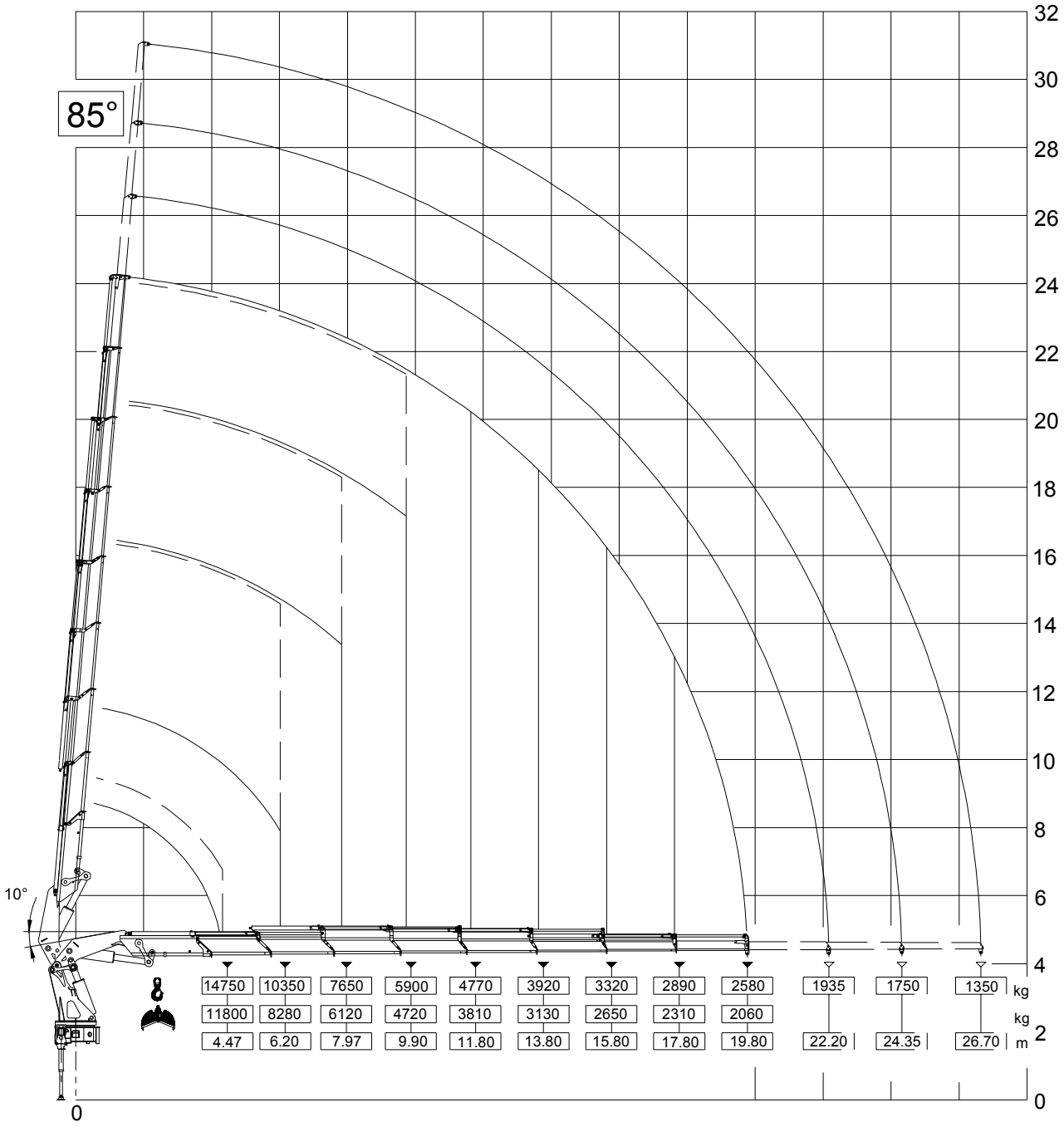
———	Curve di carico con valvola rigenerativa attivata Load curves with regenerative extension valve activated	– – –	Curve di carico con valvola rigenerativa disattivata (EES) Load curves with regenerative extension valve deactivated (EES)

DIAGRAMMA PORTATE
LOAD DIAGRAM
VR85 6S



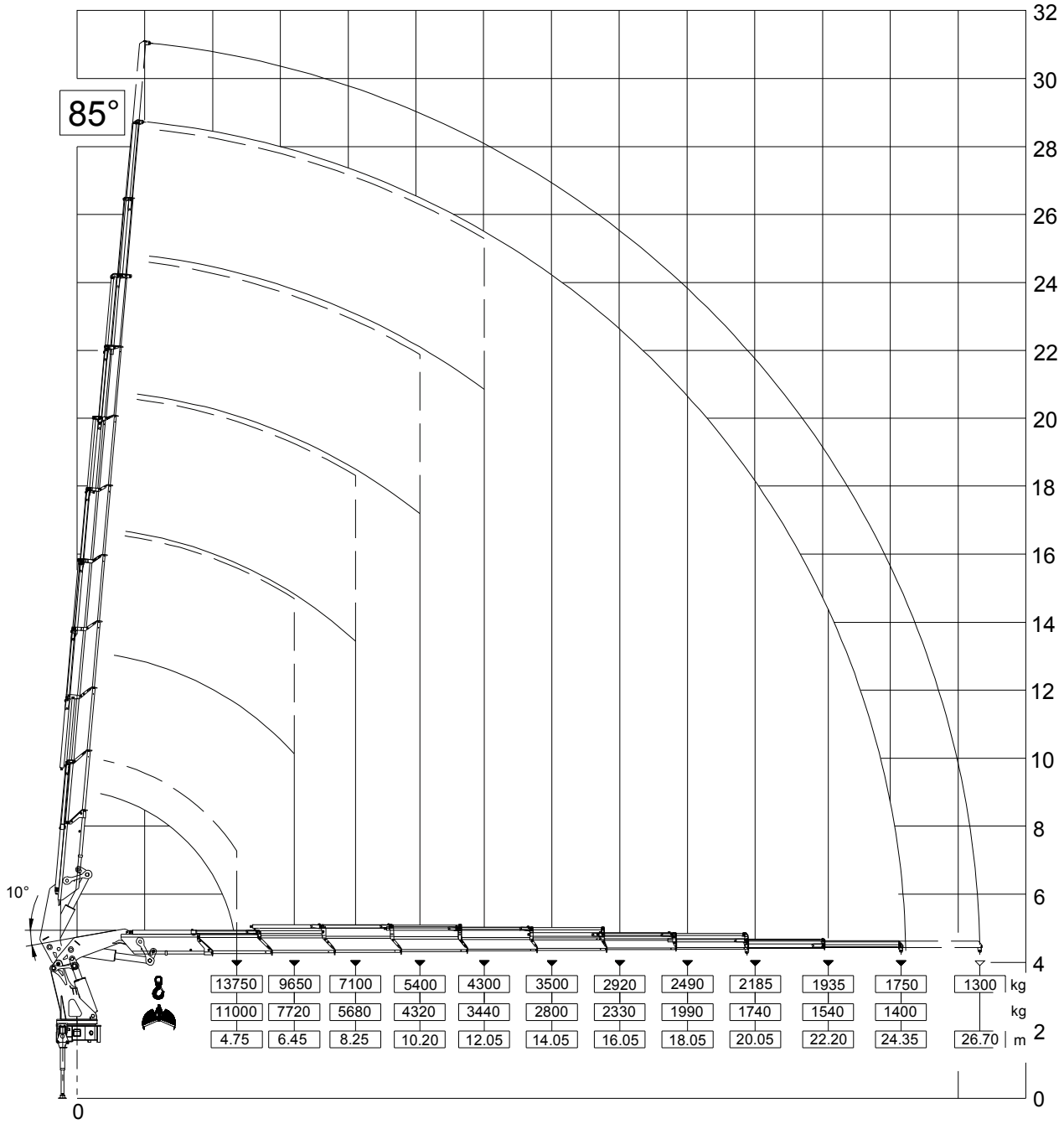
———	Curve di carico con valvola rigenerativa attivata Load curves with regenerative extension valve activated	– – –	Curve di carico con valvola rigenerativa disattivata (EES) Load curves with regenerative extension valve deactivated (EES)

DIAGRAMMA PORTATE
LOAD DIAGRAM
VR85 8S



———	Curve di carico con valvola rigenerativa attivata Load curves with regenerative extension valve activated	– – –	Curve di carico con valvola rigenerativa disattivata (EES) Load curves with regenerative extension valve deactivated (EES)

DIAGRAMMA PORTATE
LOAD DIAGRAM
VR85 10S



———	Curve di carico con valvola rigenerativa attivata Load curves with regenerative extension valve activated	— —	Curve di carico con valvola rigenerativa disattivata (EES) Load curves with regenerative extension valve deactivated (EES)

DIAGRAMMA PORTATE
LOAD DIAGRAM
VR85 6SJ6

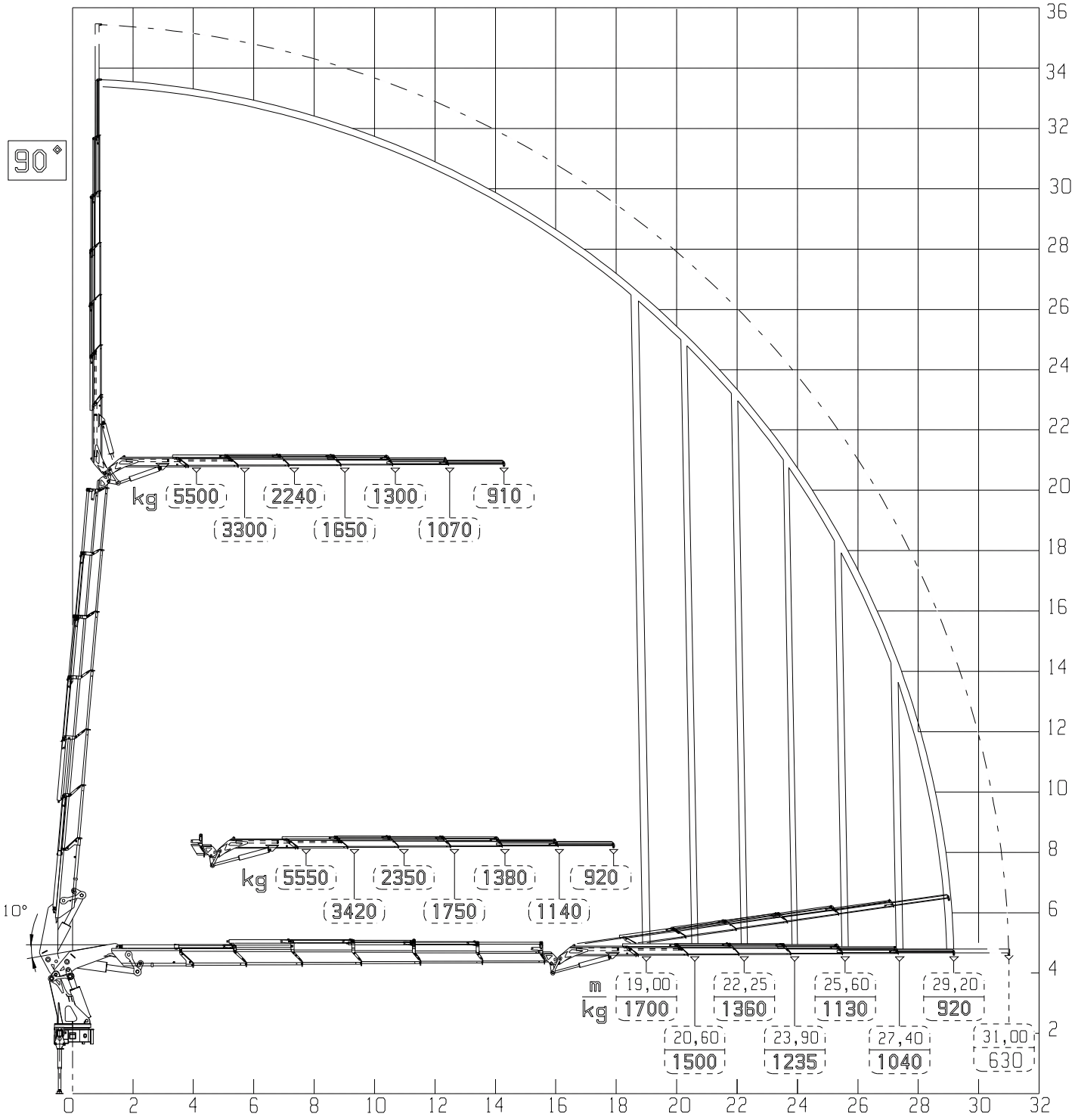
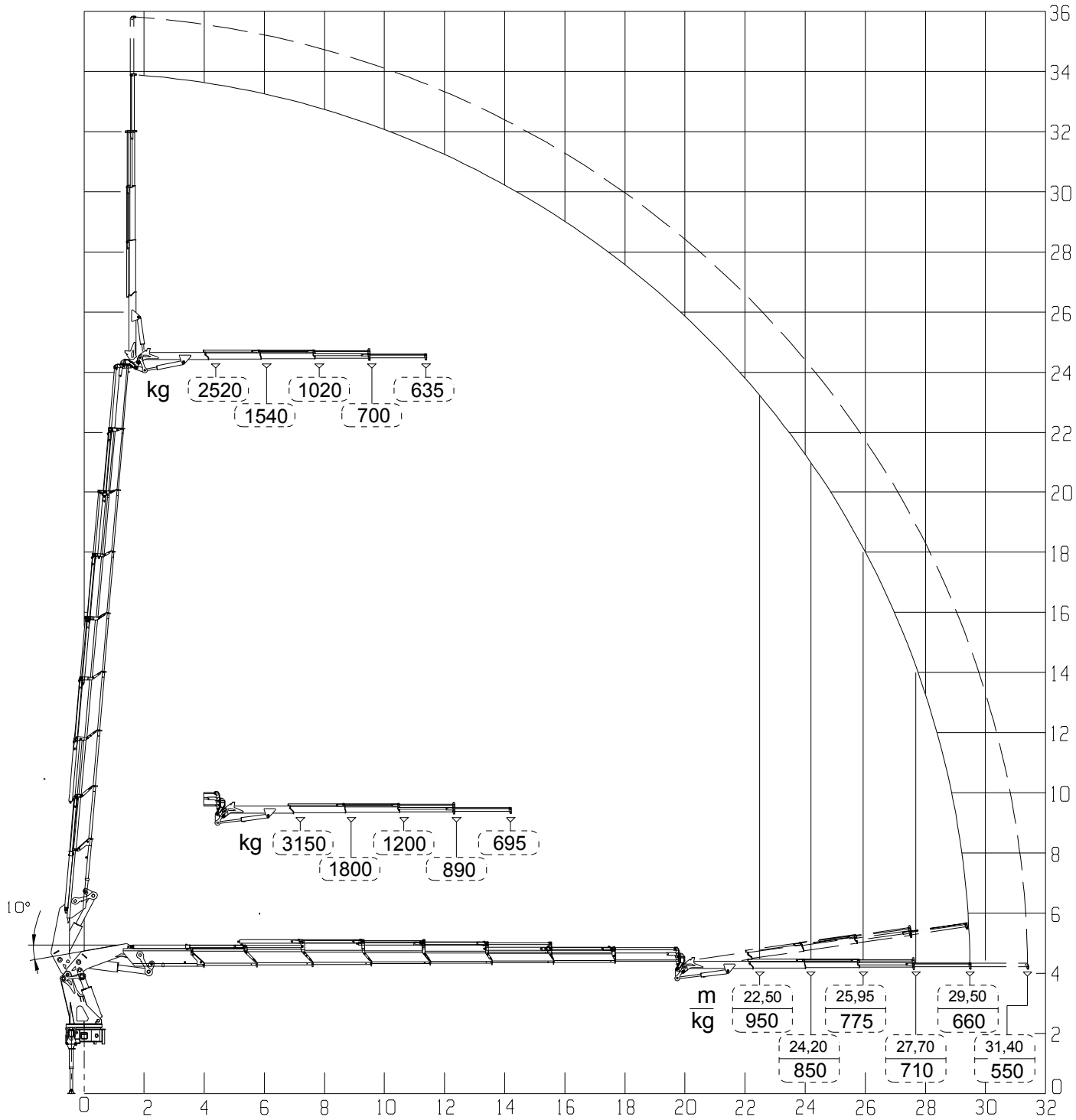
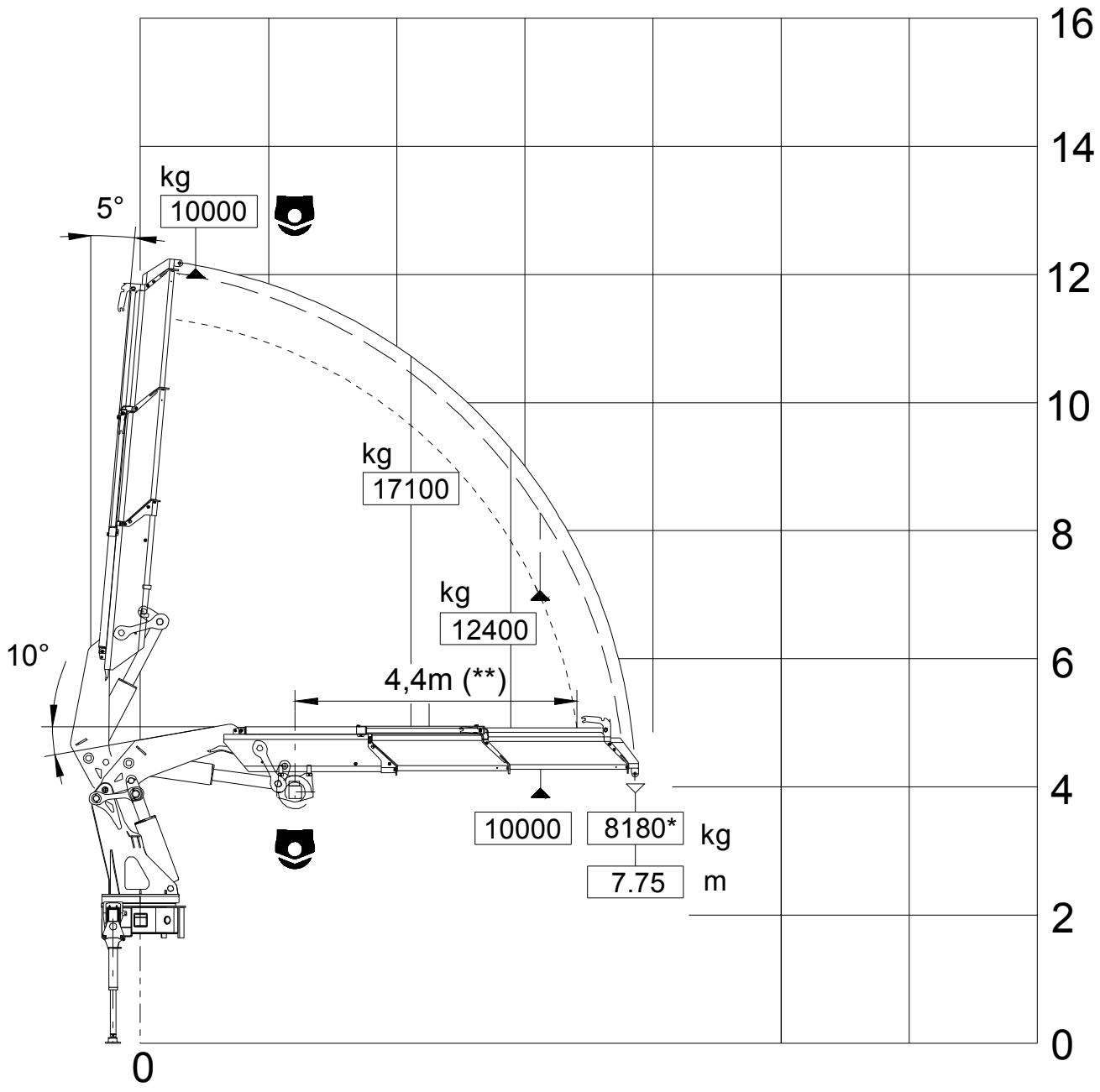


DIAGRAMMA PORTATE
LOAD DIAGRAM
VR85 8SJ4

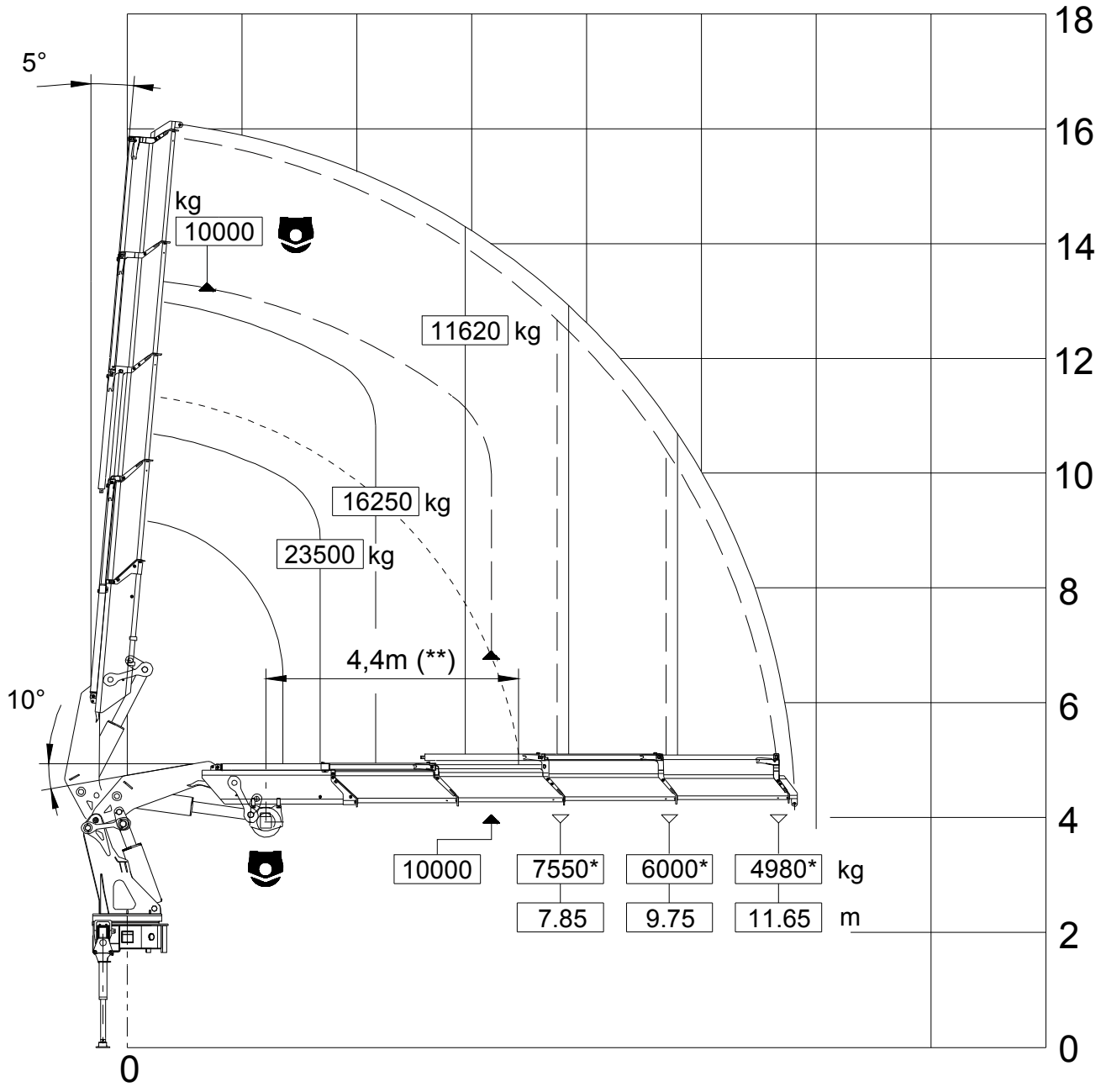


DIAGRAMMI DI TENUTA STATICA E ARGANO
HOLDING AND WINCH DIAGRAMS
2S



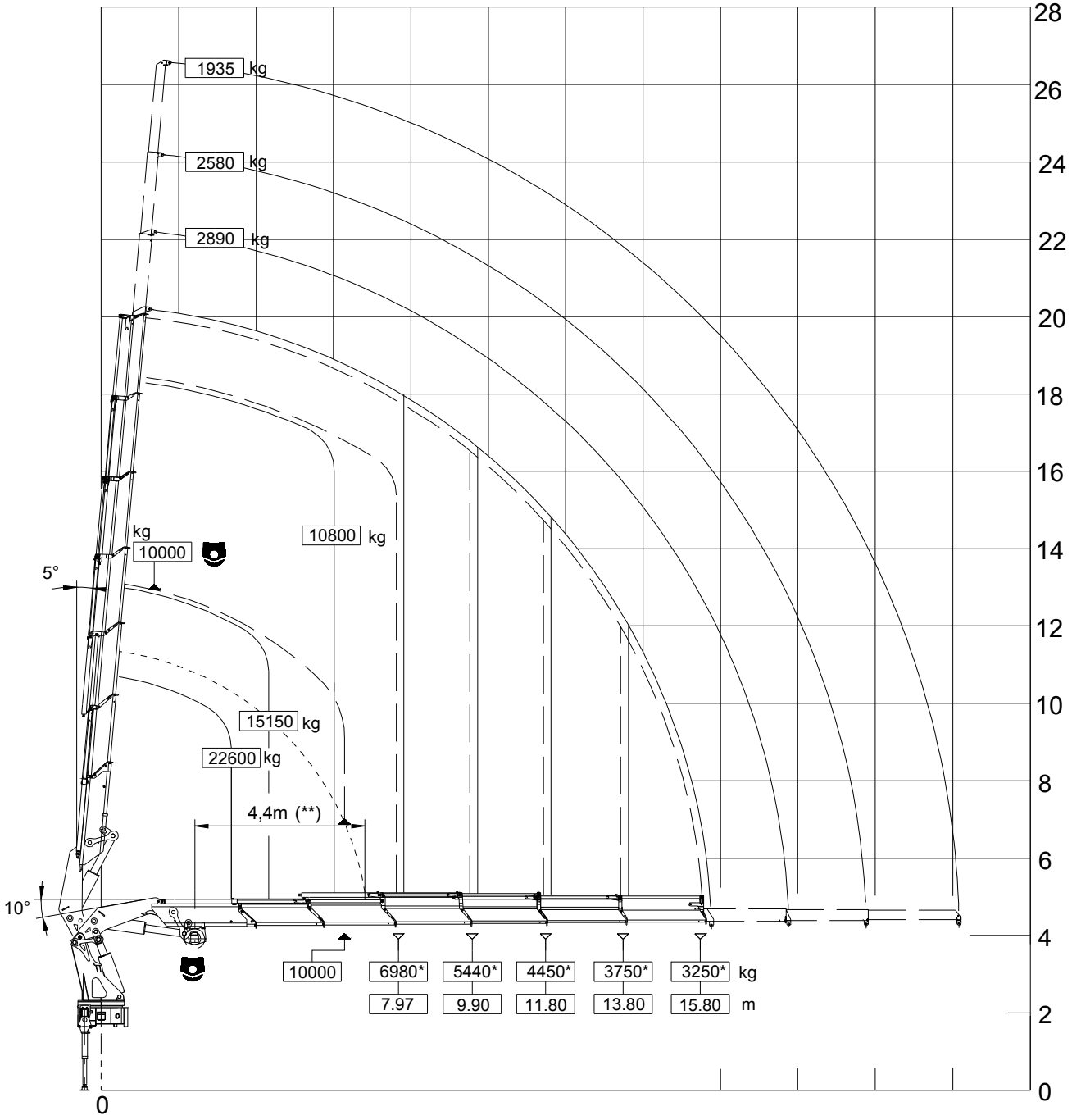
(*)	Puleggia argano con tiro doppio Winch pulley with double line pull	(**)	Distanza minima tra argano e puleggia Min distance between winch and pulley
———	Curve di carico di tenuta statica Load curves for static holding	– – –	Curve di carico per argano Load curves for winch

DIAGRAMMI DI TENUTA STATICA E ARGANO
HOLDING AND WINCH DIAGRAMS
4S



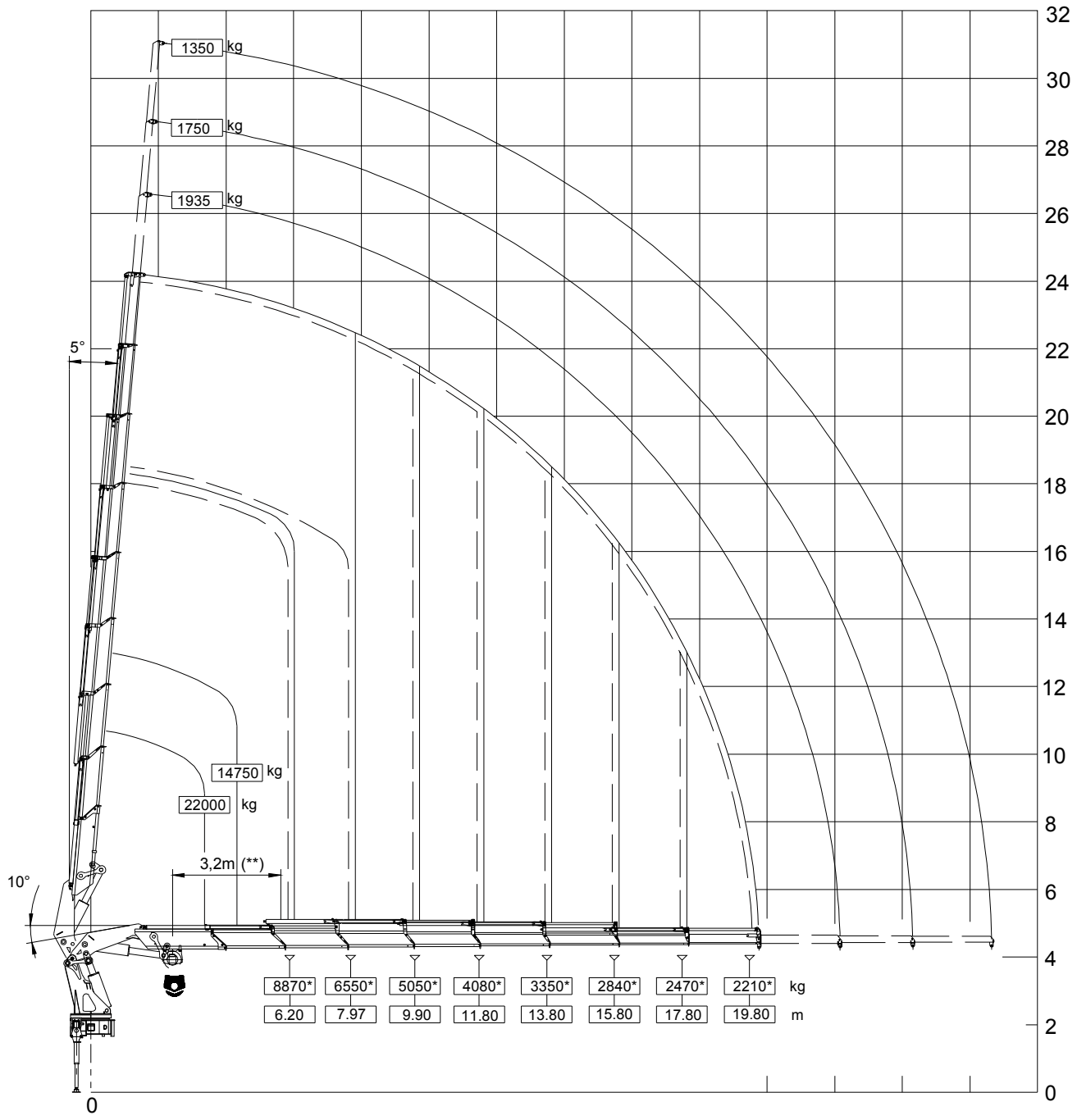
(*)	Puleggia argano con tiro doppio Winch pulley with double line pull	(**)	Distanza minima tra argano e puleggia Min distance between winch and pulley
———	Curve di carico di tenuta statica Load curves for static holding	– – –	Curve di carico per argano Load curves for winch

DIAGRAMMI DI TENUTA STATICA E ARGANO
HOLDING AND WINCH DIAGRAMS
6S



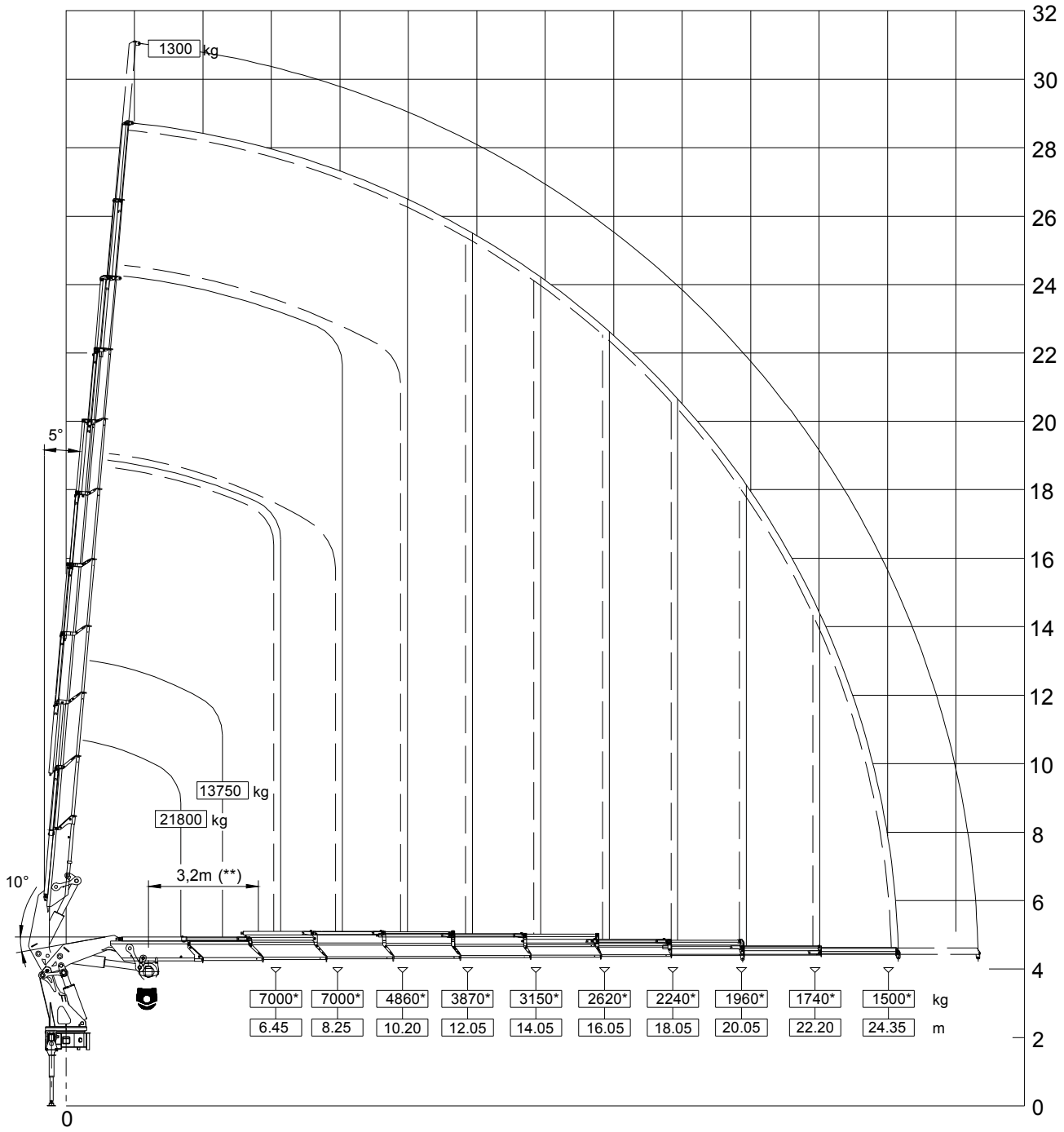
(*)	Puleggia argano con tiro doppio Winch pulley with double line pull	(**)	Distanza minima tra argano e puleggia Min distance between winch and pulley
———	Curve di carico di tenuta statica Load curves for static holding	— —	Curve di carico per argano Load curves for winch

DIAGRAMMI DI TENUTA STATICA E ARGANO
HOLDING AND WINCH DIAGRAMS
8S



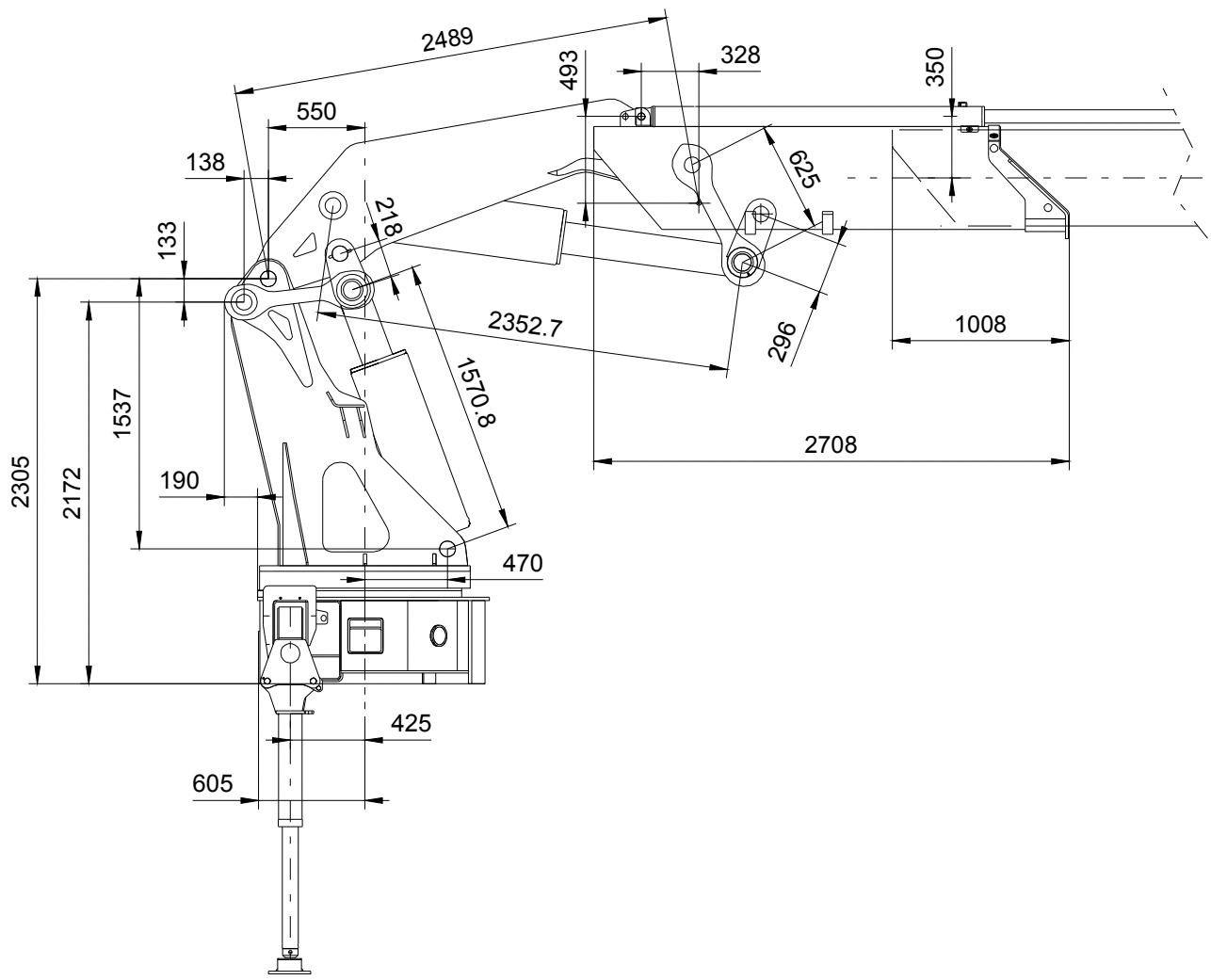
(*)	Puleggia argano con tiro doppio Winch pulley with double line pull	(**)	Distanza minima tra argano e puleggia Min distance between winch and pulley
———	Curve di carico di tenuta statica Load curves for static holding	— —	Curve di carico per argano Load curves for winch

DIAGRAMMI DI TENUTA STATICA E ARGANO
HOLDING AND WINCH DIAGRAMS
10S

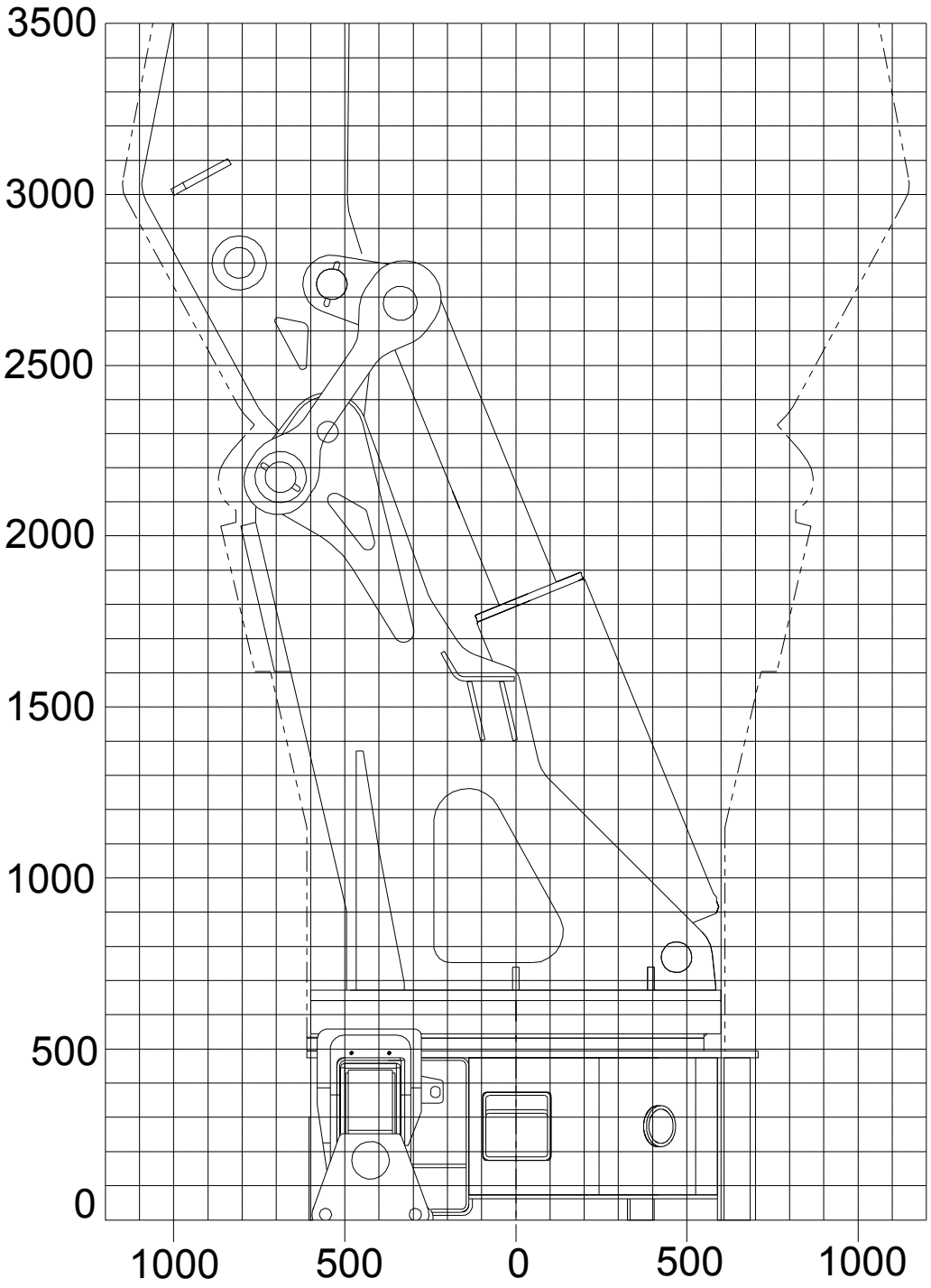


(*)	Puleggia argano con tiro doppio Winch pulley with double line pull	(**)	Distanza minima tra argano e puleggia Min distance between winch and pulley
———	Curve di carico di tenuta statica Load curves for static holding	— —	Curve di carico per argano Load curves for winch

DIMENSIONALE COLONNA PRIMO BRACCIO
COLUMN - 1ST BOOM - DIMENSIONS

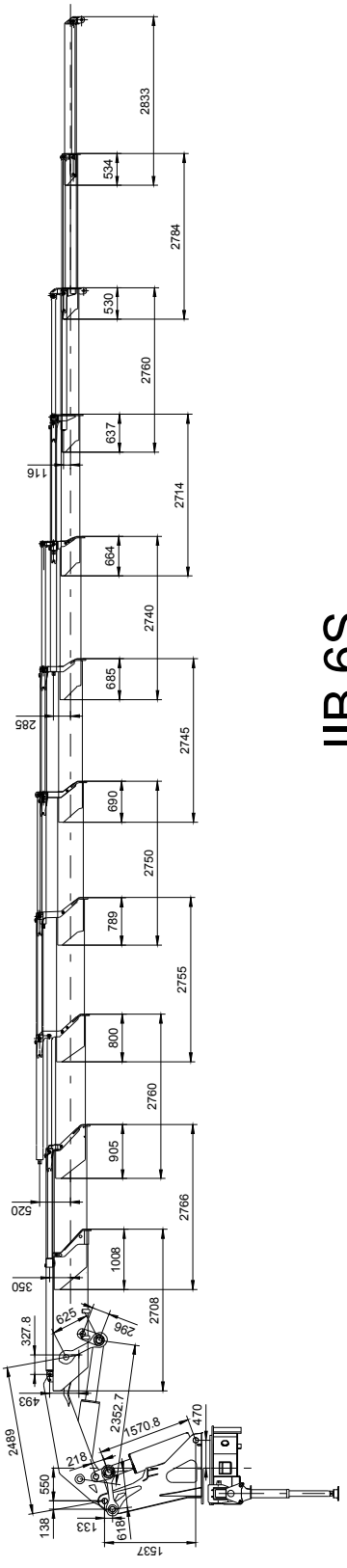


INGOMBRO IN ROTAZIONE
ROTATION SPACE NEEDED

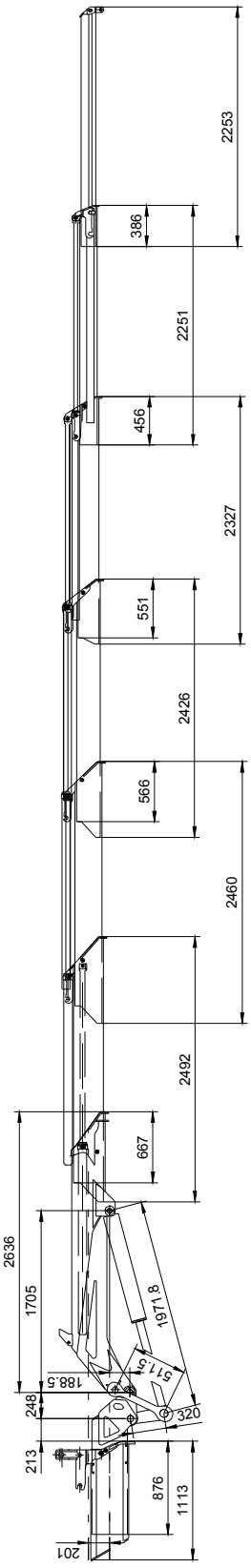


DIMENSIONALE PACCO BRACCI
BOOM DIMENSIONS

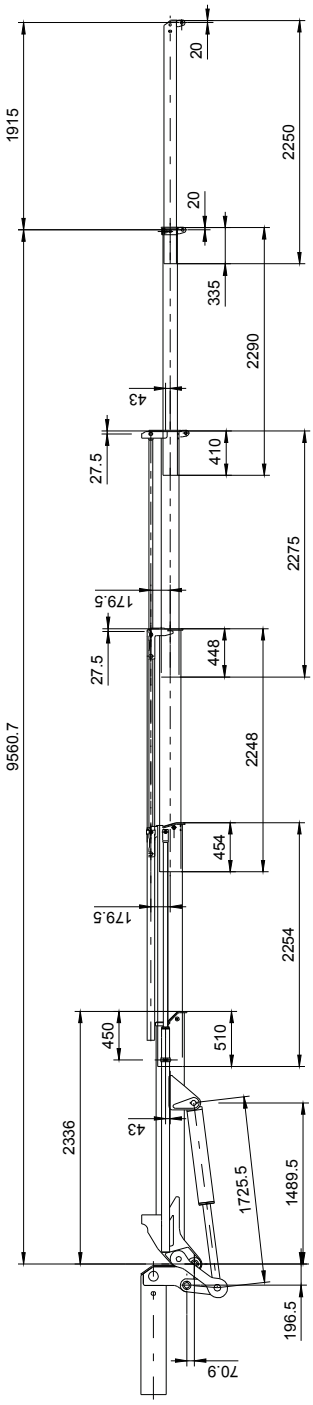
VR85 10S



JIB 6S



JIB 4S



DIMENSIONI MARTINETTI
CYLINDERS DIMENSIONS

CILINDRO DI SOLLEVAMENTO
LIFTING CYLINDER

Alesaggio - *Cylinder bore*	300
Diametro esterno - *Cyl. ext. diameter*	340.5
Diametro stelo - *Rod diameter*	180 - 145
Interasse aperto - *Centers (open)*	2079
Interasse chiuso - *Centers (closed)*	1265
Corsa - *Stroke*	814
∅ perni articolazione - *Artic. pin* ∅	90
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO DI ARTICOLAZIONE
ARTICULATION CYLINDER

Alesaggio - *Cylinder bore*	280
Diametro esterno - *Cyl. ext. diameter*	310
Diametro stelo - *Rod diameter*	180 - 145
Interasse aperto - *Centers (open)*	2458.5
Interasse chiuso - *Centers (closed)*	1438.5
Corsa - *Stroke*	1020
∅ perno fissaggio - *Fixing pin* ∅	90
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO 1° SFILO
1ST EXTENSION CYL.

Alesaggio - *Cylinder bore*	100
Diametro esterno - *Cyl. ext. diameter*	115
Diametro stelo - *Rod diameter*	75 - 60
Interasse aperto - *Centers (open)*	3734
Interasse chiuso - *Centers (closed)*	2034
Corsa - *Stroke*	1700
∅ perni articolazione - *Artic. pin* ∅	40
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO 2° SFILO
2ND EXTENSION CYL.

Alesaggio - *Cylinder bore*	100
Diametro esterno - *Cyl. ext. diameter*	115
Diametro stelo - *Rod diameter*	75 - 60
Interasse aperto - *Centers (open)*	1955
Interasse chiuso - *Centers (closed)*	155
Corsa - *Stroke*	1800
∅ perno fissaggio - *Fixing pin* ∅	40
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO 3° - 4° SFILO
3RD - 4TH EXTENSION CYL.

Alesaggio - *Cylinder bore*	100
Diametro esterno - *Cyl. ext. diameter*	115
Diametro stelo - *Rod diameter*	75 - 60
Interasse aperto - *Centers (open)*	2045
Interasse chiuso - *Centers (closed)*	145
Corsa - *Stroke*	1900
∅ perni articolazione - *Artic. pin* ∅	40
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO 5° - 6° - 7° - 8° SFILO
5TH - 6TH - 7TH - 8TH EXT. CYL.

Alesaggio - *Cylinder bore*	90
Diametro esterno - *Cyl. ext. diameter*	105
Diametro stelo - *Rod diameter*	65 - 50
Interasse aperto - *Centers (open)*	2135
Interasse chiuso - *Centers (closed)*	135
Corsa - *Stroke*	2000
∅ perno fissaggio - *Fixing pin* ∅	35
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO 9° - 10° SFILO
9TH - 10TH EXTENSION CYL.

Alesaggio - *Cylinder bore*	85
Diametro esterno - *Cyl. ext. diameter*	100
Diametro stelo - *Rod diameter*	60 - 40
Interasse aperto - *Centers (open)*	2285
Interasse chiuso - *Centers (closed)*	135
Corsa - *Stroke*	2150
∅ perni articolazione - *Artic. pin* ∅	35
Materiale perno/i - *Pin material*	42CrMo4 BNF

DIMENSIONI MARTINETTI
CYLINDERS DIMENSIONS
JIB J6

CILINDRO ARTICOLAZIONE JIB
JIB ARTICULATION CYLINDER

Alesaggio - *Cylinder bore*	125
Diametro esterno - *Cyl. ext. diameter*	145
Diametro stelo - *Rod diameter*	70 - 0
Interasse aperto - *Centers (open)*	2005
Interasse chiuso - *Centers (closed)*	1170
Corsa - *Stroke*	835
∅ perni articolazione - *Artic. pin* ∅	45 / 80
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO 1° - 2° SFILO JIB
1ST - 2ND JIB EXTENSION CYL.

Alesaggio - *Cylinder bore*	70
Diametro esterno - *Cyl. ext. diameter*	80
Diametro stelo - *Rod diameter*	45 - 30
Interasse aperto - *Centers (open)*	1704
Interasse chiuso - *Centers (closed)*	104
Corsa - *Stroke*	1600
∅ perno fissaggio - *Fixing pin* ∅	25
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO 3° - 4° SFILO JIB
3RD - 4TH JIB EXTENSION CYL.

Alesaggio - *Cylinder bore*	65
Diametro esterno - *Cyl. ext. diameter*	75
Diametro stelo - *Rod diameter*	40 - 25
Interasse aperto - *Centers (open)*	1774
Interasse chiuso - *Centers (closed)*	104
Corsa - *Stroke*	1670
∅ perno fissaggio - *Fixing pin* ∅	25
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO 5° SFILO JIB
5TH JIB EXTENSION CYL.

Alesaggio - *Cylinder bore*	60
Diametro esterno - *Cyl. ext. diameter*	70
Diametro stelo - *Rod diameter*	35 - 25
Interasse aperto - *Centers (open)*	1854
Interasse chiuso - *Centers (closed)*	104
Corsa - *Stroke*	1750
∅ perno fissaggio - *Fixing pin* ∅	25
Materiale perno/i - *Pin material*	42CrMo4 BNF

CILINDRO 6° SFILO JIB
6TH JIB EXTENSION CYL.

Alesaggio - *Cylinder bore*	60
Diametro esterno - *Cyl. ext. diameter*	70
Diametro stelo - *Rod diameter*	30 - 0
Interasse aperto - *Centers (open)*	1900
Interasse chiuso - *Centers (closed)*	100
Corsa - *Stroke*	1800
∅ perni articolazione - *Artic. pin* ∅	25
Materiale perno/i - *Pin material*	42CrMo4 BNF

DIMENSIONI MARTINETTI
CYLINDERS DIMENSIONS
JIB J4

CILINDRO SNODO JIB
JIB ARTICULATION CYL.

Alesaggio - *Cylinder bore*	125
Diametro esterno - *Cyl. ext. diameter*	145
Diametro stelo - *Rod diameter*	70 - 0
Interasse aperto - *Centers (open)*	1753
Interasse chiuso - *Centers (closed)*	1045.5
Corsa - *Stroke*	707.5
Raccordi - *Fittings*	7/8 - 14 ½ GAS
∅ perni articolazione - *Artic. pin* ∅	65 - 45
Materiale perno/i - *Pin material*	39NiCrMo3 BNF

CILINDRO 1° SFILO JIB
1ST JIB EXTENSION CYL.

Alesaggio - *Cylinder bore*	65
Diametro esterno - *Cyl. ext. diameter*	75
Diametro stelo - *Rod diameter*	40 - 25
Interasse aperto - *Centers (open)*	2108
Interasse chiuso - *Centers (closed)*	408
Corsa - *Stroke*	1700
Raccordi - *Fittings*	7/8 - 14 ½ GAS
∅ perno fissaggio - *Fixing pin* ∅	25
Materiale perno/i - *Pin material*	39NiCrMo3 BNF

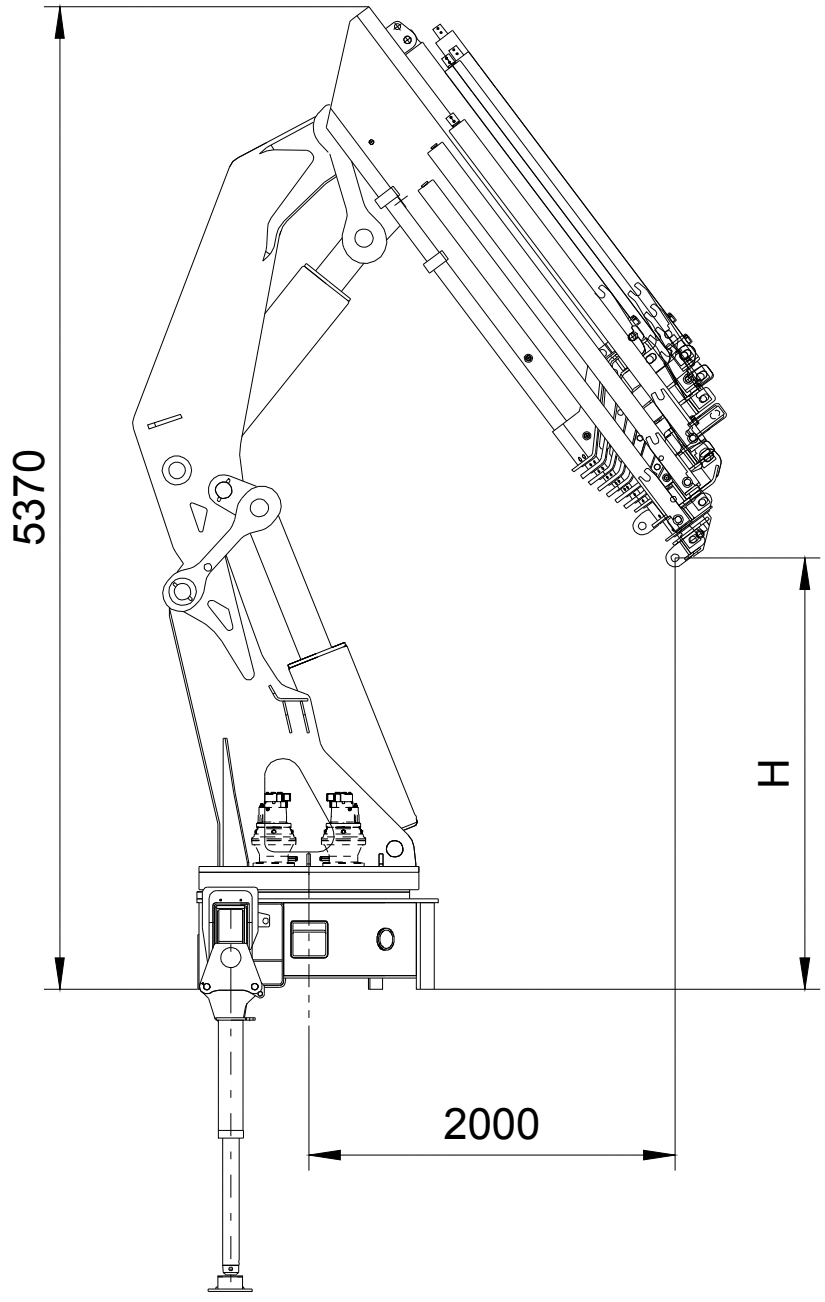
CILINDRO 2° - 3° SFILO JIB
2ND - 3RD JIB EXTENSION CYL.

Alesaggio - *Cylinder bore*	60
Diametro esterno - *Cyl. ext. diameter*	70
Diametro stelo - *Rod diameter*	35 - 25
Interasse aperto - *Centers (open)*	1854
Interasse chiuso - *Centers (closed)*	104
Corsa - *Stroke*	1750
Raccordi - *Fittings*	7/8 - 14 ½ GAS
∅ perno fissaggio - *Fixing pin* ∅	25
Materiale perno/i - *Pin material*	39NiCrMo3 BNF

CILINDRO 4° SFILO JIB
4TH JIB EXTENSION CYL.

Alesaggio - *Cylinder bore*	60
Diametro esterno - *Cyl. ext. diameter*	70
Diametro stelo - *Rod diameter*	30 - 0
Interasse aperto - *Centers (open)*	1900
Interasse chiuso - *Centers (closed)*	100
Corsa - *Stroke*	1800
Raccordi - *Fittings*	7/8 - 14 ½ GAS
∅ perno fissaggio - *Fixing pin* ∅	25
Materiale perno/i - *Pin material*	39NiCrMo3 BNF

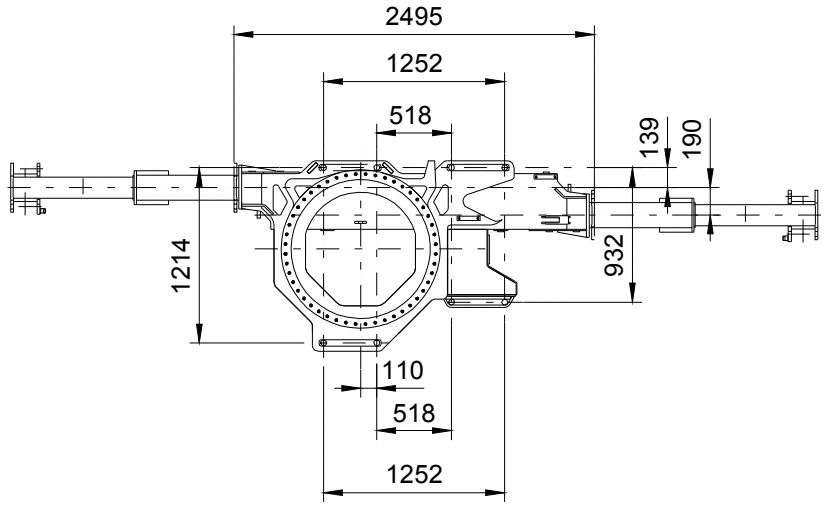
ALTEZZA ATTACCO GANCIO
HOOK HEIGHT



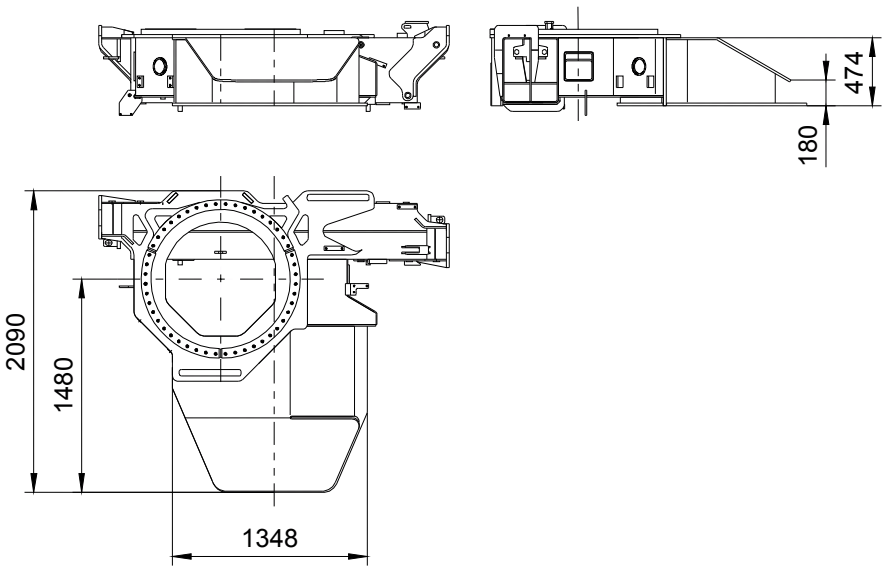
	H (mm)
2S	2650
4S	2650
6S	2580
8S	2530
10S	2355

2S	4S	6S	8S	10S	
2650	2650	2580	2530	2355	H

DIMENSIONI BASAMENTO
BASE DIMENSIONS

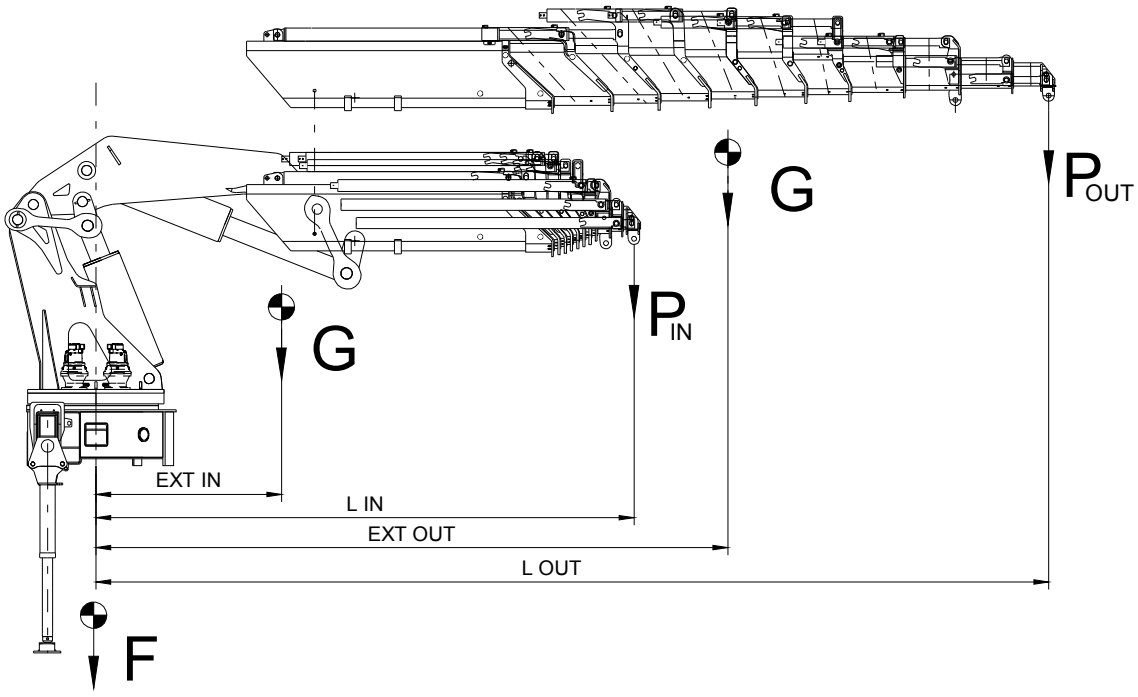


VERSIONE CON
BASAMENTO INTEGRALE



Tiranti di staffaggio Tie mounting rods	N°8 M39x3 42CrMo4 BNF
Viti fissaggio ralla Fixing bolts for bearing	M20x150 12.9 UNI 5931

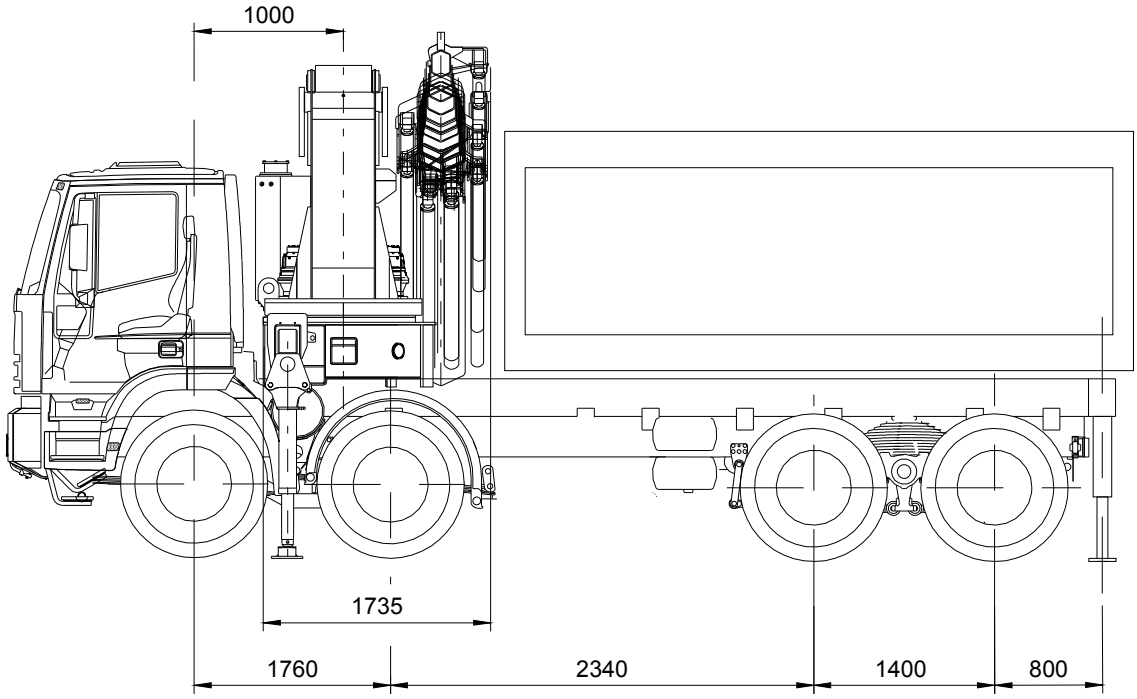
PESI – BARICENTRI
WEIGHTS – CENTERS OF GRAVITY



		2S	4S	6S	8S	10S	6SJ6	8SJ4
Massa parti fisse F (kg) Fixed parts weights F		4750	4750	4750	4750	4750	4750	4750
Massa parti mobili G (kg) Mobile parts weights G		2700	3350	3950	4500	4900	5450	5350
Sfili chiusi Folded extensions	**EXT IN (m)**	1.82	2.05	2.21	2.34	2.43	8.53 (*)	8.95 (*)
	L_{IN} (m)	4.25	4.32	4.47	4.47	4.75	19.00	22.50
	Portata P_{IN} (kg) Load	17100	16250	15150	14750	13750	1700	950
Sfili estesi Opened extensions	**EXT OUT (m)**	2.44	3.74	5.16	6.61	7.80	9.20 (*)	9.18 (*)
	L_{OUT} (m)	7.75	11.65	15.80	19.80	24.35	29.20	29.50
	Portata P_{OUT} (kg) Load	9550	5820	3800	2580	1750	920	660

(*)baricentri calcolati con i primi 6 sfili idraulici estesi per 6S e i primi 8 sfili idraulici estesi per 8S
(*)centers of gravity calculated with first 6 hydr. extensions for 6S and first 8 hydr. extensions for 8S fully extended

AUTOCARRO MINIMO CON STABILIZZATORI SUPPLEMENTARI
MIN TRUCK WITH SUPPLEMENTARY STABILIZERS



PTT (GVW) = 420 q

DATI AUTOCARRO A VUOTO
Asse anteriore
Tara 1° asse = 3640 kg
Tara 2° asse = 3200 kg
Carico ammissibile 1° asse = 8000 kg
Carico ammissibile 2° asse = 8000 kg

Asse posteriore
Tara tandem posteriore = 4020 kg

PESI ALLESTIMENTO
Peso cassone = 1000 kg
Peso gru = 8800 kg (VR85-10S)
Peso controtelaio = 1200 kg

Stabilizzatori supplementari
Apertura minima = 6900 mm
Peso stabilizzatori supplementari = 1060 kg

Coefficiente di stabilità = 1,54

CHASSIS DATA
Front axle
1st axle tare weight = 3640 kg
2nd axle tare weight = 3200 kg
Allowable 1st axle weight = 8000 kg
Allowable 2nd axle weight = 8000 kg

Rear axle
Rear tandem tare weight = 4020 kg

OUTFIT WEIGHTS
Body weight = 1000 kg
Crane weight = 8800 kg (VR85-10S)
Counterframe weight = 1200 kg

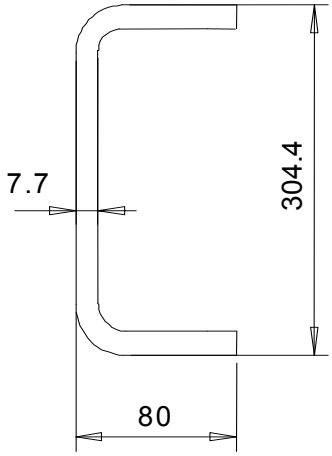
Rear beam stabilizers
Min. width = 6900 mm
Rear stabilizer weight = 1060Kg

Stability index = 1,54

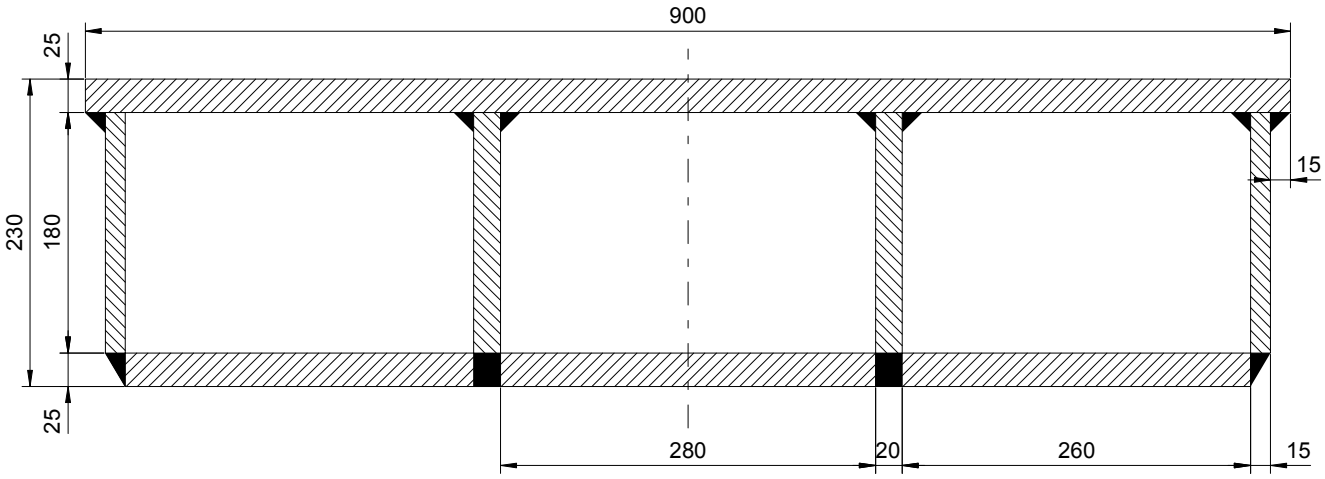
CONTROTELAIO MINIMO
MIN COUNTERFRAME

Momento dinamico max (daNm) Max dynamic moment	90500

Sezione telaio minima (autocarro PTT=420 q)
Min frame section (truck GVW 42 ton)



Sezione minima controtelaio (materiale S355)
Min counterframe section (steel S355)



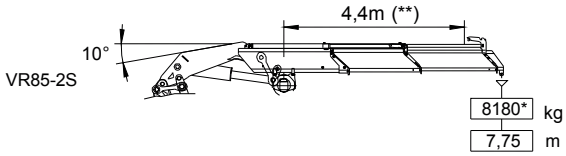
CARATTERISTICHE VERRICELLO IDRAULICO
HYDRAULIC WINCH DATA

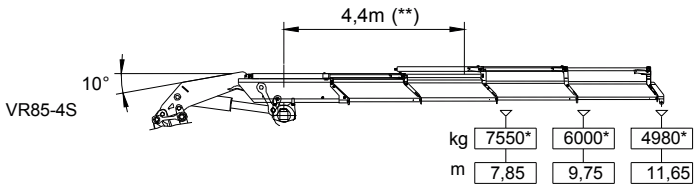
GRU CRANE **VR85 2S - 4S - 6S**

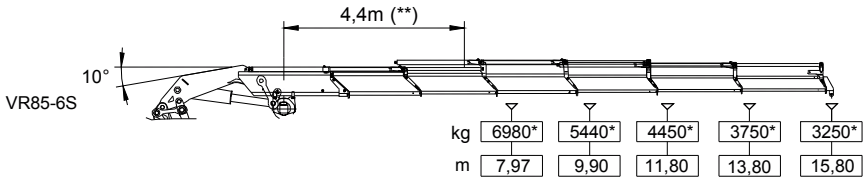
Max tiro diretto per gru con posizione di lavoro a bracci orizzontali Max winch direct pull for crane at horizontal boom work position	5000 kg

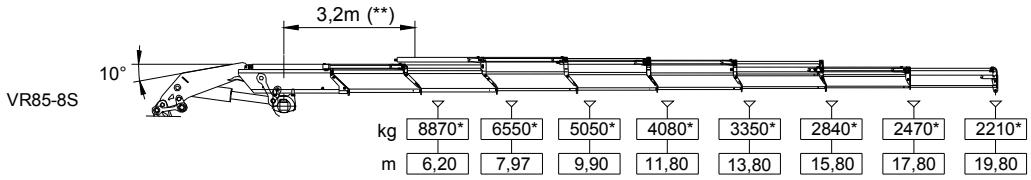
GRU CRANE **VR85 8S - 10S**

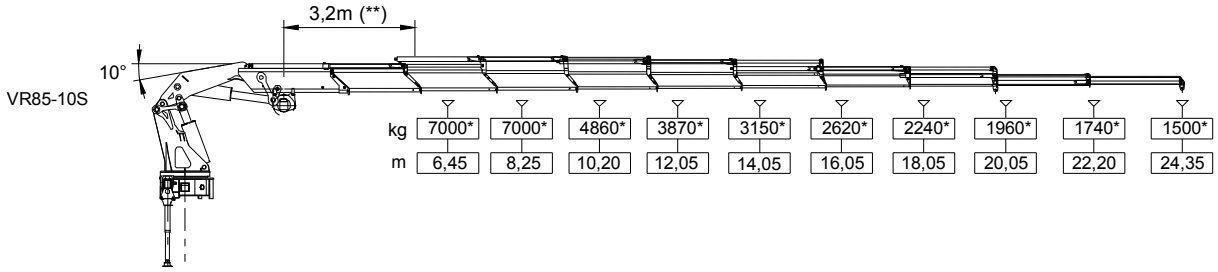
Max tiro diretto per gru con posizione di lavoro a bracci orizzontali Max winch direct pull for crane at horizontal boom work position	3500 kg











(*) = Puleggia argano con tiro doppio
(*) = Pulley with double line pull
(*) = Seilrolle mit Doppelzug

(**) = Distanza minima di utilizzo argano
(**) = Min distance for using the winch
(**) = Min Abstand fur Benutzung der Winde

CARATTERISTICHE ACCESSORI BENNA-POLIPO
GRAB - BUCKET DATA

Peso massimo ammissibile Max allowable weight	830 kg
Pressione max. di esercizio Max working pressure	280 bar

LE PORTATE DELLE GRU CON ATTIVAZIONI (BENNA, POLIPO) SONO DECLASSATE DEL 30% RISPETTO ALLE GRU STANDARD.
THE CAPACITIES OF THE ACTIVATED CRANES (FOR GRAB OR BUCKET) ARE DERATED BY 30% RESPECT TO THE STANDARD CRANES.