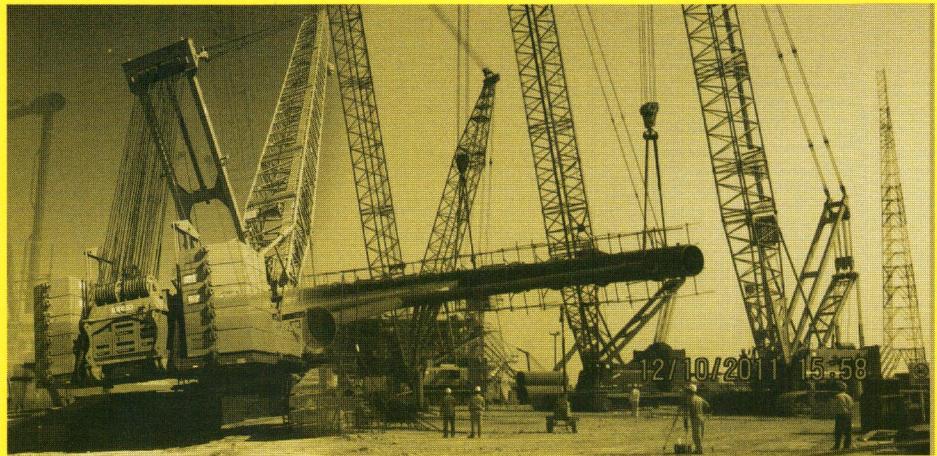


معرفی شرکت



About Us

تاریخچه شرکت

این مجموعه از سال ۱۳۴۸ به انکا مدیران با تجربه فعالیت خود را در عرصه ماشین آلات سنگین آغاز نموده و تحت عنوانی مختلف از قبیل جرثقیل و کمرشکن مرکزی ، سنگین بار ارائه ، این کار، هیدرولیک کاران... فعالیت های مختلف در عرصه صنعت کشور به انجام رسانده است . این فعالیت ها شامل واردات و فروش جرثقیل های سنگین ، اجاره جرثقیل به صنایع مختلف و پیمانکاران نصب ، حمل و نقل تجهیزات سنگین و فوق سنگین مربوط به صنایع نفت و گاز ، پتروشیمی و نیروگاهی انجام عملیات بار برداری و نصب تجهیزات فوق سنگین در پروژه های مختلف همچنین عملیات تعمیر و نگهداری و راهبری ماشین آلات از جمله توانمندی های این شرکت می باشد

شرکت روزافزون در سال ۱۳۶۸ در اداره ثبت شرکت های تهران به ثبت رسیده و فعالیت هایی در زمینه بازرگانی و واردات و داشته است که در سال ۱۳۸۶ با تغییر اساسنامه و زمینه فعالیت خود وارد عرصه ماشین آلات کشور گردیده است

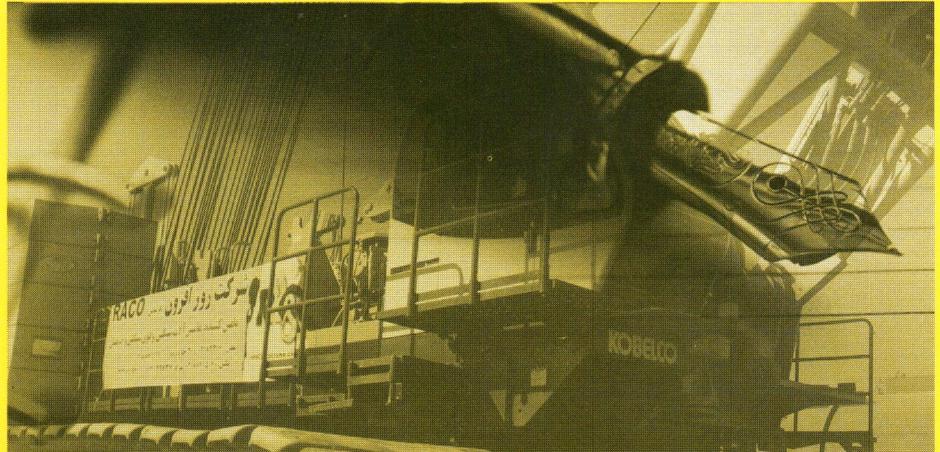
شرکت روزافزون با در اختیار داشتن انواع جرثقیل های تلسکوپی و زنجیری فوق سنگین به صورت ملکی همچنین با استفاده از پتانسیل همکاران معتبر خارجی آمادگی دارد تا کلیه پروژه های مرتبط با فعالیت خود را در ایران و خارج از ایران با بهترین کیفیت و کمترین زمان ممکن به انجام برساند

شرکت روزافزون الفخار دارد که تنها شرکت لیفتینگ در ایران است که همزمان موفق به دریافت گواهینامه های:

- ISO 9001:2008 ●
- ISO 14001:2004 ●
- OHSAS 18001:2007 ●
- HSE-MS ●

از شرکت بزرگ و معتبر **SGS** سویس گردیده است و تعهد دارد نسبت به افزایش رضایتمندی مشتریان محترم و ارتقاء سطح کیفی خدمات همچنین توجه موكد به اینتی کوشش نماید و امید دارد تا با توجه به توانمندی های خود و دارا بودن ماشین آلات به روز و همچنین قادر مجری و قوی و کارآزموده بتواند سهمی در انجام پروژه های ملی داشته باشد

اطلاعات ثبتی شرکت



**Registration
Information**

اطلاعات ثبتی شرکت

| | |
|--------------|--|
| نام: | شرکت روز افزون |
| نام اختصاری: | RACO CRANE |
| نوع شرکت: | سهامی خاص |
| شماره ثبت: | ۷۷۹۷۹ |
| تاریخ ثبت: | ۱۳۶۸/۰۹/۲۷ |
| کد اقتصادی: | ۴۱۱۳-۴۱۵۸-۸۱۷۸ |
| نوع فعالیت: | تمامین ماشین آلات و جرثقیل های سنگین و فوق سنگین |

دفتر تهران

خط ویژه: ۰۲۱-۸۴۳۱۶ تلفن: ۰۲۱-۸۸۷۱۵۴۷۱ فکس: ۰۲۱-۸۸۷۱۵۱۶۰
آدرس: میدان آزادی، خیابان احمد قمیر(بخارست)، خیابان سیزدهم، پلاک ۱، طبقه ۱، واحد ۱

دفتر ماهشهر

تلفکس: ۰۶۵۲-۲۳۳۲۱۶۶۸-۹
آدرس: اتوبان ماهشهر، سرپندر، بعد از فرودگاه

کارگاه تهران

تلفن: ۰۲۱-۵۵۲۶۲۹۵۷
۰۲۱-۵۵۲۴۹۲۵۵-۶
۰۲۱-۵۵۲۴۲۷۲۷
آدرس: تهران، اتوبان قدیم ساوه، شاطره، انبار شرکت روزافرون

دفتر اراک

همراه: ۰۹۱۸۱۶۱۱۰۰۳

دفتر عسلویه

تلفکس: ۰۷۷۲-۷۳۲۰۱۲۶
۰۹۱۲۱۷۹۱۹۴۱

| | |
|----------------------|----------------------------------|
| Name | ROOZ AFZOON |
| Title | RACOCRANE |
| Type Of Company | L.P |
| Registration No. | 77979-Tehran |
| Date Of Registration | 18/12/1989 |
| Economic Code | 4113-4158-8178 |
| Activity | Rental and Sale Heavy Duty Crane |

No.1, 1st Floor, Apt.No1, 13th St, Bokharest Ave, Arjantin Sq, Tehran, Iran

Tel: +9821 88715471 Fax: +9821 88715160 Telefax: +9821 84316



رسیده شناسی

۱۳۹۶۶۱۹



سازمان امور مالیاتی کشور

تاریخ: ۱۳۸۷/۱۱/۰۲
شماره: ۲۰۲۶۲۹

بسم الله الرحمن الرحيم

جمهوری اسلامی ایران
وزارت امور اقتصادی و دارایی

کوایینامه ثبت نام مؤدیان مالیاتی

پذیرش تاییدی شود روز افزون

با شماره اقتصادی: ۴۱۱۳-۴۱۵۸-۸۱۷۸

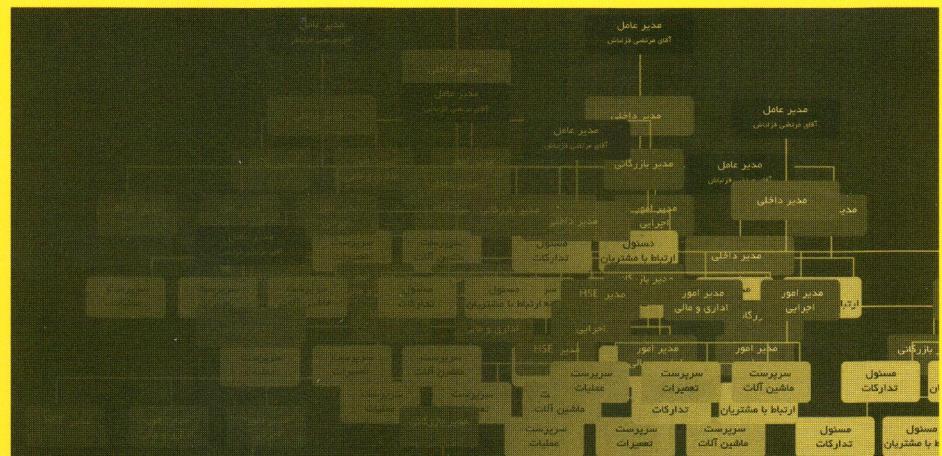
در نظام مالیاتی ثورث شده است.

سازمان امور مالیاتی کشور

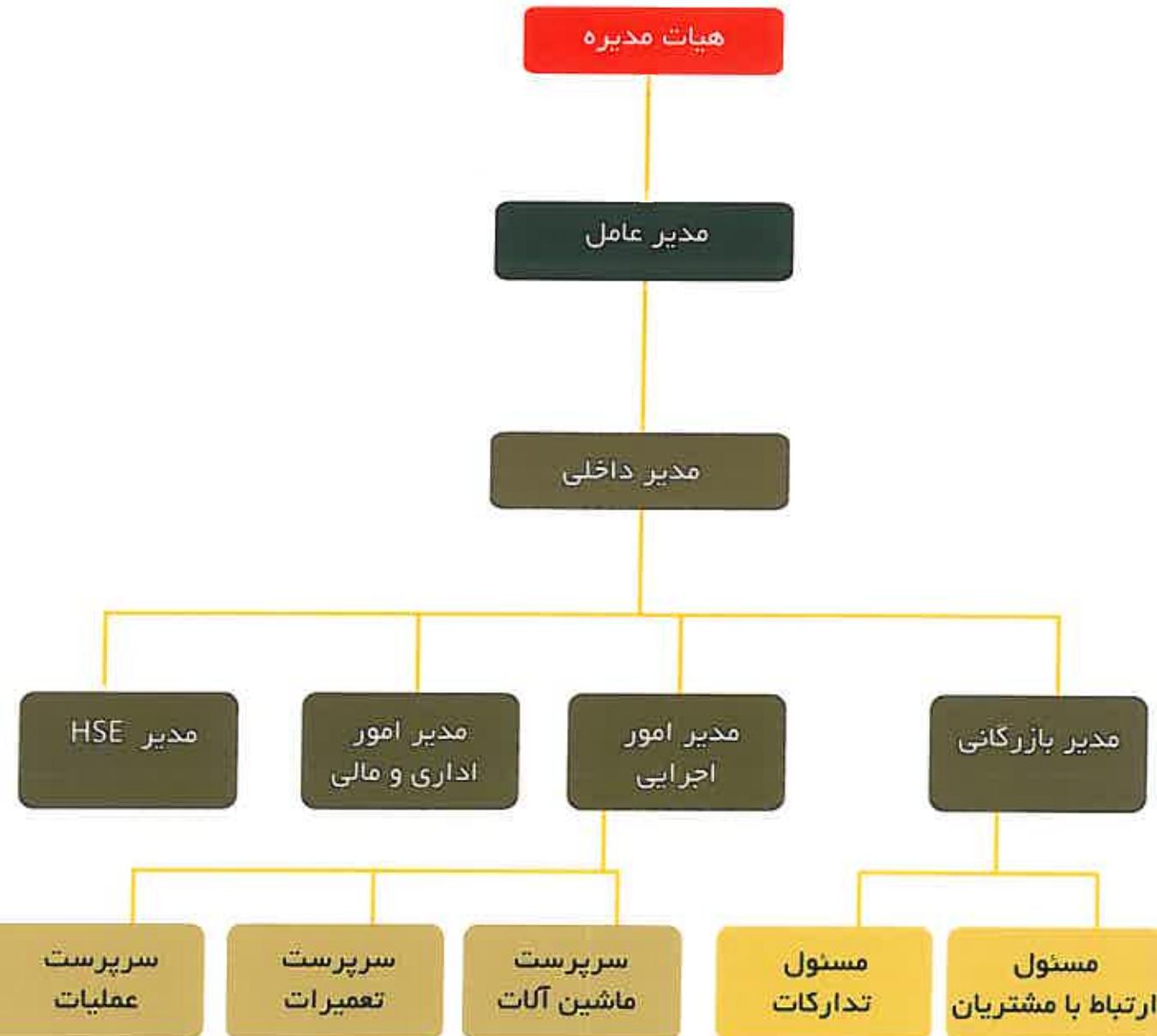


این کوایینامه بر اساس مدارک در اطلاعات موجود آمده است، عدم اعتبار مدارک موجود ابطال این کوایینامه می‌باشد.

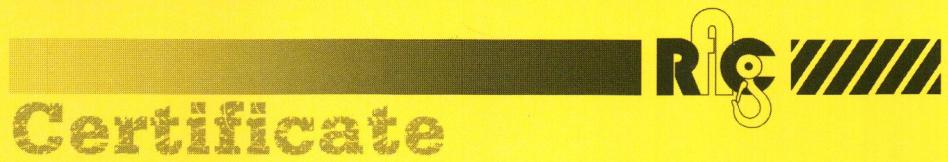
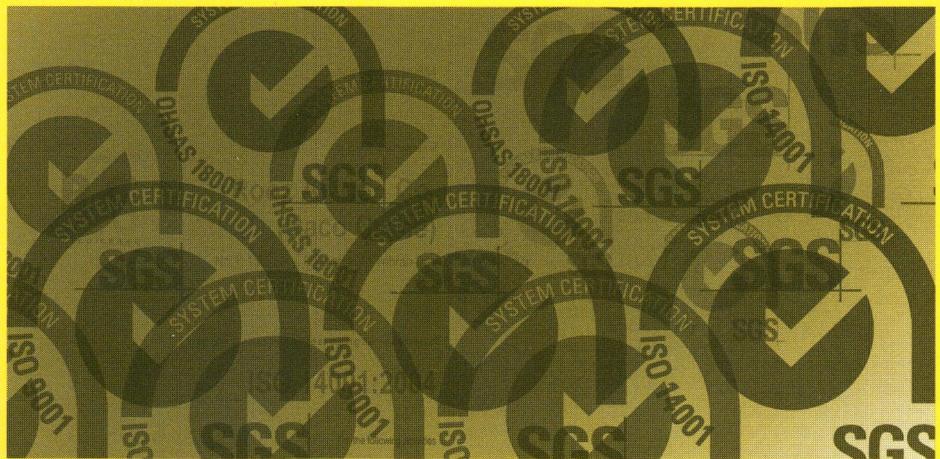
چارت سازمانی



Top
Chart



گواهینامه‌های دریافتی (...ISO,HSE,...)





گواهینامه ISO ۱۴۰۰۱:۲۰۰۴ از شرکت SGS سویس

Certificate CH11/0654

SGS

The management system of



Rooz Afzoon Co.
(Raco Crane)

No.1, 13th alley, Bokharest ST.Tehran-Iran



has been assessed and certified as meeting the requirements of

ISO 14001:2004

For the following activities

Renting crane for installation of heavy lift equipments in different industry such as oil, gas and power plant

This certificate is valid from 18 May 2011 until 17 May 2014
and remains valid subject to satisfactory surveillance audits
Recertification audit due before 5 May 2014
Issue 1. Certified since May 2011

Authorised by

S. Lili Chihale



Accreditation No. SCESm 017

SGS Société Générale de Surveillance SA Systems & Services Certification
Technoparkstrasse 1 8005 Zurich Switzerland
+41 (0)44 445-16-80 F +41 (0)44 445-16-88 www.sgs.com

Page 1 of 1



SGSSGSSCS

This document is issued by the Company subject to the General Conditions of Certification Services accessible at www.sgs.com/terms_and_conditions.htm.
Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. The authenticity of this document may be verified at www.sgs.com/verifying_a_certificate.htm. Any unauthorised alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the full extent of the law.



گواهینامه گواهیت سویس OHSAS ۱۸۰۰۱:۲۰۰۷ از شرکت SGS

Certificate CH11/0655

SGS

The management system of



Rooz Afzoon Co.
(Raco Crane)

No.1, 13th alley, Bokharest St.Tehran-Iran



has been assessed and certified as meeting the requirements of

OHSAS 18001:2007

For the following activities

Renting crane for installation of heavy lift equipments in different industry such as oil, gas and power plant

This certificate is valid from 18 May 2011 until 17 May 2014
and remains valid subject to satisfactory surveillance audits
Recertification audit due before 5 May 2014
Issue 1. Certified since May 2011

Authorised by

S. Lai Chihue



Accreditation No. SCESm 017

SGS Société Générale de Surveillance SA Systems & Services Certification
Technoparkstrasse 1 8005 Zurich Switzerland
+41 (0)44 445-16-80 F +41 (0)44 445-18-88 www.sgs.com

Page 1 of 1



SG SSG SCS SCS SCS SCS SCS SCS

This document is issued by the Company subject to its General Conditions of Certification Services accessible at www.sgs.com/terms_and_conditions.htm.
Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. The authenticity of this document may be verified at <http://www.sgs.com/certidoc/auth/validateDoc.htm>. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

گواهینامه سویس HSE-MS از شرکت SGS

Certificate IR11/011

SGS

The management system of



**Rooz Afzoon Co.
(Raco Crane)**

No.1, 13th alley, Bokharest St.



has been assessed and certified as meeting the requirements of

HSE Management System
Based on:
E & P Forum Guideline/ Report No. 6.36/210

For the following activities

Renting crane for installation of heavy lift equipments in different industry such as oil, gas and power plant

This certificate is valid from 18 May 2011 until 17 May 2014
and remains valid subject to satisfactory surveillance audits
Recertification audit due before 5 May 2014
Issue 1. Certified since May 2011

Authorised by

SGS Iran, System & Service Certification
No. 47, Ahmad Ghasir St, Argentina Sq., Tehran-Iran
T +98 21 88542400 F +98 21 88731808 www.sgs.com

Page 1 of 1



SGSSSGS

This document is issued by the Company subject to its General Conditions of
Certification Services accessible at www.sgs.com/certifications and www.sgs.com/terms-and-conditions.
Attention is drawn to the limitations of liability, indemnification and jurisdictional
issues established therein. The authenticity of this document may be verified at
<http://www.sgs.com/verifysgs/gsverifysgs.htm>. Any unauthorized alteration,
forgery or falsification of the content or appearance of this document is unlawful
and offenders may be prosecuted to the fullest extent of the law.



گواهینامه ISO ۹۰۰۱:۲۰۰۸ از شرکت SGS سویس

Certificate CH11/0653

SGS

The management system of



Rooz Afzoon Co.
(Raco Crane)

No.1, 13th alley, Bokharest St.Tehran-Iran



has been assessed and certified as meeting the requirements of

ISO 9001:2008

For the following activities

Renting crane for installation of heavy lift equipments in different
Industry such as oil, gas and power plant

This certificate is valid from 18 May 2011 until 17 May 2014
and remains valid subject to satisfactory surveillance audits
Recertification audit due before 5 May 2014
Issue 1. Certified since May 2011

Authorised by



Accreditation No. SCESm 017

SGS Société Générale de Surveillance SA Systems & Services Certification
Technoparkstrasse 1 8005 Zurich Switzerland
+41 (0)44 445-16-80 +41 (0)44 445-16-88 www.sgs.com

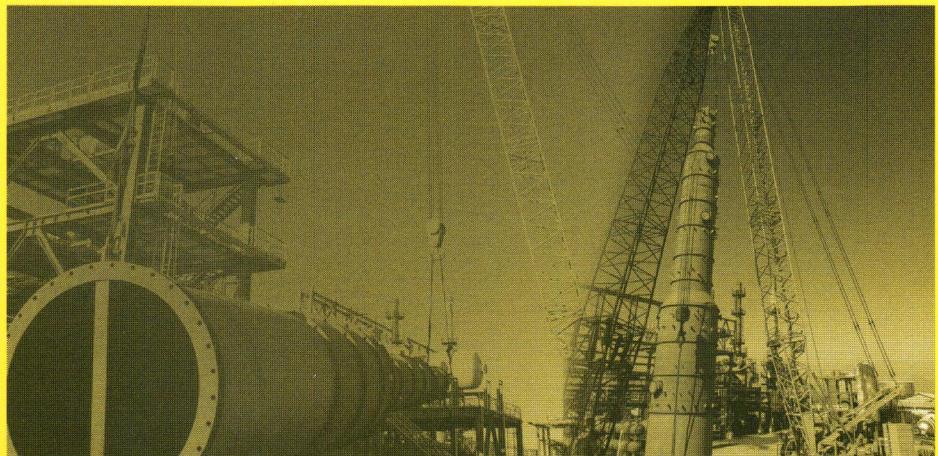
Page 1 of 1



SGSSGSSS

This document is issued by the Company subject to its General Conditions of
Certification Services accessible at www.sgs.com/GeneralConditions.aspx
Attention is drawn to the limitations of liability, indemnification and jurisdictional
issues established therein. The authority of this document may be verified at
www.sgs.com/VerifCert/SCESm017.htm. Any unauthorised alteration,
forgery or falsification of the content or appearance of this document is unlawful
and offenders may be prosecuted to the fullest extent of the law.

پروژه های انجام شده



Project



پروژه های پالایشگاهی :

- پالایشگاه ارak ۱۳۷۰
- پالایشگاه بندر عباس ۱۳۷۵
- پالایشگاه آبادان ۱۳۸۵
- پالایشگاه خارک ۱۳۸۹-۱۳۸۵
- پالایشگاه تهران ۱۳۸۸
- پالایشگاه اصفهان ۱۳۸۸
- پالایشگاه تبریز ۱۳۸۹-۱۳۹۰
- پالایشگاه ستاره خلیج فارس ۱۳۸۸-۱۳۸۹

پروژه های متفرقه :

- فولاد آذربایجان یزد ۱۳۷۴ الی ۱۳۷۶
- پل بافق بندر عباس ۱۳۷۳
- پل بهمن شیر
- ۱۳۷۵ شرکت آلمینیوم سازی المهدی بندر عباس ۱۳۷۷ الی ۱۳۷۷
- شرکت سیمان بهروک یزد ۱۳۷۴ و ۱۳۷۵
- شرکت سیمان درود ۱۳۸۶
- فولاد هرمزگان ۱۳۸۶ الی ۱۳۸۸
- شرکت سیمان آبیک ۱۳۸۸
- شرکت سیمان ساوه ۱۳۸۶ و ۱۳۸۷
- شرکت فولاد مبارکه ۱۳۸۹-۱۳۹۰
- پل طبیعت تهران ۱۳۸۸
- پل لرستان ۱۳۸۹
- پل جوادیه تهران ۱۳۸۹
- شرکت آهاب ۱۳۹۰
- شرکت موسسه رهاب ۱۳۹۰
- شرکت ماشین سازی اصفهان ۱۳۹۰
- شرکت توانکاران ۱۳۹۰
- شرکت دنیای فلز ۱۳۸۹
- شرکت تاسیسات دریایی ایران ۱۳۹۰
- شرکت کشتی سازی صدرا ۱۳۹۰
- شرکت ایزوایکو ۱۳۸۹
- شرکت نارگان ۱۳۹۰
- شرکت خدمات انرژی ایرانیان ارونده ۱۳۹۰
- شرکت پاییزان ۱۳۹۰
- ...

پروژه های نیروگاهی :

- نصب اولین نیروگاه بادی ۱۳۷۳
- نیروگاه ارak ۱۳۷۶
- نیروگاه یزد ۱۳۸۳ و ۱۳۸۸
- نیروگاه عسلویه ۱۳۸۵
- نیروگاه دماوند ۱۳۸۸

پروژه های گازی :

- فاز ۱ و ۲ سال ۱۳۸۱ و ۱۳۸۲
- فاز ۶ و ۷ سال ۱۳۸۵
- فاز ۹ و ۱۰ سال ۱۳۸۶ الی ۱۳۸۷
- فاز ۱۵ و ۱۶ سال ۱۳۸۸ و ۱۳۸۹
- فاز ۱۷ و ۱۸ سال ۱۳۸۹

پروژه های پتروشیمی :

- پتروشیمی ارak ۱۳۶۸
- پتروشیمی مارون ۱۳۸۲-۱۳۸۱
- پتروشیمی امیرکبیر ۱۳۸۲
- پتروشیمی تند گویان ۱۳۸۲
- پتروشیمی زاگرس ۱۳۸۲ و ۱۳۸۹
- پتروشیمی جم ۱۳۸۳ الی ۱۳۸۶
- پتروشیمی بروزیه ۱۳۸۳
- پتروشیمی پارس ۱۳۸۴
- پتروشیمی میبن ۱۳۸۶
- پتروشیمی ایلام ۱۳۸۷

پالایشگاه بنزین سازی تبریز

پروژه نصب قطعات سنگین و
فوق سنگین
پالایشگاه بنزین سازی تبریز
کارفرمای شرکت تناوب

آبان ماه ۱۳۸۹ نهایت تیر ماه ۱۳۹۰



RACOGRAM

EQ: Tower 5258

Weight: 99 Ton

Heigh: 36m

Radius: 12m





پالایشگاه بنzin سازی تبریز

EQ: T-5204

Weight: 147 Ton

Heigh: 36m

Radius: 12m



Convection module of fire heater

Total Weight:

Panel 1: 58 Ton

Panel 2: 100 Ton

Panel 3: 80 Ton

Panel 4: 14 Ton

Panel 5: 30 Ton

Panel 6: 28 Ton





پالایشگاه بنزین سازی تبریز

EQ: T-1901-1
Weight: 81 Ton
Heigh: 27m
Radius: 10m





IR11/011



CH11/0655



CH11/0653



CH11/0654

پالایشگاه بنزین سازی تبریز

EQ: T- 1901-2

Weight: 81 Ton

Heigh: 27m

Radius: 10m





SGS
IR11/011



SGS
CH11/0655



SGS
ISO 9001
CH11/0653



SGS
ISO 14001
CH11/0654

پالایشگاه بنزین سازی تبریز

EQ: T- 1903-1

Weight: 162 Ton

Heigh: 24m

Radius: 10m



EQ: 400 Ton (2008)

Weight: 370 Ton

پروژه ساخت سکو های نفتی

شرکت تاسیسات دریانی ایران

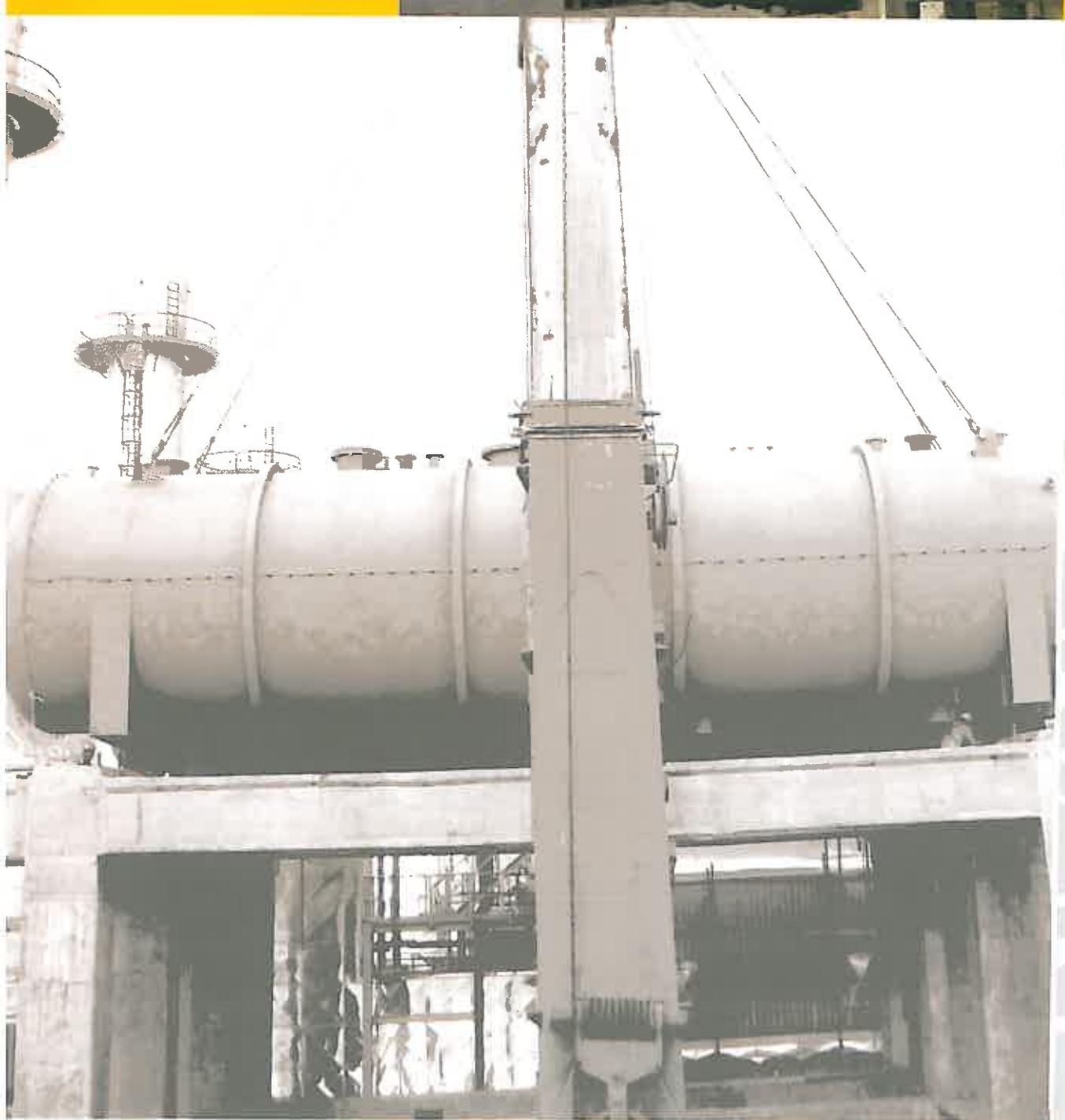
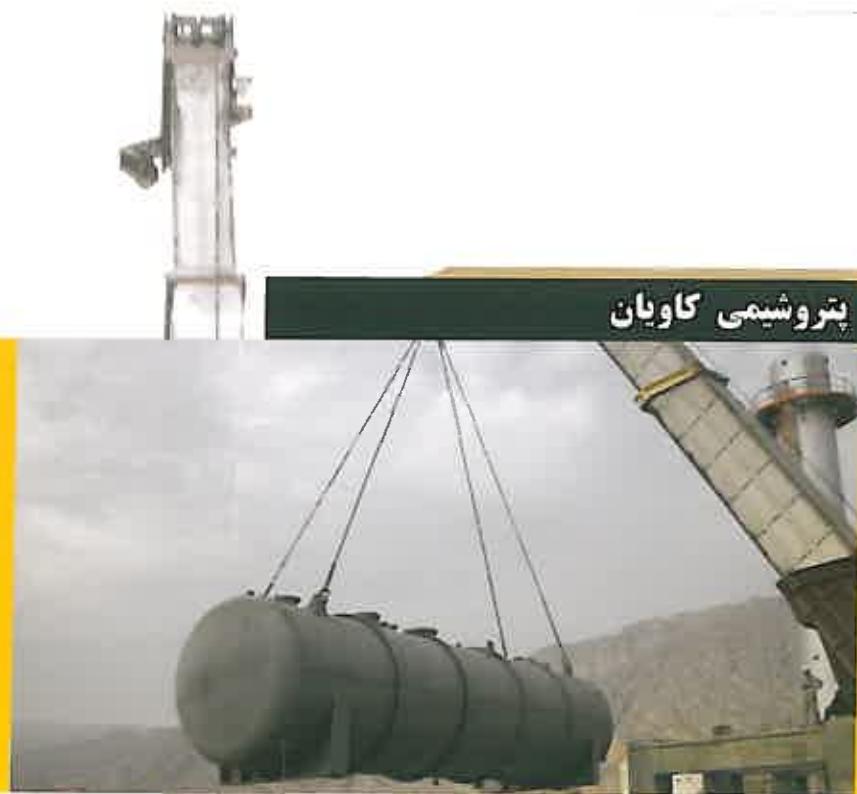
خرما شهر ۱۳۹۰



پتروشیمی کاویان

پروژه نصب تجهیزات سنگین
پتروشیمی کاویان

شرکت آذر آب ۱۳۸۹



RACOR
EINAK

پروژه نصب تجهیزات سنگین
پتروشیمی کاویان
شرکت آذر آب ۱۳۸۹

Weight: 45 Ton

Height: 30m

Radius: 18m



عملیات رول آپ شرکت تاسیسات دریابی

پروژه های ساخت سکوهای دریابی
کارفرما : شرکت تاسیسات دریابی ایران
سال ۱۳۹۰



PACIFIC





فولاد هرمزگان

پروژه نصب قطعات سنگین
فولاد هرمزگان

کارفرما : شرکت پامیکو
آبان ماه ۱۳۸۷



RACÖCRANE

Weight: 150 Ton

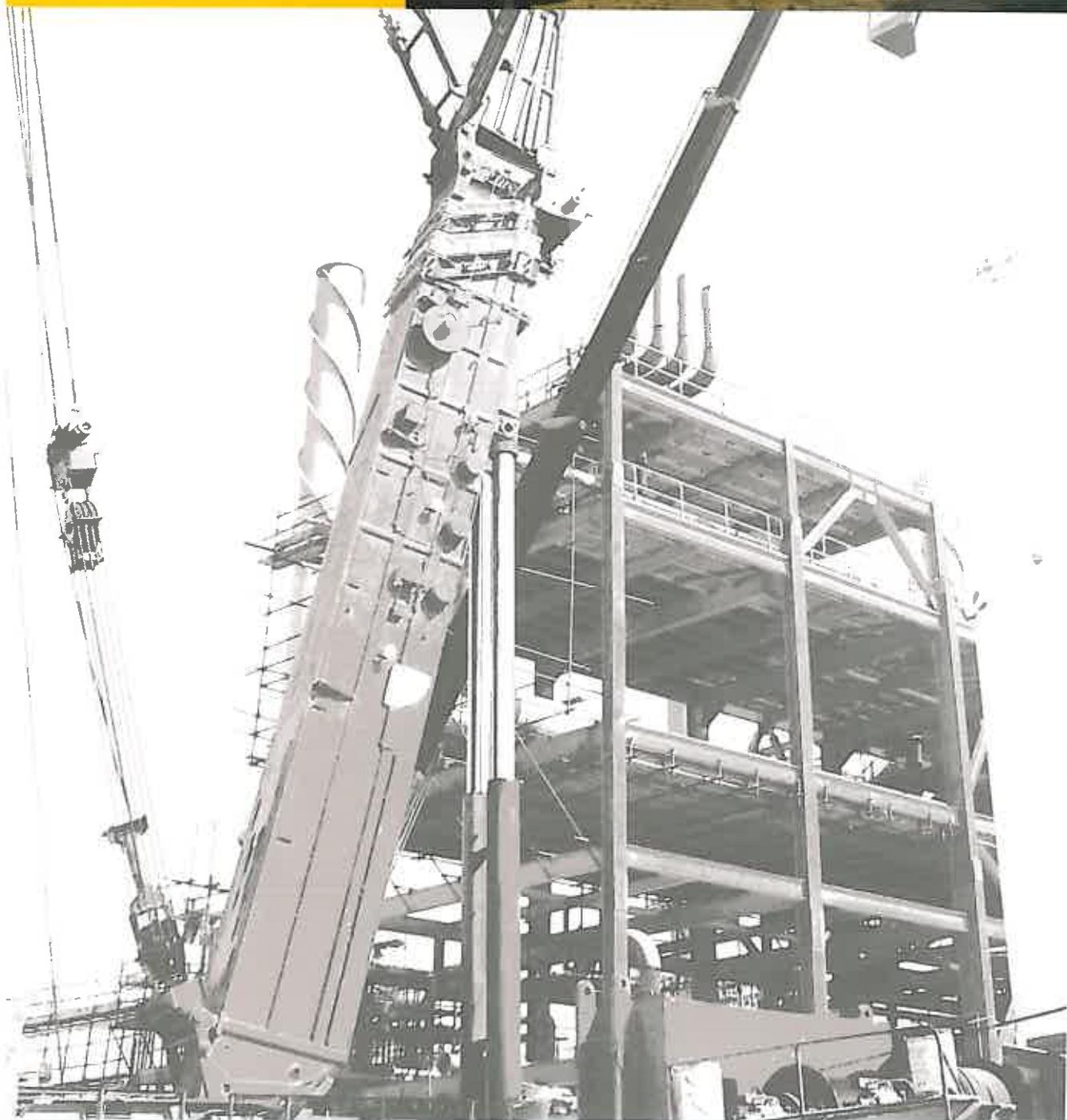


فاز ۱۵، ۱۶ پارس جنوبی



پروژه نصب قطعات سنگین
و فوق سنگین فاز ۱۵ و ۱۶

کارفرما : شرکت مینا
آبان ماه ۱۳۸۹



RACORAM

EQ: Air Receiver
Weight: 120 Ton
Heigh: 37m
Radius: 10m



نصب پل جوادی تهران

پروژه نصب پل جوادی ۱۳۸۹
جرثقیل ۳۶۰ تن
وزن قطعه ۱۸۰ تن



RACORAN



IR11/011

CH11/0655

CH11/0653

CH11/0654

نصب پل جوادی تهران

Weight: 180 Ton

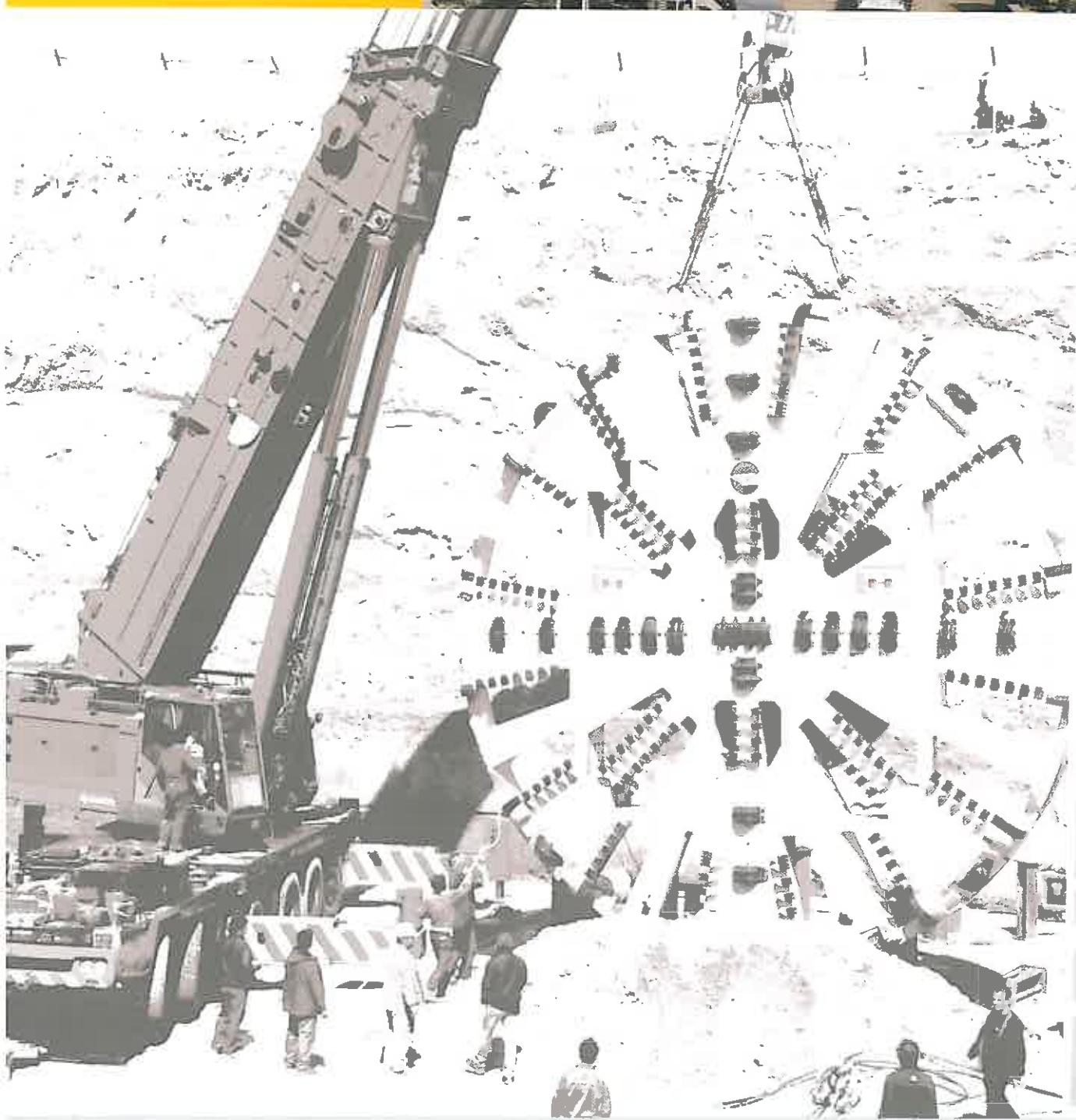
Heigh: 27m

Radius: 10m



پروژه خط ۶ مترو تهران

پروژه نصب تجهیزات سنگین مترو خط ۶
تهران
شرکت آهاب ۱۳۸۹-۱۳۹۰



RACOR

EQ: T- 1903-1
Weight: 162 Ton
Heigh: 24m
Radius: 10m

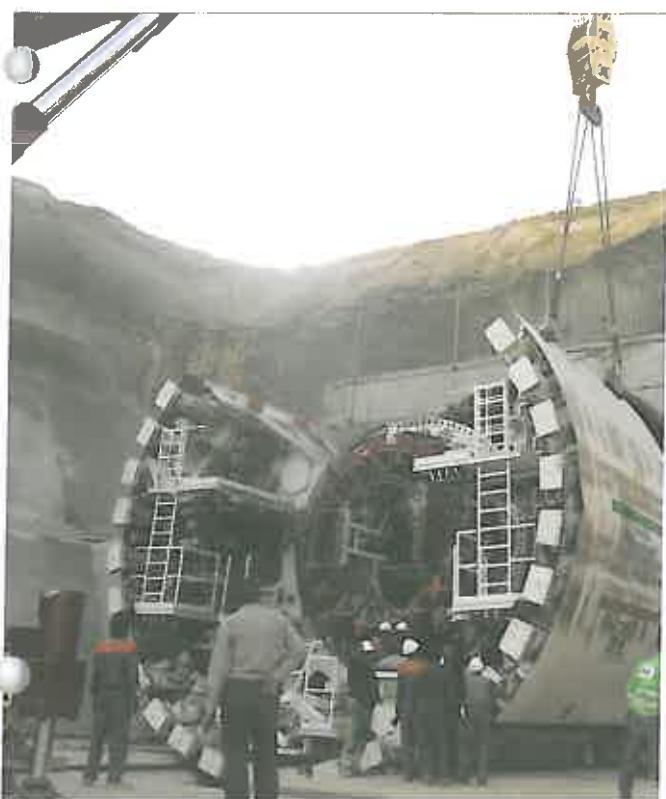


EQ: T- 1903-1

Weight: 162 Ton

Heigh: 24m

Radius: 10m



کارخانجات دنیای فلز اردستان

پروژه نصب قطعات کارخانجات
دنیای فلز اردستان
جرثقیل ۳۶۰ تن و ۱۶۰ تن

سال ۱۳۸۹



PACONDA

Weight: 260 Ton
Height: 15m
Radius: 3.5m



لیست ماشین آلات و تجهیزات



Equipment
List



لیست ماشین آلات

| ردیف | نام مکانیزم | سیستم | کارخانه سازنده | عمل | سال ساخت/کشور سازنده | تعداد | توضیحات |
|------|----------------------|---------|----------------|-----------|----------------------|-------|----------|
| ۱ | جرثقیل ۴۰۰ تن | زنگیری | KOBELCO | CKE4000C | ژاپن ۲۰۰۸ | ۱ | |
| ۲ | جرثقیل ۳۶۵ تن | تلسکوپی | SUMITOMO | ST3600 | ژاپن ۱۹۹۵ | ۱ | |
| ۳ | جرثقیل ۳۵۰ تن | زنگیری | AMERICAN | 9310 | آمریکا ۱۹۸۵ | ۱ | Skyhorse |
| ۴ | جرثقیل ۳۰۰ تن | تلسکوپی | KATO | NK3000 | ژاپن ۱۹۹۱ | ۱ | |
| ۵ | جرثقیل ۲۵۰ تن | زنگیری | KOBELCO | CKE2500 | ژاپن ۲۰۰۴ | ۱ | |
| ۶ | جرثقیل ۲۲۵ تن | زنگیری | AMERICAN | 9310 | آمریکا ۱۹۸۵ | ۱ | |
| ۷ | جرثقیل ۲۳۰ تن | زنگیری | Manitowoc | 4100 | آمریکا ۱۹۷۱ | ۱ | |
| ۸ | جرثقیل ۱۶۰ تن | تلسکوپی | KATO | NK1600 | ژاپن ۱۹۹۴ | ۱ | |
| ۹ | جرثقیل ۱۵۰ تن | زنگیری | DEMAG | CCH600 | آلمان ۱۹۸۶ | ۲ | |
| ۱۰ | جرثقیل ۱۵۰ تن | زنگیری | IHI | CCH1500 | ژاپن ۱۹۹۰ | ۱ | |
| ۱۱ | جرثقیل ۱۴۰ تن | تلسکوپی | GROVE | TM1400 | ژاپن ۲۰۰۴ | ۱ | |
| ۱۲ | جرثقیل ۱۰۰ تن | زنگیری | Manitowoc | WICON3900 | آمریکا ۱۹۸۸ | ۲ | |
| ۱۳ | جرثقیل ۱۰۰ تن | تلسکوپی | KATO | ۱۰۰ تن | ژاپن ۱۹۹۳-۱۹۹۵ | ۲ | |
| ۱۴ | جرثقیل ۸۰ تن | تلسکوپی | KATO/TADANO | ۸۰ تن | ژاپن ۱۹۹۳-۱۹۹۵ | ۲ | |
| ۱۵ | جرثقیل ۵۰ تن | تلسکوپی | KATO/TADANO | ۵۰ تن | ژاپن ۱۹۹۰-۲۰۰۰ | ۳ | |
| ۱۶ | جرثقیل ۳۰ تن | تلسکوپی | KATO/TADANO | ۳۰ تن | ژاپن ۱۹۹۰-۱۹۹۹ | ۵ | |
| ۱۷ | جرثقیل ۲۰ تن و ۲۵ تن | تلسکوپی | KATO/TADANO | ۲۰ تن | ژاپن ۱۹۹۰-۲۰۰۰ | ۵ | |
| ۱۸ | بوژی | | | | ۲۰ محور | ۲۰ | |



جرثقیل ۴۰۰ تن زنجیری



RIG RACOCRANE

| | |
|----------|---------------------------|
| KOBELCO | کارخانه سازنده |
| CKE4000C | مدل |
| 2008 | سال ساخت |
| ۴۰۰ تن | حداکثر ظرفیت باربرداری |
| ۷۸ متر | طول بوم |
| ۶۰ متر | طول جیب |
| ژاپن | کشور سازنده |

جرثقیل ۴۰۰ تن زنجیری



خط ویژه: ۰۲۱-۸۴۳۱۶ فکس: ۰۲۱-۸۸۷۱۵۱۶۰ (خط)

میدان آزادی، خیابان احمد قمیز (پخارست)، خیابان سیزدهمین میلاد، طبقه ۱، واحد ۱

جرثقیل ۴۰۰ تن زنجیری KOBELCO



خط ویژه: ۰۲۱-۸۴۳۱۶ فکس: ۰۲۱-۸۸۷۱۵۱۶۰ (۰۲۱-۸۴۳۱۶۰)

هیدان آرژانتین، خیابان احمد قمیر (بخارست)، خیابان سیزدهم میلاد، ۱، طبقه ۱، واحد ۱



www.racocrane.com
info@racocrane.com

RACOCRANE



جرثقيل ٤٥٥ تون زنجیری



خط ویژه: ۰۲۱-۸۴۳۱۶ (۰۳ خط) فکس: ۰۲۱-۸۸۷۱۵۱۶۰

میدان آزادی، خیابان احمد فمیر(پخارست)، خیابان سیزدهم پلکان ۱، طبقه ۱، واحد ۱



SGS
IR11/011



SGS
CH11/0655



SGS
CH11/0653



SGS
CH11/0654

جرثقيل ٤٠٠ تون زنجيري KOBELCO

HYDRAULIC CRAWLER CRANE **CKE4000C**

KOBELCO

Heavy-Duty Boom
Specification
for KOREA

Max. Lifting Capacity (Heavy-Duty Boom) : 400 t × 4.2 m
Max. Lifting Capacity (Standard Boom) : 350 t × 6.0 m
Max. Boom Length (Light-Duty Boom) : 96 m

Max. Lifting Capacity (Luffing Jib) : 113.5 t × 16.0 m
Max. Combination (Boom + Jib Length) : 72 m + 54 m

S P E C I F I C A T I O N S

Heavy-Duty Crane

Max. Lifting Capacity 400 t / 4.2 m
Boom Length 12 m

Standard Crane

Max. Lifting Capacity 350 t / 6.0 m
Boom Length 18 m to 78 m

HL Crane

Max. Lifting Capacity 350 t / 7.0 m
Boom Length 30 m to 84 m

SHL Crane

Max. Lifting Capacity 350 t / 12.0 m
Boom Length 30 m to 84 m

Light-Duty Crane

Max. Lifting Capacity 113.5 t / 14.0 m
Boom Length 30 m to 96 m

Luffing Jib

Max. Lifting Capacity 113.5 t / 16.0 m
Max. Combination 66 m + 66 m / 72 m + 54 m

HL Luffing Jib

Max. Lifting Capacity 113.5 t / 16.0 m
Max. Combination 72 m + 66 m / 78 m + 54 m

SHL Luffing Jib

Max. Lifting Capacity 113.5 t / 16.0 m
Max. Combination 78 m + 66 m / 84 m + 54 m

Main & Aux. Winch

Max. Line Speed 130 m/min (5th layer)
Wire Rope 28 mm

Brake Type Spring set hydraulically release brake

Working Speed

Swing Speed 1.3 min⁻¹ (rpm)
Travel Speed 1.0 / 0.4 km/h

Power Plant

Model HINO K13C-UV
Engine Output 295 kW / 2,000 min⁻¹ (rpm)

Fuel Tank Capacity 600 liters

Hydraulic System

Main Pumps 6 variable displacement pump
Max. Pressure 31.9 MPa (325 kgf/cm²)

Self-Erection Device

Option

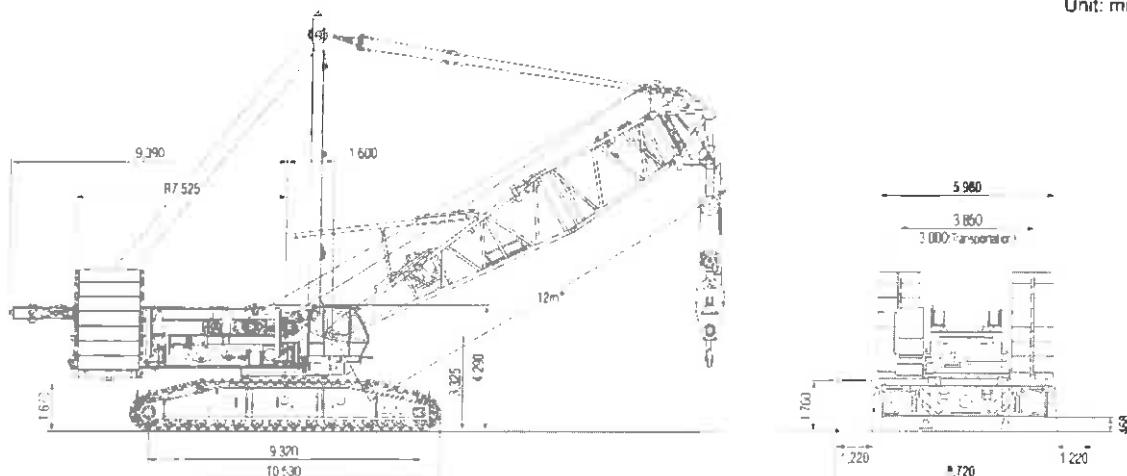
Weight

Operating Weight Approx. 346 t
Counterweight Std 120 t (Upper) + 41 t (Lower)
Transport Weight 60.0 t (Main machine)
Ground Pressure 150 kPa (1.52 kgf/cm²)

Units are SI units | | indicates conventional units.

General Dimensions

Unit: mm



* Heavy-duty boom specification with 12.0m boom length only.

Crane Lifting Capacity

CKE4000C

Rated loads in metric tons for 360° working area
(Counterweight 120 tons + Carbodyweight 41 tons, Double drum)

| Operating radius (m) | Boom length (m) | Standard crane boom | | | | | | | | | | Unit: metric tons | |
|----------------------|-----------------|---------------------|------------|------------|-------|------------|------------|-------------|------------|------------|-------------|-------------------|--------|
| | | 12.0* | 18.0 | 24.0 | 30.0 | 36.0 | 42.0 | 48.0 | 54.0 | 60.0 | 66.0 | 72.0 | 78.0 |
| 4.2 | 400.0 | | | | | | | | | | | | 4.2 |
| 5.0 | 375.0 | 350.0 | 5.5m/350.0 | | | | | | | | | | 5.0 |
| 6.0 | 350.0 | 350.0 | 6.1m/350.0 | 6.8m/343.3 | | | | | | | | | 6.0 |
| 7.0 | 320.7 | 320.7 | 318.5 | 316.6 | 314.4 | 7.4m/302.1 | | | | | | | 7.0 |
| 8.0 | 269.4 | 269.4 | 267.6 | 265.8 | 263.6 | 262.2 | 261.1 | 25.5m/242.4 | | | | | 8.0 |
| 9.0 | 200.2 | 231.8 | 230.4 | 228.8 | 226.9 | 225.3 | 224.1 | 222.8 | 9.3m/219.7 | 9.9m/200.4 | | | 9.0 |
| 10.0 | 166.0 | 203.0 | 202.0 | 200.5 | 198.7 | 197.2 | 195.9 | 194.6 | 193.5 | 192.5 | 10.5m/171.4 | 11.1m/144.7 | 10.0 |
| 12.0 | 111.4 | 150.8 | 160.8 | 160.1 | 158.5 | 157.0 | 155.8 | 154.5 | 153.3 | 152.1 | 151.1 | 142.5 | 12.0 |
| 14.0 | | 127.2 | 127.0 | 126.4 | 125.5 | 124.6 | 124.1 | 123.8 | 122.9 | 122.7 | 122.7 | 121.9 | 14.0 |
| 16.0 | | 104.8 | 104.4 | 103.5 | 102.7 | 101.6 | 101.1 | 100.7 | 99.8 | 99.5 | 99.4 | 98.6 | 16.0 |
| 18.0 | | 17.8m/89.7 | 88.2 | 87.2 | 86.3 | 85.2 | 84.6 | 84.2 | 83.2 | 82.8 | 82.6 | 81.9 | 18.0 |
| 20.0 | | | 76.0 | 75.0 | 74.0 | 72.8 | 72.3 | 71.7 | 70.8 | 70.4 | 70.3 | 69.3 | 20.0 |
| 22.0 | | | 66.8 | 65.5 | 64.5 | 63.3 | 62.7 | 62.1 | 61.1 | 60.7 | 60.5 | 59.6 | 22.0 |
| 24.0 | | | 23.1m/62.3 | 57.9 | 56.8 | 55.6 | 55.0 | 54.4 | 53.3 | 52.8 | 52.7 | 51.8 | 24.0 |
| 26.0 | | | | 51.8 | 50.6 | 49.4 | 48.7 | 48.0 | 47.0 | 46.6 | 46.4 | 45.4 | 26.0 |
| 28.0 | | | | | 47.4 | 45.5 | 44.2 | 43.5 | 42.8 | 41.7 | 41.3 | 41.1 | 28.0 |
| 30.0 | | | | | | 28.3m/48.7 | 41.2 | 39.8 | 39.1 | 38.4 | 37.3 | 36.8 | 35.5 |
| 34.0 | | | | | | | 33.5m/35.3 | 33.0 | 32.1 | 31.3 | 30.2 | 29.7 | 34.0 |
| 38.0 | | | | | | | | 28.0 | 28.0 | 24.9 | 24.3 | 23.8 | 38.0 |
| 42.0 | | | | | | | | | 38.7m/27.3 | 22.9 | 21.9 | 20.7 | 42.0 |
| 46.0 | | | | | | | | | | 43.9m/21.4 | 18.7 | 17.4 | 16.4 |
| 50.0 | | | | | | | | | | | 46.1m/16.7 | 14.5 | 13.5 |
| 54.0 | | | | | | | | | | | | 12.5 | 11.1 |
| 58.0 | | | | | | | | | | | | | 10.3 |
| 62.0 | | | | | | | | | | | | | 8.8 |
| 66.0 | | | | | | | | | | | | | 54.0 |
| 70.0 | | | | | | | | | | | | | 58.0 |
| reeves | 36 | 32 | 32 | 32 | 32 | 28 | 24 | 20 | 20 | 18 | 16 | 16 | reeves |

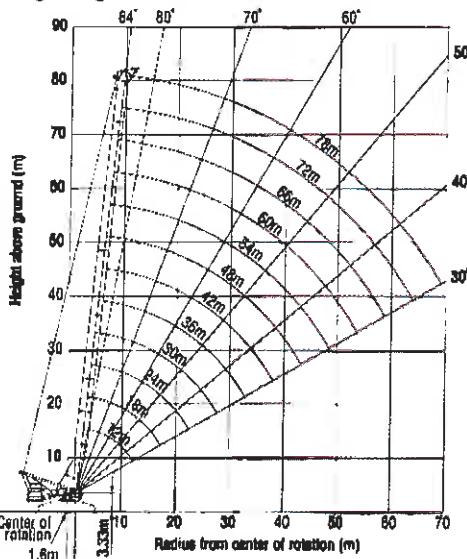
Note : Designed and rated to comply with ANSI Code B30.5.

Ratings shown in are determined by the strength of the boom or other structural components.

This is the rated for double drum.

* Values of 12.0m boom length are lifting capacities for heavy-duty boom. Ratings shown for boom length 18.0m or longer are with standard boom top only.

Working Ranges



Boom Arrangement

■ Heavy-Duty Boom

| Boom length | Boom arrangement |
|-------------|------------------|
| 12 m | Base-HD |

■ Standard Crane Boom

| Boom length | Boom arrangement |
|-------------|--|
| 18 m | Base-B-Top |
| 24 m | Base-A-B-Top |
| 30 m | Base-A-A-B-Top, Base-C-B-Top |
| 36 m | Base-A-C-B-Top |
| 42 m | Base-A-A-C-B-Top, Base-C-C-B-Top |
| 48 m | Base-A-C-C-B-Top |
| 54 m | Base-A-A-C-C-B-Top, Base-C-C-C-B-Top |
| 60 m | Base-A-C-C-C-B-Top |
| 66 m | Base-A-A-C-C-C-B-Top, Base-C-C-C-C-B-Top |
| 72 m | Base-A-C-C-C-C-B-Top |
| 78 m | Base-A-A-C-C-C-B-Top |

Note : Base (lower boom) = 8.0 m , Top (standard boom top) = 1.2 m,
HD(heavy-duty top)=3.0m

Inserts: A = 8.0 m, B (tapered boom)= 7.8 m, C = 12.0 m

جرثقیل ۳۶۰ تن تلسکوپی



RACOCRANE

| | |
|----------|---------------------------|
| Sumitomo | کارخانه سازنده |
| ST 3600 | مدل |
| ۱۹۹۵ | سال ساخت |
| ۳۶۰ تن | حداکثر ظرفیت باربرداری |
| ۵۰ متر | طول بوم |
| ۷۷ متر | طول جنب |
| ژاپن | کشور سازنده |



جرثقيل ۵۰ تن تلسکوپی





جر تقييل ٣٦٠ تن تلسكوبى Sumitomo

● 主ブーム定格総荷重表 B 性能

| ブーム長さ (m) 作業半径 (m) | 13.6 | 18.15 | 22.7 | 31.8 | 40.9 | 50.0 |
|-----------------------|----------------------------|------------------------------|------------------------------|-------------|-----------------------------|-------------|
| 3.0 | * (360) | * 180 | | | | |
| 3.6 | * (300) | * 180 | | | | |
| 4.0 | * (250) | * 180 | * 180 | | | |
| 4.5 | * (220) | * 180 | * 180 | | | |
| 5.0 | * (200) | * 180 | * 175 | | | |
| 5.5 | * 175 | * 170 | * 170 | | | |
| 6.0 | * 163 | * 160 | * 160 | * 105 | | |
| 7.0 | * 142 | * 141 | * 140 | * 105 | * 95 | |
| 8.0 | * 123 | * 123 | * 122 | * 105 | * 91.5 | * 70 |
| 9.0 | * 106 | * 107 | * 108 | * 104 | * 88 | * 67.5 |
| 10.0 | * 92 | * 94 | * 94 | * 97 | * 85 | * 65 |
| 12.0 | <small>80 11.0</small> | * 74 | * 73 | * 76 | * 73 | * 57.5 |
| 14.0 | | 58 | * 58.5 | * 62 | * 62 | * 51 |
| 16.0 | | <small>52.0 15.0</small> | 45 | 49.1 | * 51 | * 45 |
| 18.0 | | | 35.5 | 39.6 | * 41.5 | * 40 |
| 20.0 | | | <small>32.0 15.0</small> | 32.5 | 34.3 | * 35 |
| 22.0 | | | | 27 | 28.8 | * 27.3 |
| 24.0 | | | | 22.6 | 24.4 | * 25 |
| 26.0 | | | | 19 | 20.8 | * 21.5 |
| 28.0 | | | | 16 | 17.2 | 18.5 |
| 30.0 | | | | | 14.7 | 16 |
| 32.0 | | | | | 12.6 | 14 |
| 34.0 | | | | | 10.8 | 12.2 |
| 36.0 | | | | | 9.2 | 10.2 |
| 38.0 | | | | | <small>8.5 37.0</small> | 8.9 |
| 40.0 | | | | | | 7.5 |
| 42.0 | | | | | | 6.2 |
| 44.0 | | | | | | 4.7 |
| 46.0 | | | | | | 3.5 |



SGS
IR11/011



SGS
CH11/0655



SGS
CH11/0653

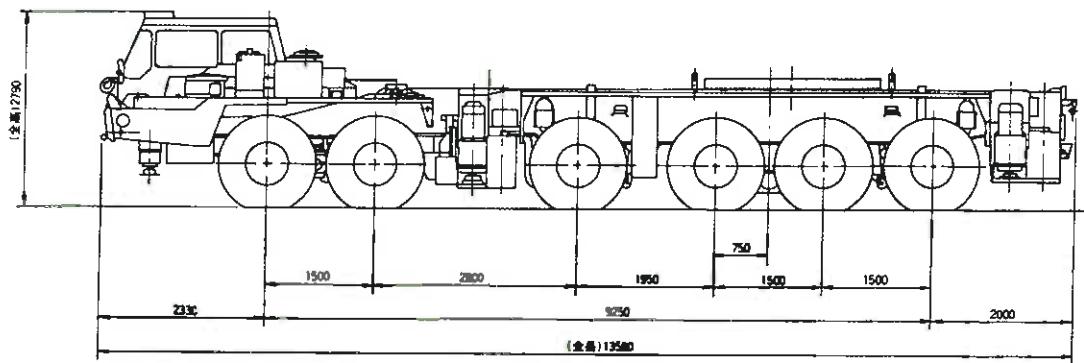
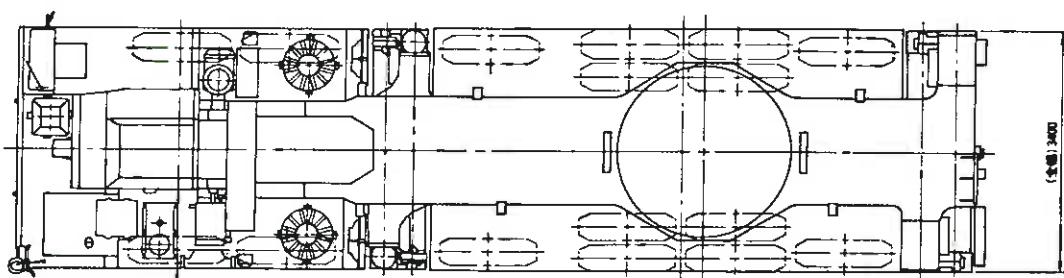
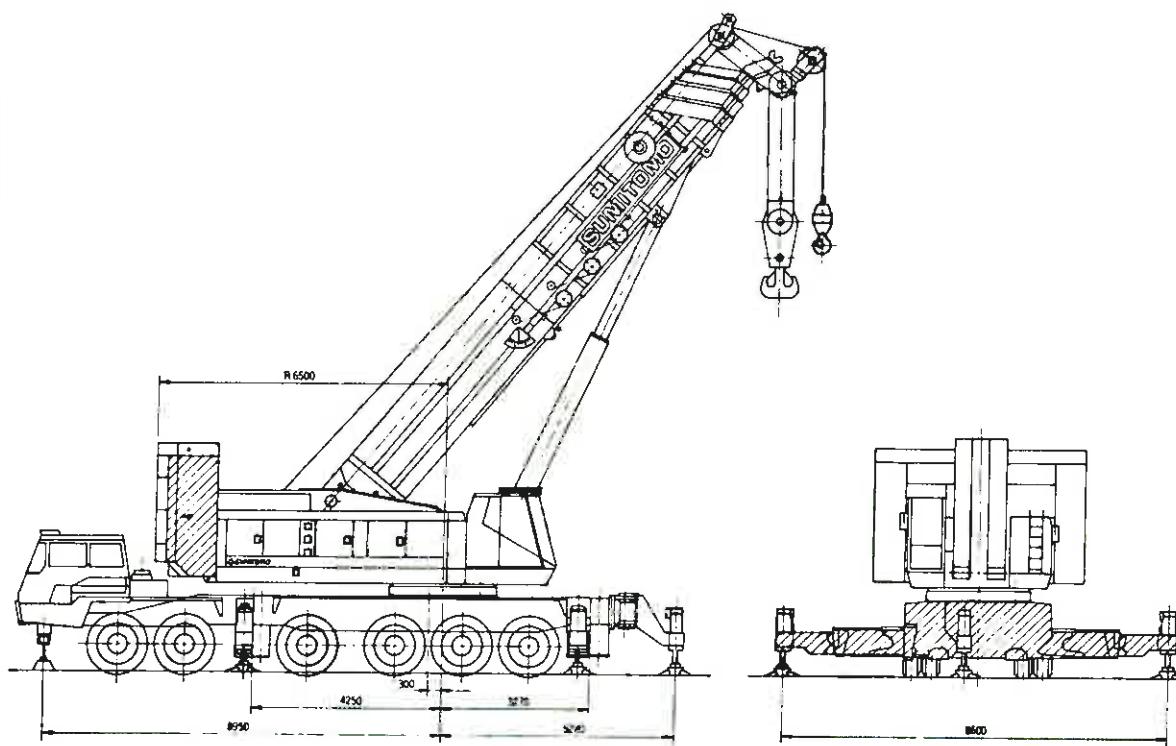


SGS
CH11/0654



SGS
CH11/0654

جربه ۳۶۰ تن تلسکوپی Sumitomo



جرثقیل ۳۵۰ تن



RIG RACOCRANE

| | |
|----------|----------------|
| AMERICAN | کارخانه سازنده |
| 9310 | مدل |
| 1985 | سال ساخت |
| ۳۵۰ تن | حداکثر ظرفیت |
| ۸۸ متر | طول بوم |
| ۲۰ متر | طول جیب |
| Skyhorse | متعلقات |
| آمریکا | کشور سازنده |

جرشقيل ٣٥٠ تون AMERICAN



خط ویژه: ۰۲۱-۸۴۳۱۶۱۹ فکس: ۰۲۱-۸۸۷۱۵۱۶۰ (فقط)

میدان آزادگان، خیابان احمد قمیر(پخارست)، خیابان سیزدهمین لنجاک ۱، طبقه ۱، واحد ۱



جرثيل ٣٥٠ تن AMERICAN+Skyhorse

AMERICAN®



MODEL 9310 SKY HORSE RATINGS

With 92H Boom and 77M Mast; 135,000 Cwt. and 138,000 Trailing Cwt.

| Boom & Mast Length | Radius In. Feet | Boom Angle Degrees | Lift Over Side | Lift Over End | Fl. From Beam Point |
|--------------------|-----------------|--------------------|----------------|---------------|---------------------|
| 150' Boom & Mast | 27 | 82.2 | 330000 | 330000 | 154 |
| | 39 | 81.0 | 329700 | 329700 | 154 |
| | 51 | 79.1 | 269310 | 271000 | 153 |
| | 63 | 77.1 | 224170 | 224300 | 152 |
| | 75 | 75.1 | 168810 | 168840 | 149 |
| | 87 | 73.1 | 131630 | 133110 | 146 |
| | 99 | 71.1 | 100160 | 100500 | 142 |
| | 111 | 69.1 | 91040 | 92150 | 137 |
| | 123 | 67.1 | 78430 | 79370 | 131 |
| | 135 | 65.1 | 68340 | 69170 | 124 |
| | 147 | 63.1 | 61250 | 60880 | 115 |
| | 159 | 61.1 | 53620 | 54770 | 105 |
| | 171 | 59.1 | 42880 | 48580 | 93 |
| | 183 | 57.1 | 43400 | 43440 | 85 |
| | 195 | 55.1 | 33500 | 40000 | 85 |
| 160' Boom & Mast | 28 | 82.3 | 324200 | 324200 | 154 |
| | 39 | 81.5 | 316200 | 316200 | 154 |
| | 51 | 79.8 | 265000 | 270240 | 153 |
| | 63 | 77.9 | 227800 | 227040 | 152 |
| | 75 | 75.2 | 165180 | 168410 | 150 |
| | 87 | 73.5 | 131180 | 132860 | 157 |
| | 99 | 71.5 | 107710 | 109050 | 153 |
| | 111 | 69.5 | 90570 | 91690 | 148 |
| | 123 | 67.5 | 77970 | 78510 | 143 |
| | 135 | 65.5 | 67470 | 68700 | 138 |
| | 147 | 63.5 | 53120 | 53780 | 129 |
| | 159 | 61.5 | 47580 | 48170 | 108 |
| | 171 | 59.5 | 42880 | 43430 | 95 |
| | 183 | 57.5 | 33100 | 33930 | 77 |
| | 195 | 55.5 | 33500 | 35600 | 50 |
| 170' Boom & Mast | 29 | 82.4 | 294200 | 294200 | 174 |
| | 40 | 81.6 | 282200 | 282200 | 174 |
| | 52 | 79.6 | 260020 | 270380 | 173 |
| | 64 | 77.6 | 223850 | 227120 | 172 |
| | 76 | 75.6 | 165230 | 168470 | 170 |
| | 88 | 73.6 | 131220 | 132900 | 157 |
| | 100 | 71.6 | 107750 | 108100 | 154 |
| | 112 | 69.6 | 90600 | 91720 | 159 |
| | 124 | 67.6 | 76010 | 76360 | 154 |
| | 136 | 65.6 | 67600 | 68730 | 148 |
| | 148 | 63.6 | 50790 | 60220 | 141 |
| | 160 | 61.6 | 53140 | 53780 | 133 |
| | 172 | 59.6 | 47590 | 48170 | 123 |
| | 184 | 57.6 | 42880 | 43430 | 112 |
| | 196 | 55.6 | 33060 | 33560 | 95 |
| 180' Boom & Mast | 30 | 82.5 | 274400 | 274400 | 184 |
| | 41 | 81.8 | 265700 | 265700 | 183 |
| | 53 | 79.3 | 225200 | 226850 | 182 |
| | 65 | 77.3 | 165160 | 169160 | 180 |
| | 77 | 75.3 | 130340 | 132530 | 178 |
| | 89 | 73.3 | 107470 | 108810 | 174 |
| | 101 | 71.3 | 90300 | 91420 | 170 |
| | 113 | 69.3 | 77730 | 78620 | 168 |
| | 125 | 67.3 | 58110 | 60440 | 155 |
| | 137 | 65.3 | 59400 | 62220 | 154 |
| | 149 | 63.3 | 52340 | 53450 | 148 |
| | 161 | 61.3 | 47280 | 47870 | 137 |
| | 173 | 59.3 | 42570 | 43110 | 127 |
| | 185 | 57.3 | 36780 | 39210 | 115 |
| | 197 | 55.3 | 32140 | 35700 | 100 |
| 190' Boom & Mast | 31 | 82.6 | 274400 | 274400 | 184 |
| | 42 | 81.9 | 265700 | 265700 | 183 |
| | 54 | 79.4 | 225200 | 226850 | 182 |
| | 66 | 77.4 | 165160 | 169160 | 180 |
| | 78 | 75.4 | 130340 | 132530 | 178 |
| | 90 | 73.4 | 107470 | 108810 | 174 |
| | 102 | 71.4 | 90300 | 91420 | 170 |
| | 114 | 69.4 | 77730 | 78620 | 168 |
| | 126 | 67.4 | 58110 | 60440 | 155 |
| | 138 | 65.4 | 59400 | 62220 | 154 |
| | 150 | 63.4 | 52340 | 53450 | 148 |
| | 162 | 61.4 | 47280 | 47870 | 137 |
| | 174 | 59.4 | 42570 | 43110 | 127 |
| | 186 | 57.4 | 36780 | 39210 | 115 |
| | 198 | 55.4 | 32140 | 35700 | 100 |
| 200' Boom & Mast | 32 | 82.7 | 260900 | 260900 | 194 |
| | 43 | 81.0 | 253200 | 253200 | 193 |
| | 55 | 79.9 | 223110 | 226300 | 193 |
| | 67 | 77.8 | 165460 | 187700 | 191 |
| | 79 | 75.8 | 130460 | 132140 | 188 |
| | 91 | 73.8 | 107000 | 108350 | 185 |
| | 103 | 71.8 | 90320 | 90530 | 181 |
| | 115 | 69.8 | 77260 | 78310 | 177 |
| | 127 | 67.8 | 57140 | 57970 | 172 |
| | 139 | 65.8 | 59020 | 59750 | 166 |
| | 151 | 63.8 | 52350 | 53010 | 159 |
| | 163 | 61.8 | 46780 | 47360 | 151 |
| | 175 | 59.8 | 42310 | 42810 | 142 |
| | 187 | 57.8 | 34770 | 35340 | 131 |
| | 199 | 55.8 | 31880 | 32110 | 123 |
| 210' Boom & Mast | 33 | 82.8 | 260900 | 260900 | 204 |
| | 44 | 81.1 | 253200 | 253200 | 203 |
| | 56 | 79.8 | 222690 | 226260 | 203 |
| | 68 | 77.7 | 165140 | 167380 | 201 |
| | 80 | 75.7 | 130140 | 131830 | 198 |
| | 92 | 73.7 | 106650 | 108030 | 195 |
| | 104 | 71.7 | 90580 | 90820 | 192 |
| | 116 | 69.7 | 76980 | 77910 | 188 |
| | 128 | 67.7 | 56840 | 57870 | 183 |
| | 140 | 65.7 | 59700 | 59440 | 177 |
| | 152 | 63.7 | 52030 | 52860 | 171 |
| | 164 | 61.7 | 46470 | 47070 | 164 |
| | 176 | 59.7 | 41740 | 42290 | 155 |
| | 188 | 57.7 | 30200 | 30520 | 146 |
| | 200 | 55.7 | 34480 | 34940 | 135 |
| 210' Boom & Mast | 34 | 82.9 | 217840 | 217840 | 214 |
| | 45 | 81.2 | 217840 | 217840 | 214 |
| | 57 | 79.8 | 215810 | 215810 | 213 |
| | 69 | 77.8 | 163600 | 165840 | 211 |
| | 81 | 75.8 | 120770 | 130460 | 208 |
| | 93 | 73.8 | 105460 | 106110 | 206 |
| | 105 | 71.8 | 66340 | 66460 | 203 |
| | 117 | 69.8 | 75880 | 76340 | 199 |
| | 129 | 67.8 | 65790 | 66330 | 194 |
| | 141 | 65.8 | 57700 | 58440 | 189 |
| | 153 | 63.8 | 51080 | 51720 | 180 |
| | 165 | 61.8 | 45110 | 46110 | 174 |
| | 177 | 59.8 | 40160 | 41350 | 168 |
| | 189 | 57.8 | 37120 | 37620 | 160 |
| | 201 | 55.8 | 33610 | 34070 | 156 |
| 220' Boom & Mast | 35 | 83.0 | 260900 | 260900 | 221 |
| | 46 | 81.3 | 253200 | 253200 | 221 |
| | 58 | 79.9 | 223500 | 226750 | 219 |
| | 70 | 77.9 | 165380 | 165380 | 216 |
| | 82 | 75.9 | 126500 | 126500 | 213 |
| | 94 | 73.9 | 105370 | 105370 | 210 |
| | 106 | 71.9 | 75810 | 76780 | 205 |
| | 118 | 69.9 | 66460 | 66460 | 201 |
| | 130 | 67.9 | 52120 | 52120 | 197 |
| | 142 | 65.9 | 42310 | 42310 | 187 |
| | 154 | 63.9 | 32110 | 32110 | 186 |
| | 166 | 61.9 | 34770 | 35340 | 175 |
| | 178 | 59.9 | 31880 | 32330 | 163 |
| | 190 | 57.9 | 27700 | 28190 | 153 |
| | 202 | 55.9 | 23550 | 23730 | 151 |
| 230' Boom & Mast | 36 | 83.1 | 194860 | 194860 | 231 |
| | 47 | 81.4 | 194860 | 194860 | 231 |
| | 59 | 79.9 | 163500 | 165750 | 229 |
| | 71 | 77.9 | 126200 | 128300 | 221 |
| | 83 | 75.9 | 105380 | 105380 | 216 |
| | 95 | 73.9 | 76250 | 76370 | 213 |
| | 107 | 71.9 | 66370 | 70780 | 210 |
| | 119 | 69.9 | 52120 | 52120 | 205 |
| | 131 | 67.9 | 42310 | 42310 | 197 |
| | 143 | 65.9 | 32110 | 32110 | 187 |
| | 155 | 63.9 | 34770 | 35340 | 175 |
| | 167 | 59.9 | 31880 | 32330 | 163 |
| | 179 | 57.9 | 27700 | 28190 | 153 |
| | 191 | 55.9 | 23550 | 23730 | 151 |



Skyhorse+AMERICAN ٣٥ تون جرثقيل

MODEL 9310 SKY HORSE RATINGS (cont.)

With 92' Boom and 77M Mast; 135,000 Cwt, and 138,000 Trailing Ctwt.

| Boom & Mast Length | Radius in Feet | Boom Angle Degrees | LW Over Side | LW Over End | FL From Boom Point |
|-----------------------|----------------|--------------------|--------------|-------------|--------------------|
| 200' Boom & Mast Len. | 230 | 39.4 | 14500 | 14500 | 191 |
| | 240 | 35.2 | 12600 | 12600 | 179 |
| | 250 | 32.7 | 11300 | 11300 | 164 |
| | 260 | 29.8 | 10010 | 10010 | 147 |
| | 270 | 24.3 | 8760 | 8760 | 127 |
| | 280 | 18.8 | 7630 | 7630 | 102 |
| | 290 | 11.0 | 6650 | 6650 | 64 |
| | 300 | | | | |
| | 45 | 82.4 | 106600 | 106600 | 303 |
| | 50 | 81.7 | 106300 | 106300 | 302 |
| 300' Boom & Mast | 60 | 79.7 | 102600 | 102600 | 301 |
| | 70 | 77.8 | 101200 | 101200 | 298 |
| | 80 | 75.8 | 94600 | 95100 | 297 |
| | 90 | 73.8 | 72400 | 73400 | 294 |
| | 100 | 71.8 | 62200 | 63170 | 291 |
| | 110 | 68.8 | 54240 | 54900 | 287 |
| | 120 | 67.8 | 47500 | 48240 | 284 |
| | 130 | 65.7 | 42030 | 42830 | 279 |
| | 140 | 63.6 | 37850 | 38500 | 275 |
| | 150 | 61.4 | 33800 | 34400 | 270 |
| | 160 | 59.2 | 30370 | 30840 | 264 |
| | 170 | 56.9 | 27240 | 27730 | 258 |
| | 180 | 54.8 | 24560 | 24970 | 251 |
| | 190 | 52.2 | 22140 | 22520 | 244 |
| | 200 | 49.8 | 19980 | 20050 | 238 |
| | 210 | 47.2 | 17810 | 17810 | 227 |
| | 220 | 44.5 | 15790 | 15790 | 217 |
| | 230 | 41.7 | 13990 | 13990 | 207 |
| | 240 | 38.7 | 12300 | 12300 | 195 |
| | 250 | 35.6 | 10780 | 10780 | 183 |
| | 260 | 32.1 | 9400 | 9400 | 167 |
| | 270 | 28.3 | 8140 | 8140 | 153 |
| | 280 | 23.9 | 6980 | 6980 | 129 |
| | 290 | 18.5 | 5950 | 5950 | 103 |
| | 300 | 10.1 | 5060 | 5060 | 65 |
| 310' Boom & Mast | 40 | 82.3 | 98310 | 98310 | 313 |
| | 50 | 81.9 | 98310 | 98310 | 312 |
| | 60 | 80.1 | 98310 | 98310 | 311 |
| | 70 | 78.2 | 98310 | 98310 | 309 |
| | 80 | 76.3 | 94270 | 95400 | 307 |
| | 90 | 74.4 | 72040 | 73000 | 304 |
| | 100 | 72.4 | 61940 | 62780 | 301 |
| | 110 | 70.5 | 53830 | 54570 | 298 |
| | 120 | 68.5 | 47170 | 47830 | 294 |
| | 130 | 66.5 | 41610 | 42210 | 290 |
| | 140 | 64.5 | 37540 | 38050 | 286 |
| | 150 | 62.4 | 33480 | 33990 | 281 |
| | 160 | 60.3 | 29950 | 30420 | 276 |
| | 170 | 58.1 | 26360 | 27300 | 270 |
| | 180 | 55.9 | 24130 | 24530 | 263 |
| | 190 | 53.7 | 21620 | 22080 | 255 |
| | 200 | 51.3 | 18510 | 18880 | 249 |
| | 210 | 48.9 | 17580 | 17880 | 240 |
| | 220 | 46.4 | 15770 | 15950 | 231 |
| | 230 | 43.8 | 14030 | 14030 | 221 |
| | 240 | 41.0 | 12230 | 12330 | 210 |
| | 250 | 38.1 | 10770 | 10770 | 198 |
| | 260 | 35.0 | 9360 | 9360 | 185 |
| | 270 | 31.8 | 8060 | 8060 | 170 |
| | 280 | 27.8 | 6980 | 6980 | 152 |
| | 290 | 23.5 | 5780 | 5780 | 131 |
| | 300 | 18.2 | 4740 | 4740 | 105 |
| | 310 | 10.7 | 3480 | 3480 | 65 |
| 320' Boom & Mast | 49 | 82.4 | 93410 | 93410 | 323 |
| | 50 | 82.2 | 93410 | 93410 | 322 |
| | 60 | 80.4 | 93410 | 93410 | 321 |
| | 70 | 78.6 | 90820 | 90820 | 319 |
| | 80 | 76.7 | 84030 | 85100 | 317 |
| | 90 | 74.9 | 71820 | 72780 | 315 |
| | 100 | 73.0 | 61710 | 62550 | 312 |
| | 110 | 71.1 | 53610 | 54350 | 308 |
| | 120 | 69.2 | 48940 | 47810 | 305 |
| | 130 | 67.3 | 41380 | 41990 | 301 |
| | 140 | 65.3 | 37340 | 37690 | 297 |
| | 150 | 63.3 | 33270 | 33780 | 292 |
| | 160 | 61.3 | 29750 | 30220 | 287 |
| | 170 | 59.2 | 26680 | 27080 | 281 |
| | 180 | 57.1 | 23920 | 24330 | 275 |
| | 190 | 55.0 | 21490 | 21870 | 269 |
| | 200 | 52.7 | 19310 | 19670 | 261 |
| | 210 | 50.4 | 17340 | 17550 | 253 |
| | 220 | 48.1 | 15490 | 15490 | 245 |
| | 230 | 45.8 | 13630 | 13630 | 238 |
| | 240 | 43.0 | 11630 | 11630 | 225 |
| | 250 | 40.3 | 10280 | 10380 | 214 |

| Boom & Mast Length | Radius in Feet | Boom Angle Degrees | LW Over Side | LW Over End | FL From Boom Point |
|--------------------|----------------|--------------------|--------------|-------------|--------------------|
| 320' Boom & Mast | 260 | 37.5 | 8960 | 8960 | 202 |
| | 270 | 34.4 | 7650 | 7650 | 168 |
| | 280 | 31.0 | 6450 | 6450 | 173 |
| | 290 | 27.3 | 5360 | 5360 | 155 |
| | 300 | 23.1 | 4360 | 4360 | 133 |
| | 310 | 17.9 | 3460 | 3460 | 108 |
| | 320 | | | | |
| | 50 | 82.4 | 87800 | 87800 | 333 |
| | 60 | 80.7 | 87800 | 87800 | 331 |
| | 70 | 78.9 | 87800 | 87800 | 329 |
| 330' Boom & Mast | 80 | 77.1 | 83300 | 84330 | 327 |
| | 90 | 75.3 | 71440 | 72440 | 325 |
| | 100 | 73.5 | 61330 | 62170 | 322 |
| | 110 | 71.7 | 52220 | 53290 | 319 |
| | 120 | 69.9 | 45560 | 47220 | 316 |
| | 130 | 68.0 | 41600 | 41600 | 312 |
| | 140 | 66.1 | 36980 | 37530 | 308 |
| | 150 | 64.2 | 32820 | 33420 | 303 |
| | 160 | 62.3 | 29390 | 29860 | 298 |
| | 170 | 60.3 | 26290 | 26730 | 280 |
| | 180 | 58.2 | 23560 | 23970 | 267 |
| | 190 | 56.2 | 21120 | 21510 | 261 |
| | 200 | 54.1 | 18940 | 19190 | 274 |
| | 210 | 51.9 | 16650 | 16930 | 268 |
| | 220 | 49.8 | 14700 | 14700 | 258 |
| | 230 | 47.3 | 13000 | 13000 | 249 |
| | 240 | 44.8 | 11310 | 11310 | 240 |
| | 250 | 42.3 | 9750 | 9750 | 229 |
| | 260 | 39.7 | 8330 | 8330 | 218 |
| | 270 | 38.9 | 7030 | 7030 | 205 |
| | 280 | 35.8 | 5530 | 5530 | 191 |
| | 290 | 30.8 | 4730 | 4730 | 175 |
| | 300 | 26.9 | 3710 | 3710 | 157 |
| | 310 | 22.7 | 2780 | 2780 | 135 |
| 340' Boom & Mast | 51 | 82.5 | 85900 | 85900 | 343 |
| | 60 | 81.0 | 85900 | 85900 | 341 |
| | 70 | 79.2 | 85900 | 85900 | 340 |
| | 80 | 77.5 | 81760 | 81760 | 338 |
| | 90 | 75.8 | 70960 | 71000 | 335 |
| | 100 | 74.0 | 60860 | 61700 | 333 |
| | 110 | 72.3 | 52740 | 53480 | 332 |
| | 120 | 70.5 | 46700 | 48740 | 330 |
| | 130 | 68.7 | 40510 | 41120 | 323 |
| | 140 | 66.9 | 36310 | 37070 | 319 |
| | 150 | 65.0 | 32450 | 32950 | 314 |
| | 160 | 63.1 | 29390 | 30390 | 310 |
| | 170 | 61.2 | 25230 | 26270 | 304 |
| | 180 | 59.3 | 23100 | 23510 | 296 |
| | 190 | 57.3 | 20660 | 20660 | 293 |
| | 200 | 55.3 | 18430 | 18430 | 288 |
| | 210 | 53.2 | 16170 | 16170 | 279 |
| | 220 | 51.0 | 14110 | 14110 | 271 |
| | 230 | 48.8 | 12240 | 12240 | 263 |
| | 240 | 46.5 | 10540 | 10540 | 254 |
| | 250 | 44.2 | 9000 | 9000 | 244 |
| | 260 | 41.7 | 7570 | 7570 | 233 |
| | 270 | 39.1 | 6270 | 6270 | 221 |
| | 280 | 36.3 | 5060 | 5060 | 209 |
| | 290 | 33.3 | 3550 | 3550 | 194 |
| | 300 | 30.1 | 2940 | 2940 | 178 |
| 350' Boom & Mast | 53 | 82.4 | 80200 | 80200 | 352 |
| | 60 | 81.2 | 80200 | 80200 | 351 |
| | 70 | 79.8 | 80200 | 80200 | 350 |
| | 80 | 77.9 | 77110 | 74480 | 349 |
| | 90 | 76.2 | 67620 | 67620 | 348 |
| | 100 | 74.5 | 60470 | 61310 | 343 |
| | 110 | 72.8 | 52350 | 53050 | 340 |
| | 120 | 71.1 | 45860 | 48350 | 337 |
| | 130 | 69.3 | 40120 | 40720 | 333 |
| | 140 | 67.8 | 36150 | 36700 | 330 |
| | 150 | 65.8 | 32090 | 32600 | 326 |
| | 160 | 64.0 | 26550 | 26030 | 321 |
| | 170 | 62.1 | 23480 | 23800 | 318 |
| | 180 | 60.3 | 22720 | 23130 | 310 |
| | 190 | 58.3 | 20280 | 20280 | 304 |
| | 200 | 56.4 | 17800 | 17800 | 290 |
| | 210 | 54.4 | 15540 | 15540 | 281 |
| | 220 | 52.4 | 13400 | 13400 | 264 |
| | 230 | 50.3 | 11620 | 11620 | 278 |
| | 240 | 48.1 | 9820 | 9820 | 267 |
| | 250 | 45.8 | 8370 | 8370 | 254 |
| | 260 | 43.5 | 6850 | 6850 | 244 |
| | 270 | 41.0 | 5840 | 5840 | 237 |
| | 280 | 38.5 | 4450 | 4450 | 223 |
| | 290 | 35.7 | 3320 | 3320 | 212 |
| | 300 | 32.8 | 0 | 2310 | 197 |



IR11/011



CH11/0655



CH11/0653



CH11/0654

Skyhorse+AMERICAN جرثقيل ٣٥٠ تن

MODEL 9310 SKY HORSE RATINGS (cont.)

With 9?H Boom and 77M Mast; 135,000 Cwt. and 138,000 Trailing Cwt.

| Boom & Mast Length | Radius in Feet | Boom Angle in Degrees | LJN Over Side | Lift Over End | FL From Boom Point |
|---|----------------------|--------------------------------|---------------------|---------------------|--------------------------|
| 220' Boom & 130' Mast ext. | 110 | 81.9 | 57610 | 58340 | 200 |
| | 120 | 58.9 | 50980 | 51620 | 195 |
| | 130 | 55.6 | 45410 | 46010 | 188 |
| | 140 | 52.6 | 40700 | 41250 | 181 |
| | 150 | 49.2 | 37060 | 37550 | 173 |
| | 160 | 45.6 | 33320 | 33830 | 164 |
| | 170 | 41.8 | 30440 | 30870 | 154 |
| | 180 | 37.7 | 27710 | 28110 | 142 |
| | 190 | 33.2 | 25270 | 25650 | 128 |
| | 200 | 28.0 | 23080 | 23450 | 111 |
| | 210 | 21.7 | 21120 | 21460 | 99 |
| | 220 | 12.7 | 19340 | 19570 | 57 |
| 230' Boom & 130' Mast | 37 | 82.4 | 172300 | 178300 | 233 |
| | 40 | 81.6 | 175300 | 178300 | 233 |
| | 50 | 79.1 | 163180 | 165410 | 231 |
| | 60 | 76.6 | 122350 | 130040 | 238 |
| | 70 | 74.0 | 105050 | 108400 | 227 |
| | 80 | 71.4 | 87010 | 89300 | 224 |
| | 88 | 68.7 | 75460 | 76440 | 218 |
| | 98 | 65.0 | 55390 | 56220 | 212 |
| | 110 | 63.2 | 57280 | 58020 | 212 |
| | 120 | 60.4 | 50840 | 51300 | 208 |
| | 130 | 57.3 | 45070 | 45670 | 203 |
| | 140 | 54.5 | 40370 | 40920 | 194 |
| 240' Boom & 130' Mast | 150 | 51.3 | 36730 | 37240 | 186 |
| | 160 | 48.0 | 33210 | 33870 | 178 |
| | 170 | 44.6 | 30110 | 30560 | 168 |
| | 180 | 40.9 | 27390 | 27790 | 158 |
| | 190 | 36.9 | 24650 | 25330 | 145 |
| | 200 | 32.4 | 22770 | 23130 | 131 |
| | 210 | 27.4 | 20900 | 21140 | 113 |
| | 220 | 21.2 | 19030 | 19350 | 97 |
| | 230 | 12.4 | 17380 | 17700 | 58 |
| | 30 | 82.5 | 170300 | 170300 | 243 |
| | 40 | 82.0 | 170300 | 170300 | 243 |
| | 50 | 79.6 | 162260 | 164930 | 242 |
| 250' Boom & 130' Mast | 60 | 77.1 | 122620 | 125560 | 240 |
| | 70 | 74.7 | 104580 | 105920 | 237 |
| | 80 | 72.2 | 87440 | 88560 | 234 |
| | 88 | 68.6 | 75020 | 75860 | 231 |
| | 98 | 67.1 | 64920 | 66780 | 227 |
| | 110 | 64.4 | 56810 | 57550 | 223 |
| | 120 | 61.7 | 50150 | 50810 | 218 |
| | 130 | 59.0 | 44600 | 45190 | 212 |
| | 140 | 56.1 | 40340 | 40860 | 208 |
| | 150 | 53.2 | 36280 | 36780 | 198 |
| | 160 | 50.2 | 32750 | 33220 | 191 |
| | 170 | 46.8 | 29950 | 30390 | 182 |
| 260' Boom & 130' Mast | 180 | 43.8 | 26920 | 27330 | 172 |
| | 190 | 40.0 | 24480 | 24970 | 161 |
| | 200 | 36.0 | 22310 | 22870 | 149 |
| | 210 | 31.7 | 20340 | 20890 | 134 |
| | 220 | 26.8 | 18550 | 18880 | 118 |
| | 230 | 20.8 | 16930 | 17230 | 93 |
| | 240 | 12.2 | 15451 | 15700 | 59 |
| | 30 | 82.3 | 157830 | 157830 | 233 |
| | 40 | 82.0 | 147840 | 147840 | 232 |
| | 50 | 77.8 | 127510 | 129210 | 230 |
| | 60 | 75.3 | 104240 | 105590 | 248 |
| 270' Boom & 130' Mast | 70 | 72.9 | 97080 | 98210 | 245 |
| | 80 | 70.5 | 74980 | 75560 | 242 |
| | 90 | 68.0 | 64680 | 65420 | 238 |
| | 110 | 63.5 | 59470 | 57210 | 234 |
| | 120 | 60.0 | 49810 | 50470 | 229 |
| | 130 | 56.4 | 44250 | 44850 | 224 |
| | 140 | 53.7 | 40020 | 40570 | 218 |
| | 150 | 50.9 | 35930 | 36480 | 211 |
| | 160 | 52.0 | 32430 | 32890 | 204 |
| | 170 | 49.1 | 28330 | 29770 | 198 |
| | 180 | 45.9 | 26000 | 27000 | 187 |
| | 190 | 42.6 | 21470 | 24550 | 178 |
| 280' Boom & 130' Mast | 200 | 39.1 | 21980 | 22340 | 165 |
| | 210 | 35.3 | 20010 | 20330 | 152 |
| | 220 | 31.1 | 18230 | 18570 | 138 |
| | 230 | 26.2 | 16910 | 16810 | 118 |
| | 240 | 20.3 | 15040 | 15040 | 98 |
| | 250 | 11.9 | 13880 | 13880 | 89 |
| | 40 | 82.4 | 145730 | 145730 | 263 |
| | 50 | 80.4 | 140340 | 144120 | 262 |
| | 60 | 78.1 | 127000 | 128700 | 260 |
| | 70 | 75.9 | 103780 | 105100 | 258 |
| 290' Boom & 130' Mast | 80 | 73.6 | 93880 | 97710 | 255 |
| | 90 | 71.3 | 74210 | 76170 | 242 |
| | 100 | 68.9 | 64100 | 68440 | 248 |

| Boom & Mast Length | Radius in Feet | Boom Angle in Degrees | LJN Over Side | Lift Over End | FL From Boom Point |
|---|----------------------|--------------------------------|---------------------|---------------------|--------------------------|
| 200' Boom & 130' Mast ext. | 110 | 81.9 | 55680 | 56720 | 245 |
| | 120 | 81.1 | 49320 | 49320 | 243 |
| | 130 | 81.8 | 47350 | 44350 | 238 |
| | 140 | 59.1 | 38550 | 40100 | 229 |
| | 150 | 58.5 | 35490 | 36000 | 223 |
| | 160 | 53.8 | 31980 | 32420 | 218 |
| | 170 | 51.0 | 26880 | 29200 | 209 |
| | 180 | 48.0 | 26130 | 26540 | 200 |
| | 190 | 45.0 | 23650 | 24070 | 191 |
| | 200 | 41.8 | 21510 | 21740 | 180 |
| | 210 | 38.3 | 19540 | 19640 | 169 |
| | 220 | 34.6 | 17580 | 17580 | 153 |
| 210' Boom & 130' Mast ext. | 230 | 30.4 | 15800 | 16800 | 135 |
| | 240 | 25.7 | 14210 | 14210 | 120 |
| | 250 | 18.9 | 12780 | 12780 | 97 |
| | 260 | 11.7 | 11540 | 11540 | 61 |
| | 40 | 82.5 | 126750 | 126750 | 273 |
| | 50 | 80.7 | 126750 | 126750 | 272 |
| | 60 | 78.8 | 122750 | 122750 | 270 |
| | 70 | 76.4 | 103010 | 104370 | 268 |
| | 80 | 74.2 | 85910 | 87030 | 268 |
| | 90 | 72.0 | 73600 | 74560 | 263 |
| | 100 | 69.7 | 63620 | 64390 | 263 |
| | 110 | 67.4 | 55430 | 56170 | 255 |
| 220' Boom & 130' Mast | 120 | 65.1 | 48790 | 49460 | 246 |
| | 130 | 62.8 | 42250 | 43850 | 246 |
| | 140 | 60.3 | 35080 | 35930 | 241 |
| | 150 | 57.9 | 35040 | 35550 | 235 |
| | 160 | 55.3 | 31520 | 31990 | 226 |
| | 170 | 52.7 | 26450 | 26860 | 221 |
| | 180 | 49.9 | 25730 | 26130 | 213 |
| | 190 | 47.1 | 22300 | 23690 | 209 |
| | 200 | 44.1 | 21130 | 21490 | 195 |
| | 210 | 40.9 | 19180 | 19520 | 184 |
| | 220 | 37.8 | 17410 | 17730 | 175 |
| | 230 | 33.9 | 15800 | 15910 | 158 |
| 240' Boom & 130' Mast | 240 | 29.8 | 14260 | 14260 | 142 |
| | 250 | 25.2 | 12760 | 12760 | 123 |
| | 260 | 19.5 | 11410 | 11410 | 97 |
| | 270 | 11.4 | 10220 | 10220 | 82 |
| | 40 | 82.3 | 118300 | 118300 | 283 |
| | 50 | 81.1 | 118300 | 118300 | 282 |
| | 60 | 79.0 | 115790 | 115790 | 280 |
| | 70 | 76.9 | 102680 | 104110 | 276 |
| | 80 | 74.8 | 85540 | 86870 | 276 |
| | 90 | 72.8 | 73250 | 74210 | 273 |
| | 100 | 70.5 | 61170 | 64200 | 270 |
| | 110 | 68.3 | 55080 | 55820 | 268 |
| 250' Boom & 130' Mast | 120 | 66.1 | 44430 | 49100 | 263 |
| | 130 | 63.8 | 42630 | 43490 | 257 |
| | 140 | 61.5 | 38750 | 39300 | 252 |
| | 150 | 59.1 | 34700 | 35200 | 247 |
| | 160 | 56.7 | 31190 | 31660 | 240 |
| | 170 | 54.2 | 28160 | 28540 | 234 |
| | 180 | 51.8 | 25380 | 25780 | 226 |
| | 190 | 49.0 | 22350 | 23340 | 216 |
| | 200 | 46.2 | 20780 | 21140 | 205 |
| | 210 | 43.3 | 18620 | 19180 | 193 |
| | 220 | 40.2 | 17050 | 17150 | 188 |
| | 230 | 36.9 | 15320 | 15320 | 179 |
| 260' Boom & 130' Mast | 240 | 33.3 | 13860 | 13860 | 161 |
| | 250 | 29.3 | 12150 | 12150 | 145 |
| | 260 | 24.7 | 10790 | 10790 | 123 |
| | 270 | 19.2 | 9550 | 9550 | 123 |
| | 280 | 11.2 | 8470 | 8470 | 83 |
| | 45 | 82.4 | 114580 | 114580 | 263 |
| | 50 | 81.4 | 114580 | 114580 | 262 |
| | 60 | 79.4 | 111400 | 112020 | 261 |
| | 70 | 77.4 | 102130 | 103540 | 258 |
| | 80 | 75.3 | 85050 | 86190 | 258 |
| | 90 | 73.3 | 72790 | 73750 | 263 |
| 270' Boom & 130' Mast | 100 | 71.2 | 62700 | 63330 | 260 |
| | 110 | 69.1 | 54600 | 55340 | 277 |
| | 120 | 66.9 | 47950 | 48610 | 273 |
| | 130 | 64.8 | 42410 | 43010 | 268 |
| | 140 | 62.8 | 39230 | 39840 | 264 |
| | 150 | 60.3 | 34230 | 34740 | 254 |
| | 160 | 58.0 | 30720 | 31190 | 254 |
| | 170 | 55.6 | 27630 | 28070 | 246 |
| | 180 | 53.2 | 24910 | 25320 | 243 |
| | 190 | 50.7 | 22490 | 22870 | 231 |
| | | | | | |

جرثقیل ۳۰۰ تن تلسکوپی



RIG RACOCRANE

| | |
|---------|---------------------------|
| KATO | کارخانه سازنده |
| NK-3000 | مدل |
| 1991 | سال ساخت |
| ۳۰۰ تن | حداکثر ظرفیت باربرداری |
| ۴۵ متر | طول بوم |
| ۷۷ متر | طول جیب |
| ژاین | کشور سازنده |



www.racocrane.com
info@racocrane.com

RIG RACOCRANE

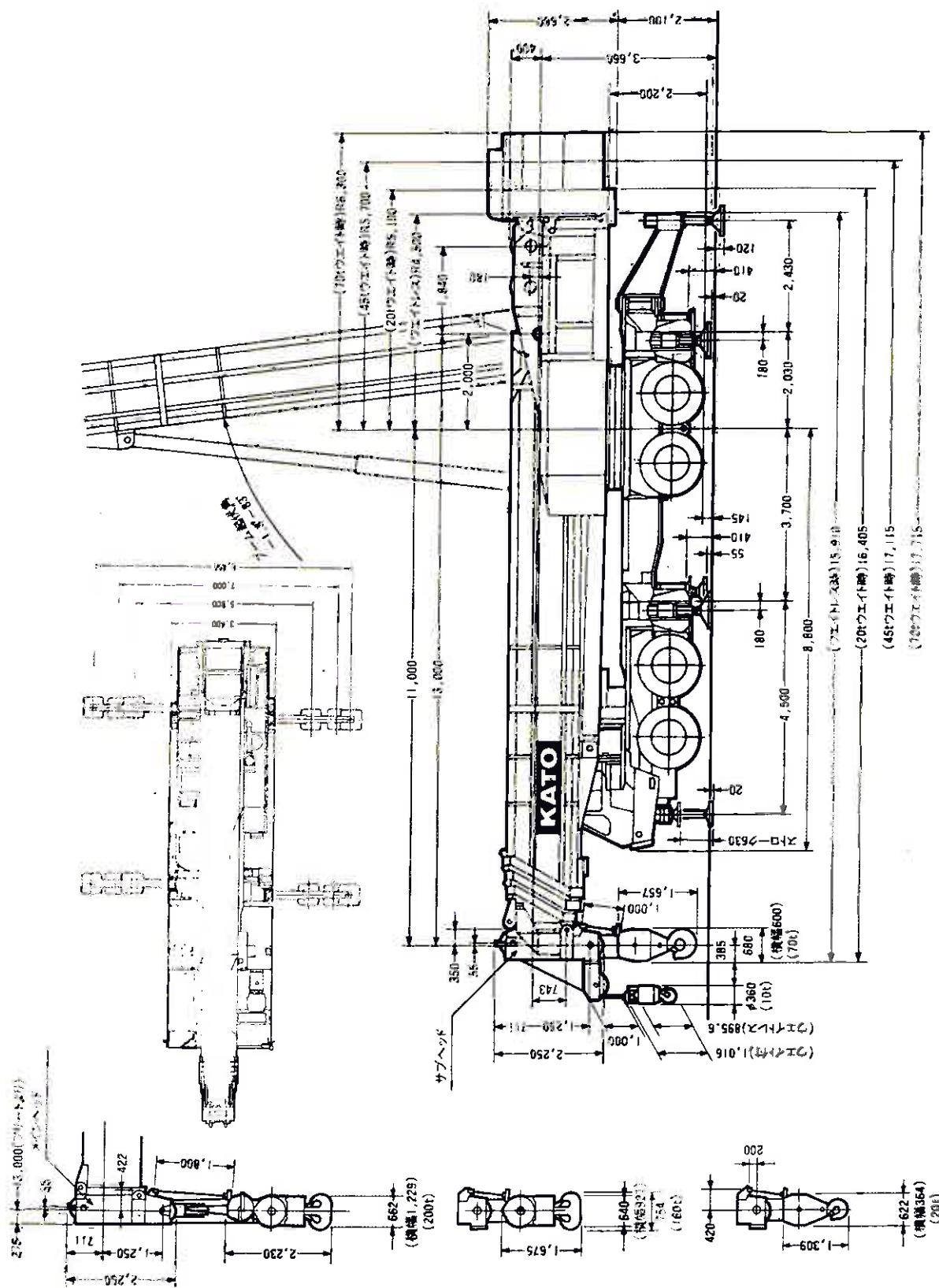


جرثقيل ٥٠٣٥ تن تلسكوبی



خط ویژه: ۰۲۱-۸۴۳۱۶-۰۲۱ فکس: ۰۲۱-۸۸۷۱۵۱۶۰

میدان آزادی، خیابان احمد قصیر(پخارست)، خیابان سیزدهم میلادی، ۱، طبقه ۱، واحد ۱



جتنیل ٣٠٠ تن تلسکوپی KATO



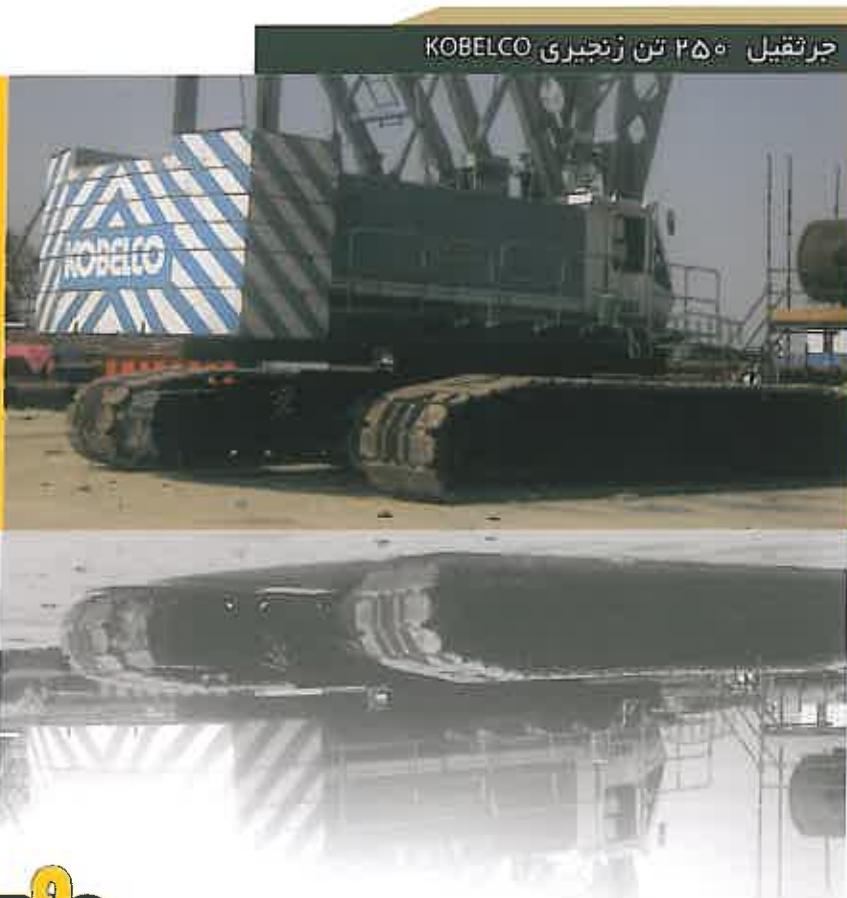
■ 13m

| 作業半径 | 13mブーム |
|------|--------|
| 3.0m | 300.0 |
| 3.5 | 250.0 |
| 4.0 | 200.0 |

■ 13m~40mブーム

| 作業半径 | 13mブーム | 17.8mブーム | 22mブーム | 31mブーム | 40mブーム |
|------|--------|----------|--------|--------|--------|
| 4.0m | 200.0 | | | | |
| 4.5 | 200.0 | 180.0 | 160.0 | | |
| 5.0 | 185.0 | 160.0 | 160.0 | | |
| 6.0 | 160.0 | 155.0 | 160.0 | 100.0 | |
| 7.0 | 139.0 | 137.5 | 136.0 | 100.0 | 70.0 |
| 8.0 | 125.0 | 123.0 | 121.5 | 100.0 | 70.0 |
| 9.0 | 110.0 | 108.5 | 107.0 | 93.0 | 70.0 |
| 10.0 | 97.5 | 96.0 | 94.5 | 85.0 | 67.6 |
| 11.0 | | 85.5 | 83.5 | 77.5 | 62.1 |
| 12.0 | | 76.5 | 75.0 | 71.5 | 57.4 |
| 14.0 | | 60.0 | 60.0 | 61.6 | 49.7 |
| 16.0 | | | 47.9 | 50.5 | 43.7 |
| 18.0 | | | 39.0 | 41.5 | 38.8 |
| 20.0 | | | | 34.7 | 34.8 |
| 22.0 | | | | 29.5 | 30.5 |
| 24.0 | | | | 25.3 | 26.5 |
| 26.0 | | | | 21.9 | 23.0 |
| 28.0 | | | | 19.1 | 20.1 |
| 30.0 | | | | | 17.7 |
| 32.0 | | | | | 16.6 |
| 34.0 | | | | | 13.8 |
| 36.0 | | | | | 12.2 |

جرثقیل ۲۵۰ تن زنجیری KOBELCO

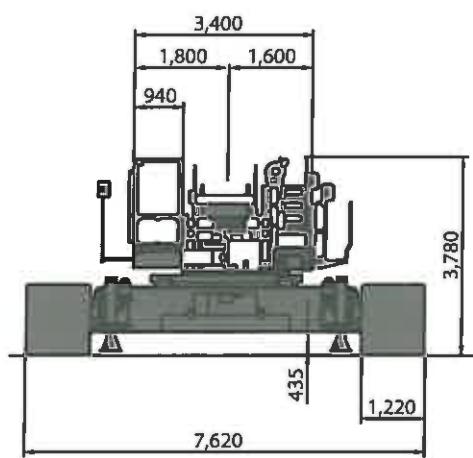
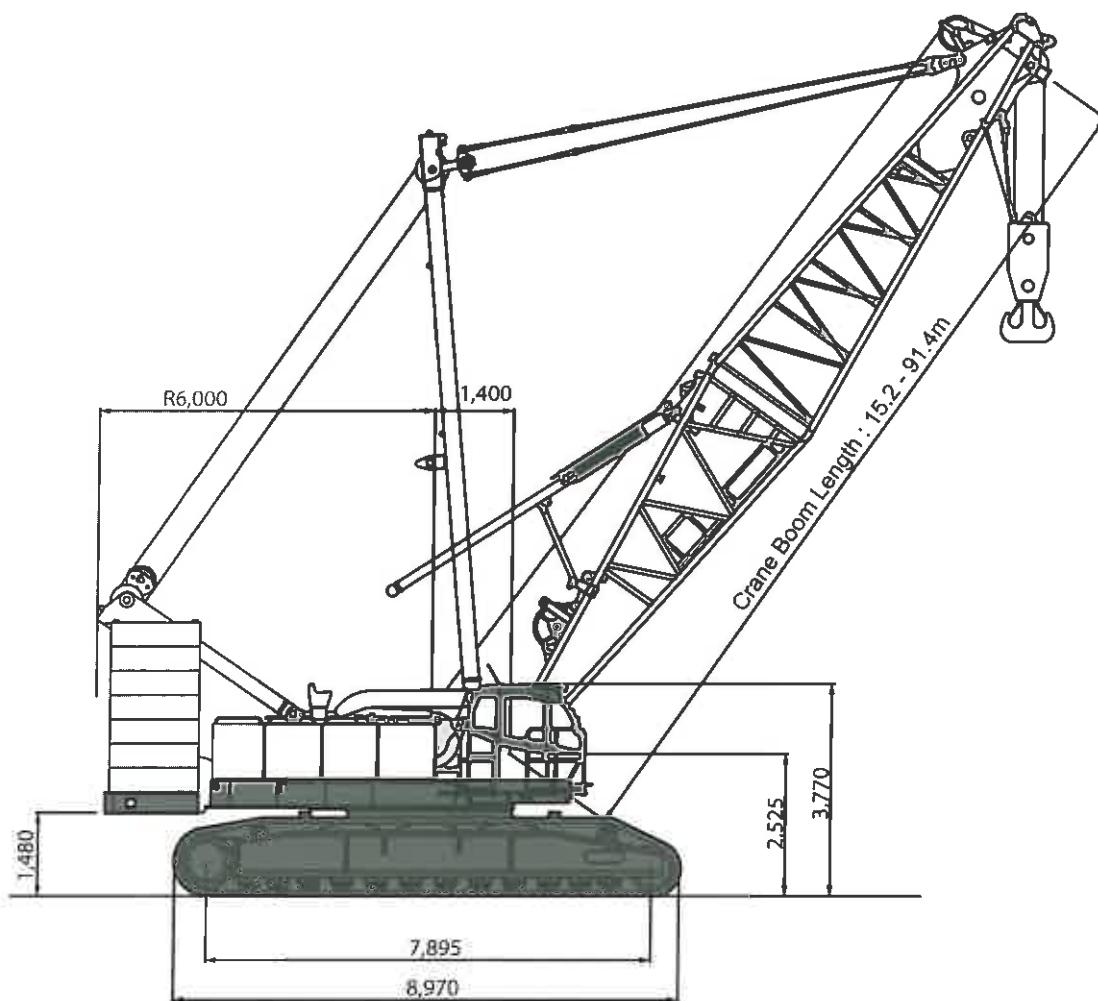


RACOCRANE

| | |
|----------|---------------------------|
| KOBELCO | کارخانه سازنده |
| CKE 2500 | مدل |
| 2004 | سال ساخت |
| ۲۵۰ تن | حداکثر ظرفیت باربرداری |
| ۷۳ متر | طول بوم |
| ۳۵ متر | طول حیب |
| ژریان | کشور سازنده |

جرثقیل ۲۵۰ تن زنجیری KOBELCO





Crane Boom Lifting Capacity

Unit: metric ton

Counterweight: 90.0 t, Cabbody weight: 24.0 t

| Boom Length / Working radius (m) | 15.2 | 18.3 | 21.3 | 24.4 | 27.4 | 30.5 | 33.5 | 36.6 | 39.6 | 42.7 | 45.7 | 48.8 | 51.8 | Boom Length / Working radius (m) |
|----------------------------------|------------|-------|-------|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|----------------------------------|
| 4.6 | 4.6 m/2500 | | | | | | | | | | | | | 4.6 |
| 5.0 | 230.7 | 226.7 | 225.0 | | | | | | | | | | | 5.0 |
| 6.0 | 191.5 | 191.5 | 191.1 | 61 m/183.0 | 66 m/174.5 | | | | | | | | | 6.0 |
| 7.0 | 165.9 | 165.6 | 165.2 | 165.0 | 164.7 | 71 m/154.2 | 77 m/143.8 | | | | | | | 7.0 |
| 8.0 | 146.1 | 145.8 | 145.4 | 145.2 | 144.9 | 144.6 | 141.4 | 82 m/127.3 | 87 m/115.7 | | | | | 8.0 |
| 9.0 | 130.4 | 130.1 | 129.8 | 129.6 | 129.2 | 127.0 | 127.3 | 123.8 | 114.8 | 92 m/107.2 | 98 m/98.3 | | | 9.0 |
| 10.0 | 117.7 | 117.4 | 117.1 | 116.9 | 114.7 | 115.0 | 113.3 | 110.5 | 107.4 | 103.8 | 97.0 | 103 m/92.6 | 108 m/84.7 | 10.0 |
| 12.0 | 90.0 | 90.2 | 90.2 | 90.2 | 90.2 | 90.1 | 90.0 | 89.9 | 87.8 | 85.9 | 83.8 | 82.0 | 79.5 | 12.0 |
| 14.0 | 72.2 | 72.4 | 72.4 | 72.4 | 72.3 | 72.2 | 72.1 | 72.0 | 72.0 | 72.0 | 70.8 | 69.4 | 68.0 | 14.0 |
| 16.0 | 60.2 | 60.2 | 60.2 | 60.0 | 59.9 | 59.8 | 59.8 | 59.7 | 59.6 | 59.4 | 59.3 | 58.7 | 58.7 | 16.0 |
| 18.0 | 51.3 | 51.3 | 51.1 | 51.1 | 51.1 | 50.9 | 50.8 | 50.7 | 50.7 | 50.4 | 50.3 | 50.2 | 50.2 | 18.0 |
| 20.0 | 44.6 | 44.6 | 44.4 | 44.4 | 44.3 | 44.1 | 44.0 | 43.9 | 43.9 | 43.6 | 43.5 | 43.4 | 43.4 | 20.0 |
| 22.0 | 39.3 | 39.3 | 39.1 | 39.0 | 38.7 | 38.7 | 38.6 | 38.6 | 38.5 | 38.3 | 38.2 | 38.0 | 38.0 | 22.0 |
| 24.0 | 34.8 | 34.7 | 34.5 | 34.4 | 34.3 | 34.3 | 34.2 | 34.0 | 33.8 | 33.7 | 33.7 | 33.7 | 33.7 | 24.0 |
| 26.0 | 31.3 | 30.9 | 30.8 | 30.7 | 30.7 | 30.7 | 30.7 | 30.4 | 30.3 | 30.3 | 30.1 | 30.1 | 30.1 | 26.0 |
| 28.0 | 28.3 | 28.0 | 27.9 | 27.8 | 27.7 | 27.7 | 27.4 | 27.3 | 27.3 | 27.1 | 27.1 | 27.1 | 27.1 | 28.0 |
| 30.0 | 25.5 | 25.4 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 24.9 | 24.8 | 24.8 | 24.6 | 24.6 | 30.0 | 30.0 |
| 32.0 | 23.4 | 23.1 | 23.0 | 22.7 | 22.7 | 22.7 | 22.7 | 22.4 | 22.4 | 22.4 | 22.4 | 22.4 | 32.0 | 32.0 |
| 34.0 | 21.2 | 21.1 | 20.8 | 20.7 | 20.7 | 20.7 | 20.7 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 34.0 | 34.0 |
| 36.0 | 19.5 | 19.2 | 19.1 | 18.9 | 18.9 | 18.9 | 18.9 | 18.7 | 18.7 | 18.7 | 18.6 | 18.6 | 36.0 | 36.0 |
| 38.0 | 17.6 | 17.6 | 17.4 | 17.4 | 17.4 | 17.4 | 17.4 | 17.3 | 17.3 | 17.3 | 17.3 | 17.3 | 38.0 | 38.0 |
| 40.0 | 16.4 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 40.0 | 40.0 |
| 42.0 | 15.2 | 15.2 | 14.9 | 14.9 | 14.9 | 14.9 | 14.9 | 14.9 | 14.9 | 14.9 | 14.9 | 14.9 | 42.0 | 42.0 |
| 44.0 | 13.9 | 13.9 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 44.0 | 44.0 |
| 46.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 46.0 | 46.0 |
| 48.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 48.0 | 48.0 |
| Reeves | 22 | 18 | 16 | 14 | 14 | 12 | 12 | 10 | 10 | 8 | 8 | 7 | 7 | Reeves |

| Boom Length / Working radius (m) | 54.9 | 57.0 | 61.0 | 64.0 | 67.1 | 70.1 | 73.2 | 76.2 | 78.3 | 82.3 | 85.3 | 88.4 | 91.4 | Boom Length / Working radius (m) | |
|----------------------------------|------------|------------|------------|------------|------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------------------|--|
| 10.0 | 114 m/81.4 | 119 m/76.1 | | | | | | | | | | | | 10.0 | |
| 12.0 | 78.0 | 75.5 | 124 m/68.8 | 129 m/67.5 | 135 m/63.8 | | | | | | | | | 12.0 | |
| 14.0 | 66.5 | 65.2 | 63.3 | 62.5 | 61.3 | 59.4 | 14.5 m/54.5 | 15.1 m/49.1 | 15.6 m/44.7 | | | | | 14.0 | |
| 16.0 | 57.5 | 56.4 | 55.4 | 54.2 | 53.2 | 51.2 | 51.1 | 48.4 | 44.5 | 16.1 m/40.9 | 16.6 m/37.4 | 17.2 m/33.8 | 17.7 m/31.0 | 16.0 | |
| 18.0 | 50.0 | 49.5 | 48.6 | 47.6 | 46.8 | 45.6 | 44.9 | 44.2 | 43.2 | 39.7 | 36.6 | 33.3 | 30.9 | 18.0 | |
| 20.0 | 43.2 | 43.0 | 42.9 | 42.2 | 41.5 | 40.6 | 39.9 | 39.2 | 38.4 | 37.6 | 35.4 | 32.2 | 29.8 | 20.0 | |
| 22.0 | 37.8 | 37.7 | 37.5 | 37.3 | 37.2 | 36.5 | 35.7 | 35.1 | 34.4 | 33.6 | 32.9 | 31.2 | 28.8 | 22.0 | |
| 24.0 | 33.5 | 33.3 | 33.2 | 32.9 | 32.9 | 32.6 | 32.2 | 31.6 | 30.9 | 30.2 | 29.6 | 29.2 | 27.7 | 24.0 | |
| 26.0 | 29.9 | 29.7 | 29.6 | 29.4 | 29.3 | 29.0 | 28.9 | 28.6 | 28.0 | 27.3 | 26.8 | 26.3 | 25.7 | 26.0 | |
| 28.0 | 26.9 | 26.8 | 26.4 | 26.4 | 26.3 | 26.0 | 25.9 | 25.8 | 25.4 | 24.8 | 24.3 | 23.9 | 23.3 | 28.0 | |
| 30.0 | 24.4 | 24.2 | 24.1 | 23.8 | 23.7 | 23.5 | 23.3 | 23.2 | 23.0 | 22.6 | 22.1 | 21.7 | 21.2 | 30.0 | |
| 32.0 | 22.2 | 22.0 | 21.9 | 21.6 | 21.5 | 21.3 | 21.1 | 21.0 | 20.8 | 20.5 | 20.2 | 19.8 | 19.3 | 32.0 | |
| 34.0 | 20.3 | 20.1 | 20.0 | 19.7 | 19.6 | 19.4 | 19.2 | 19.1 | 18.9 | 18.6 | 18.4 | 18.1 | 17.6 | 34.0 | |
| 36.0 | 18.6 | 18.5 | 18.3 | 18.1 | 17.9 | 17.7 | 17.5 | 17.4 | 17.2 | 16.9 | 16.8 | 16.6 | 16.1 | 36.0 | |
| 38.0 | 17.2 | 17.0 | 16.9 | 16.6 | 16.5 | 16.2 | 16.0 | 15.9 | 15.7 | 15.4 | 15.3 | 15.2 | 14.7 | 38.0 | |
| 40.0 | 15.9 | 15.7 | 15.5 | 15.3 | 15.2 | 14.9 | 14.7 | 14.6 | 14.4 | 14.1 | 13.9 | 13.8 | 13.5 | 40.0 | |
| 42.0 | 14.7 | 14.5 | 14.4 | 14.1 | 14.0 | 13.7 | 13.5 | 13.4 | 13.2 | 12.9 | 12.8 | 12.7 | 12.4 | 42.0 | |
| 44.0 | 13.7 | 13.5 | 13.3 | 13.0 | 12.9 | 12.6 | 12.5 | 12.3 | 12.1 | 11.8 | 11.7 | 11.6 | 11.3 | 44.0 | |
| 46.0 | 12.7 | 12.5 | 12.4 | 12.1 | 12.0 | 11.7 | 11.5 | 11.4 | 11.2 | 10.9 | 10.7 | 10.6 | 10.4 | 46.0 | |
| 48.0 | 11.9 | 11.6 | 11.2 | 11.1 | 10.8 | 10.7 | 10.5 | 10.3 | 10.0 | 9.8 | 9.7 | 9.4 | 9.4 | 48.0 | |
| 50.0 | 49.1 m/114 | 10.9 | 10.7 | 10.4 | 10.3 | 10.0 | 9.9 | 9.7 | 9.5 | 9.1 | 8.9 | 8.8 | 8.5 | 50.0 | |
| 52.0 | 51.8 m/102 | 10.0 | 9.7 | 9.6 | 9.3 | 9.1 | 8.9 | 8.7 | 8.3 | 8.1 | 8.0 | 7.7 | 7.7 | 52.0 | |
| 54.0 | 9.3 | 9.1 | 8.9 | 8.8 | 8.4 | 8.2 | 7.9 | 7.6 | 7.4 | 7.2 | 7.0 | 7.0 | 54.0 | | |
| 56.0 | 54.4 m/92 | 8.4 | 8.3 | 7.9 | 7.7 | 7.5 | 7.2 | 6.9 | 6.7 | 6.5 | 6.3 | 6.3 | 56.0 | | |
| 58.0 | 57.1 m/81 | 7.7 | 7.3 | 7.1 | 6.9 | 6.6 | 6.3 | 6.1 | 5.9 | 5.6 | 5.6 | 5.6 | 58.0 | | |
| 60.0 | | 59.7 m/72 | 6.7 | 6.5 | 6.3 | 6.0 | 5.7 | 5.5 | 5.3 | 5.0 | 5.0 | 5.0 | 60.0 | | |
| 62.0 | | | 6.2 | 6.0 | 5.8 | 5.5 | 5.1 | 4.9 | 4.8 | 4.5 | 4.5 | 4.5 | 62.0 | | |
| 64.0 | | | | 62.3 m/61 | 5.5 | 5.3 | 5.0 | 4.6 | 4.4 | 4.3 | 4.0 | 4.0 | 4.0 | 64.0 | |
| 66.0 | | | | | 65.0 m/53 | 4.8 | 4.5 | 4.2 | 4.0 | 3.8 | 3.5 | 3.5 | 3.5 | 66.0 | |
| 68.0 | | | | | | 67.6 m/45 | 4.1 | 3.7 | 3.5 | 3.3 | 3.3 | 3.2 | 3.2 | 68.0 | |
| 70.0 | | | | | | | 3.7 | 3.3 | 3.1 | 2.9 | 2.9 | 2.4 | 2.4 | 70.0 | |
| 72.0 | | | | | | | | 70.2 m/38 | 2.9 | 2.7 | 2.5 | 2.5 | 2.5 | 72.0 | |
| 74.0 | | | | | | | | | 72.9 m/28 | 2.4 | | | 74.0 | | |
| Reeves | 7 | 6 | 6 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | Reeves | |

جرثقیل ۲۳۰ تن Manitowoc



RIG RACOCRANE

| | |
|-----------|--------------------------|
| Manitowoc | کارخانه سازنده |
| 4100 | مدل |
| 1970 | سال ساخت |
| ۲۳۰ تن | حداکثر قدرت باربرداری |
| ۶۰ متر | طول بو |
| ۴۰ متر | طول جیب |
| آمریکا | کشور سازنده |



SGS

IR11/011



SGS

OHSAS 18001



SGS

ISO 9001



SGS

ISO 14001

جرثقيل ٢٣٠ تون



خط ویژه: ۰۲۱-۸۴۳۱۶-۰۲۱ (خط) فکس: ۰۲۱-۸۸۷۱ ۵۱ ۶۰

میدان آزادی، خیابان احمد قمیر(پخارست)، خیابان سیزدهم بیلک، ۱، طبقه ۱، واحد ۱

LIFTCRANE CAPACITIES - 4100W SERIES 2
BOOM NO. 22C WITH OPEN THROAT TOP, CONTINUED.
SEE CONDITIONS ON FRONT PAGE

| BOOM LGTH FEET | OPER. RAD. FEET | BOOM ANG DEG. | BOOM POINT ELEV. | CAPACITY: CRAWLERS EXTENDED |
|----------------------|-----------------------|---------------------|------------------------|-----------------------------------|
| 2 | 38 | 81.5 | 234.5 | 132,900 |
| | 40 | 81.0 | 234.2 | 125,200 |
| | 45 | 79.7 | 233.3 | 114,500 |
| | 50 | 78.5 | 232.4 | 98,600 |
| | 55 | 77.2 | 231.3 | 86,100 |
| | 60 | 75.9 | 230.1 | 76,100 |
| | 65 | 74.6 | 228.8 | 67,800 |
| | 70 | 73.3 | 227.3 | 60,900 |
| | 75 | 72.0 | 225.8 | 55,000 |
| | 80 | 70.7 | 224.1 | 50,000 |
| 3 | 85 | 69.4 | 222.3 | 45,600 |
| | 90 | 68.0 | 220.3 | 41,700 |
| | 95 | 66.7 | 218.2 | 38,400 |
| | 100 | 65.3 | 216.0 | 35,300 |
| | 105 | 64.0 | 213.6 | 32,600 |
| 0 | 110 | 62.6 | 211.1 | 30,200 |
| | 115 | 61.1 | 208.4 | 28,000 |
| | 120 | 59.7 | 205.6 | 26,000 |
| | 125 | 58.3 | 202.6 | 24,100 |
| | 130 | 56.8 | 199.4 | 22,400 |
| 1 | 135 | 55.3 | 196.0 | 20,900 |
| | 140 | 53.8 | 192.5 | 19,400 |
| | 145 | 52.2 | 188.7 | 18,100 |
| | 150 | 50.6 | 184.7 | 16,900 |
| | 155 | 49.0 | 180.5 | 15,700 |
| 2 | 160 | 47.3 | 176.0 | 14,700 |
| | 165 | 45.6 | 171.3 | 13,600 |
| | 170 | 43.8 | 166.2 | 12,700 |
| | 175 | 42.0 | 160.8 | 11,800 |
| | 180 | 40.1 | 155.1 | 11,000 |
| 3 | 185 | 38.1 | 148.9 | 10,200 |
| | 190 | 36.0 | 142.3 | 9,400 |
| | 195 | 33.9 | 135.1 | 8,700 |
| | 200 | 31.6 | 127.3 | 8,100 |
| | 205 | 29.1 | 118.8 | 7,400 |
| | 210 | 26.4 | 109.3 | 6,800 |
| 4 | 40 | 81.4 | 244.3 | 123,400 |
| | 45 | 80.2 | 243.5 | 112,600 |
| | 50 | 78.9 | 242.6 | 98,100 |
| | 55 | 77.7 | 241.5 | 85,600 |
| | 60 | 76.5 | 240.4 | 75,600 |
| 5 | 65 | 75.3 | 239.1 | 67,300 |
| | 70 | 74.0 | 237.7 | 60,400 |
| | 75 | 72.8 | 236.3 | 54,500 |
| | 80 | 71.5 | 234.6 | 49,500 |
| | 85 | 70.3 | 232.9 | 45,100 |
| 6 | 90 | 69.0 | 231.1 | 41,200 |
| | 95 | 67.7 | 229.1 | 37,800 |
| | 100 | 66.4 | 227.0 | 34,800 |
| | 105 | 65.1 | 224.7 | 32,100 |
| | 110 | 63.8 | 222.3 | 29,700 |
| 7 | 115 | 62.5 | 219.8 | 27,400 |
| | 120 | 61.1 | 217.1 | 25,400 |
| | 125 | 59.7 | 214.3 | 23,600 |
| | 130 | 58.3 | 211.3 | 21,900 |
| | 135 | 56.9 | 208.1 | 20,300 |
| 8 | 140 | 55.5 | 204.7 | 18,900 |
| | 145 | 54.0 | 201.2 | 17,600 |
| | 150 | 52.5 | 197.5 | 16,300 |
| | 155 | 51.0 | 193.5 | 15,200 |
| | 160 | 49.5 | 189.4 | 14,100 |
| 9 | 165 | 47.9 | 185.0 | 13,100 |
| | 170 | 46.2 | 180.3 | 12,200 |
| | 175 | 44.6 | 175.4 | 11,300 |
| | 180 | 42.8 | 170.2 | 10,400 |
| | 185 | 41.0 | 164.6 | 9,600 |
| 10 | 190 | 39.2 | 158.7 | 8,900 |
| | 195 | 37.3 | 152.3 | 8,200 |
| | 200 | 35.2 | 145.5 | 7,500 |
| | 205 | 33.1 | 138.1 | 6,700 |
| | 210 | 30.9 | 130.1 | 6,000 |

| BOOM LGTH FEET | OPER. RAD. FEET | BOOM ANG DEG. | BOOM POINT ELEV. | CAPACITY: CRAWLERS EXTENDED |
|----------------------|-----------------------|---------------------|------------------------|-----------------------------------|
| 2 | 45 | 80.6 | 253.6 | 106,600 |
| | 50 | 79.4 | 252.7 | 97,800 |
| | 55 | 78.2 | 251.7 | 85,200 |
| | 60 | 77.1 | 250.6 | 75,200 |
| | 65 | 75.9 | 249.4 | 66,900 |
| | 70 | 74.7 | 248.1 | 60,000 |
| | 75 | 73.5 | 246.7 | 54,100 |
| | 80 | 72.3 | 245.2 | 49,100 |
| | 85 | 71.1 | 243.5 | 44,700 |
| | 90 | 69.9 | 241.7 | 40,800 |
| 3 | 95 | 68.7 | 239.8 | 37,400 |
| | 100 | 67.4 | 237.8 | 34,400 |
| | 105 | 66.2 | 235.7 | 31,700 |
| | 110 | 64.9 | 233.4 | 29,300 |
| | 115 | 63.6 | 231.0 | 27,100 |
| 4 | 120 | 62.4 | 228.5 | 25,000 |
| | 125 | 61.1 | 225.8 | 23,200 |
| | 130 | 59.7 | 222.9 | 21,500 |
| | 135 | 58.4 | 219.9 | 20,000 |
| | 140 | 57.0 | 216.8 | 18,500 |
| 5 | 145 | 55.7 | 213.4 | 17,200 |
| | 150 | 54.3 | 209.9 | 16,000 |
| | 155 | 52.8 | 206.2 | 14,800 |
| | 160 | 51.4 | 202.4 | 13,700 |
| | 165 | 49.9 | 198.3 | 12,700 |
| 6 | 170 | 48.4 | 193.9 | 11,800 |
| | 175 | 46.8 | 189.4 | 10,900 |
| | 180 | 45.3 | 184.5 | 10,100 |
| | 185 | 43.6 | 179.4 | 9,300 |
| | 190 | 41.9 | 174.0 | 8,500 |
| 7 | 195 | 40.2 | 168.3 | 7,800 |
| | 200 | 38.4 | 162.2 | 7,000 |
| | 205 | 36.5 | 155.7 | 6,200 |
| | 210 | 34.5 | 148.6 | 5,500 |
| | 45 | 80.9 | 263.7 | 104,800 |
| 8 | 50 | 79.8 | 262.9 | 95,700 |
| | 55 | 78.7 | 261.9 | 84,700 |
| | 60 | 77.6 | 260.9 | 74,700 |
| | 65 | 76.4 | 259.7 | 66,400 |
| | 70 | 75.3 | 258.5 | 59,500 |
| 9 | 75 | 74.2 | 257.1 | 53,600 |
| | 80 | 73.0 | 255.6 | 48,500 |
| | 85 | 71.8 | 254.1 | 44,100 |
| | 90 | 70.7 | 252.4 | 40,300 |
| | 95 | 69.5 | 250.6 | 36,900 |
| 10 | 100 | 68.3 | 248.6 | 33,900 |
| | 105 | 67.1 | 246.6 | 31,100 |
| | 110 | 65.9 | 244.4 | 28,700 |
| | 115 | 64.7 | 242.1 | 26,500 |
| | 120 | 63.5 | 239.7 | 24,500 |
| 11 | 125 | 62.3 | 237.1 | 22,600 |
| | 130 | 61.0 | 234.4 | 20,900 |
| | 135 | 59.7 | 231.6 | 19,400 |
| | 140 | 58.5 | 228.6 | 17,900 |
| | 145 | 57.2 | 225.4 | 16,600 |
| 12 | 150 | 55.8 | 222.1 | 15,400 |
| | 155 | 54.5 | 218.7 | 14,200 |
| | 160 | 53.1 | 215.0 | 13,100 |
| | 165 | 51.7 | 211.2 | 12,100 |
| | 170 | 50.3 | 207.1 | 11,200 |
| 13 | 175 | 48.9 | 202.9 | 10,300 |
| | 180 | 47.4 | 198.4 | 9,500 |
| | 185 | 45.9 | 193.7 | 8,700 |
| | 190 | 44.3 | 188.7 | 7,900 |
| | 195 | 42.7 | 183.4 | 7,000 |
| 14 | 200 | 41.1 | 177.8 | 6,200 |
| | 205 | 39.4 | 171.9 | 5,400 |
| | 210 | 37.6 | 165.6 | 4,700 |

SEE CONDITIONS ON REVERSE SIDE

| BOOM LENGTH FT | OPER. RAD. FT | BOOM ANG. DEG. | BOOM POINT ELEV. | CAPACITY CRAWLERS EXTENDED | BOOM LENGTH FT | OPER. RAD. FT | BOOM ANG. DEG. | BOOM POINT ELEV. | CAPACITY CRAWLERS EXTENDED | BOOM LENGTH FT | OPER. RAD. FT | BOOM ANG. DEG. | BOOM POINT ELEV. | CAPACITY CRAWLERS EXTENDED |
|----------------|---------------|----------------|------------------|----------------------------|----------------|---------------|----------------|------------------|----------------------------|----------------|---------------|----------------|------------------|----------------------------|
| 14 | 80.6 | 112.3 | 29,600 | | 16 | 81.1 | 184.8 | 180,000 | | 24 | 174.2 | 31.2 | 10.7 | 13,300 |
| 14 | 79.5 | 113.2 | 28,600 | | 16 | 80.4 | 184.3 | 174,100 | | 24 | 175.2 | 31.0 | 10.5 | 13,300 |
| 16 | 78.5 | 114.8 | 26,300 | | 16 | 81.4 | 184.3 | 160,100 | | 24 | 176.2 | 31.6 | 10.3 | 10,900 |
| 18 | 77.4 | 115.3 | 23,400 | | 18 | 79.7 | 184.8 | 148,300 | | 24 | 177.2 | 32.2 | 10.1 | 10,900 |
| 20 | 76.3 | 115.9 | 21,500 | | 20 | 78.1 | 183.4 | 137,900 | | 24 | 178.2 | 32.8 | 10.0 | 10,900 |
| 11 | 75.3 | 124.4 | 19,300 | | 22 | 25.8 | 68.0 | 22,000 | | 24 | 179.2 | 33.2 | 10.7 | 13,300 |
| 14 | 74.2 | 122.2 | 17,100 | | 22 | 26.7 | 68.4 | 23,500 | | 24 | 180.2 | 33.0 | 10.5 | 13,300 |
| 16 | 73.1 | 120.8 | 15,100 | | 22 | 27.7 | 67.3 | 21,000 | | 24 | 181.2 | 32.8 | 10.3 | 10,900 |
| 18 | 72.0 | 118.6 | 13,100 | | 22 | 28.7 | 65.4 | 19,500 | | 24 | 182.2 | 32.6 | 10.1 | 10,900 |
| 20 | 70.9 | 117.2 | 11,600 | | 22 | 29.7 | 63.6 | 18,000 | | 24 | 183.2 | 32.3 | 10.0 | 10,900 |
| 11 | 70.3 | 93.0 | 66,600 | | 24 | 28.1 | 63.1 | 19,600 | | 24 | 184.2 | 27.2 | 11.7 | 14,600 |
| 14 | 68.1 | 109.1 | 120,100 | | 24 | 29.1 | 64.0 | 17,100 | | 24 | 185.2 | 26.9 | 11.5 | 14,600 |
| 16 | 66.9 | 106.2 | 104,200 | | 24 | 30.1 | 64.4 | 15,600 | | 24 | 186.2 | 26.7 | 11.3 | 14,600 |
| 18 | 65.8 | 104.1 | 91,800 | | 24 | 31.1 | 64.8 | 14,100 | | 24 | 187.2 | 26.4 | 11.1 | 14,600 |
| 20 | 65.3 | 102.1 | 81,400 | | 24 | 32.1 | 65.2 | 12,600 | | 24 | 188.2 | 26.2 | 11.0 | 14,600 |
| 22 | 64.1 | 98.3 | 75,600 | | 24 | 33.1 | 65.6 | 11,100 | | 24 | 189.2 | 25.9 | 10.9 | 14,600 |
| 79 | 53.1 | 95.0 | 66,600 | | 24 | 34.1 | 66.0 | 9,600 | | 24 | 190.2 | 25.6 | 11.0 | 14,600 |
| 75 | 49.8 | 91.4 | 54,900 | | 24 | 35.1 | 66.4 | 8,100 | | 24 | 191.2 | 25.4 | 10.8 | 14,600 |
| 80 | 46.5 | 86.4 | 43,400 | | 24 | 36.1 | 66.8 | 6,600 | | 24 | 192.2 | 25.2 | 10.6 | 14,600 |
| 84 | 43.2 | 81.4 | 31,600 | | 24 | 37.1 | 67.2 | 5,100 | | 24 | 193.2 | 25.0 | 10.4 | 14,600 |
| 90 | 38.6 | 75.4 | 20,600 | | 24 | 38.1 | 67.6 | 3,600 | | 24 | 194.2 | 24.8 | 10.2 | 14,600 |
| 93 | 34.2 | 68.8 | 44,400 | | 24 | 39.1 | 68.0 | 2,100 | | 24 | 195.2 | 24.6 | 10.0 | 14,600 |
| 100 | 29.7 | 60.7 | 41,400 | | 24 | 40.1 | 68.4 | 700 | | 24 | 196.2 | 24.4 | 9.8 | 14,600 |
| 104 | 25.4 | 56.6 | 35,700 | | 24 | 41.1 | 68.8 | 500 | | 24 | 197.2 | 24.2 | 9.6 | 14,600 |
| 110 | 19.5 | 48.4 | 23,900 | | 24 | 42.1 | 69.2 | 300 | | 24 | 198.2 | 24.0 | 9.4 | 14,600 |
| 22 | 81.4 | 125.0 | 291,000 | | 24 | 43.1 | 69.6 | 18,600 | | 24 | 199.2 | 23.8 | 9.2 | 14,600 |
| 24 | 80.4 | 123.5 | 263,700 | | 24 | 44.1 | 69.0 | 17,100 | | 24 | 200.2 | 23.6 | 9.0 | 14,600 |
| 26 | 79.4 | 123.0 | 239,000 | | 24 | 45.1 | 68.4 | 15,600 | | 24 | 201.2 | 23.4 | 8.8 | 14,600 |
| 28 | 77.3 | 122.5 | 212,600 | | 24 | 46.1 | 67.8 | 14,100 | | 24 | 202.2 | 23.2 | 8.6 | 14,600 |
| 30 | 75.3 | 121.1 | 192,100 | | 24 | 47.1 | 67.2 | 12,600 | | 24 | 203.2 | 23.0 | 8.4 | 14,600 |
| 32 | 74.5 | 120.6 | 178,600 | | 24 | 48.1 | 66.6 | 11,100 | | 24 | 204.2 | 22.8 | 8.2 | 14,600 |
| 34 | 73.5 | 120.1 | 165,600 | | 24 | 49.1 | 66.0 | 9,600 | | 24 | 205.2 | 22.6 | 8.0 | 14,600 |
| 36 | 72.5 | 119.6 | 153,600 | | 24 | 50.1 | 65.4 | 8,100 | | 24 | 206.2 | 22.4 | 7.8 | 14,600 |
| 40 | 70.9 | 119.1 | 140,600 | | 24 | 51.1 | 64.8 | 6,600 | | 24 | 207.2 | 22.2 | 7.6 | 14,600 |
| 45 | 70.0 | 99.8 | 119,500 | | 24 | 52.1 | 64.2 | 5,100 | | 24 | 208.2 | 22.0 | 7.4 | 14,600 |
| 48 | 67.5 | 97.5 | 107,700 | | 24 | 53.1 | 63.6 | 3,600 | | 24 | 209.2 | 21.8 | 7.2 | 14,600 |
| 50 | 65.8 | 93.8 | 91,900 | | 24 | 54.1 | 63.0 | 2,100 | | 24 | 210.2 | 21.6 | 7.0 | 14,600 |
| 53 | 62.4 | 90.1 | 75,600 | | 24 | 55.1 | 62.4 | 1,100 | | 24 | 211.2 | 21.4 | 6.8 | 14,600 |
| 55 | 60.2 | 85.8 | 61,100 | | 24 | 56.1 | 61.8 | 100 | | 24 | 212.2 | 21.2 | 6.6 | 14,600 |
| 60 | 57.5 | 71.1 | 47,100 | | 24 | 57.1 | 61.2 | 50 | | 24 | 213.2 | 21.0 | 6.4 | 14,600 |
| 65 | 52.4 | 50.4 | 31,100 | | 24 | 58.1 | 60.6 | 30 | | 24 | 214.2 | 20.8 | 6.2 | 14,600 |
| 70 | 50.6 | 107.2 | 66,200 | | 24 | 59.1 | 60.0 | 20 | | 24 | 215.2 | 20.6 | 6.0 | 14,600 |
| 75 | 48.7 | 104.8 | 56,400 | | 24 | 60.1 | 59.4 | 10 | | 24 | 216.2 | 20.4 | 5.8 | 14,600 |
| 80 | 47.1 | 93.4 | 43,600 | | 24 | 61.1 | 58.8 | 10 | | 24 | 217.2 | 20.2 | 5.6 | 14,600 |
| 84 | 44.2 | 80.7 | 30,700 | | 24 | 62.1 | 58.2 | 5 | | 24 | 218.2 | 20.0 | 5.4 | 14,600 |
| 88 | 40.7 | 65.2 | 18,800 | | 24 | 63.1 | 57.6 | 5 | | 24 | 219.2 | 19.8 | 5.2 | 14,600 |
| 93 | 36.9 | 52.5 | 10,900 | | 24 | 64.1 | 57.0 | 5 | | 24 | 220.2 | 19.6 | 5.0 | 14,600 |
| 97 | 33.3 | 41.2 | 5,100 | | 24 | 65.1 | 56.4 | 5 | | 24 | 221.2 | 19.4 | 4.8 | 14,600 |
| 100 | 32.0 | 38.8 | 3,100 | | 24 | 66.1 | 55.8 | 5 | | 24 | 222.2 | 19.2 | 4.6 | 14,600 |
| 105 | 29.7 | 31.8 | 1,100 | | 24 | 67.1 | 55.2 | 5 | | 24 | 223.2 | 19.0 | 4.4 | 14,600 |
| 108 | 26.9 | 26.0 | 1,100 | | 24 | 68.1 | 54.6 | 5 | | 24 | 224.2 | 18.8 | 4.2 | 14,600 |
| 113 | 22.3 | 32.8 | 5,100 | | 24 | 69.1 | 54.0 | 5 | | 24 | 225.2 | 18.6 | 4.0 | 14,600 |
| 24 | 81.2 | 125.5 | 250,000 | | 24 | 70.1 | 53.4 | 18,600 | | 24 | 226.2 | 18.4 | 3.8 | 14,600 |
| 26 | 80.3 | 124.0 | 228,700 | | 24 | 71.1 | 52.8 | 17,100 | | 24 | 227.2 | 18.2 | 3.6 | 14,600 |
| 28 | 79.4 | 122.5 | 204,400 | | 24 | 72.1 | 52.2 | 15,600 | | 24 | 228.2 | 18.0 | 3.4 | 14,600 |
| 30 | 78.5 | 121.0 | 181,800 | | 24 | 73.1 | 51.6 | 14,100 | | 24 | 229.2 | 17.8 | 3.2 | 14,600 |
| 32 | 77.6 | 119.9 | 152,300 | | 24 | 74.1 | 51.0 | 12,600 | | 24 | 230.2 | 17.6 | 3.0 | 14,600 |
| 34 | 76.7 | 118.5 | 133,300 | | 24 | 75.1 | 50.4 | 11,100 | | 24 | 231.2 | 17.4 | 2.8 | 14,600 |
| 36 | 74.8 | 117.1 | 120,600 | | 24 | 76.1 | 50.8 | 9,600 | | 24 | 232.2 | 17.2 | 2.6 | 14,600 |
| 38 | 73.9 | 115.9 | 104,600 | | 24 | 77.1 | 51.2 | 8,100 | | 24 | 233.2 | 17.0 | 2.4 | 14,600 |
| 40 | 71.6 | 104.4 | 119,300 | | 24 | 78.1 | 51.6 | 6,600 | | 24 | 234.2 | 16.8 | 2.2 | 14,600 |
| 45 | 69.3 | 126.8 | 103,400 | | 24 | 79.1 | 51.0 | 5,100 | | 24 | 235.2 | 16.6 | 2.0 | 14,600 |
| 50 | 66.9 | 124.8 | 91,700 | | 24 | 80.1 | 50.4 | 3,600 | | 24 | 236.2 | 16.4 | 1.8 | 14,600 |
| 55 | 64.5 | 124.3 | 81,000 | | 24 | 81.1 | 50.8 | 2,100 | | 24 | 237.2 | 16.2 | 1.6 | 14,600 |
| 60 | 62.0 | 121.8 | 71,600 | | 24 | 82.1 | 51.2 | 1,100 | | 24 | 238.2 | 16.0 | 1.4 | 14,600 |
| 65 | 59.5 | 119.0 | 65,900 | | 24 | 83.1 | 51.6 | 1,100 | | 24 | 239.2 | 15.8 | 1.2 | 14,600 |
| 73 | 36.9 | 115.9 | 60,000 | | 24 | 84.1 | 52.0 | 31,600 | | 24 | 240.2 | 15.6 | 1.0 | 14,600 |
| 80 | 34.2 | 108.7 | 55,000 | | 24 | 85.1 | 52.4 | 29,400 | | 24 | 241.2 | 15.4 | 0.8 | 14,600 |
| 85 | 31.3 | 108.7 | 50,700 | | 24 | 86.1 | 52.8 | 27,200 | | 24 | 242.2 | 15.2 | 0.6 | 14,600 |
| 90 | 48.6 | 104.4 | 46,800 | | 24 | 87.1 | 53.2 | 25,000 | | 24 | 243.2 | 15.0 | 0.4 | 14,600 |
| 93 | 45.6 | 94.8 | 43,500 | | 24 | 88.1 | 53.6 | 24,000 | | 24 | 244.2 | 14.8 | 0.2 | 14,600 |
| 100 | 42.4 | 94.7 | 94,700 | | 24 | 89.1 | 54.0 | 22,600 | | 24 | 245.2 | 14.6 | 0.0 | 14,600 |
| 103 | 40.0 | 88.8 | 78,000 | | 24 | 90.1 | 54.4 | 21,300 | | 24 | 246.2 | 14.4 | 0.0 | 14,600 |
| 115 | 31.4 | 82.3 | 33,100 | | 24 | 91.1 | 54.8 | 19,900 | | 24 | 247.2 | 14.2 | 0.0 | 14,600 |
| 120 | 26.8 | 65.7 | 21,100 | | 24 | 92.1 | 55.2 | 18,600 | | 24 | 248.2 | 14.0 | 0.0 | 14,600 |
| 125 | 21.4 | 54.5 | 29,300 | | 24 | 93.1 | 55.6 | 17,300 | | 24 | 249.2 | 13.8 | 0.0 | 14,600 |
| 26 | 81.0 | 145.4 | 239,700 | | 24 | 94.1 | 56.0 | 16,900 | | 24 | 250.2 | 13.6 | 0.0 | 14,600 |
| 28 | 80.1 | 144.9 | 230,600 | | 24 | 95.1 | 56.4 | 15,600 | | 24 | 251.2 | 13.4 | 0.0 | 14,600 |
| 30 | 79.3 | 144.6 | 211,300 | | 24 | 96.1 | 56.8 | 14,300 | | 24 | 252.2 | 13.2 | 0.0 | 14,600 |
| 32 | 78.4 | | | | | | | | | | | | | |



LIFTCRANE CAPACITIES

MEETS ANSI B30.5
REQUIREMENTS

BOOM NO. 22C WITH OPEN THROAT TOP
146,400 LB. CRANE COUNTERWEIGHT
60,000 LB. CARBODY COUNTERWEIGHT
26'6" CRAWLERS EXTENDED

WARNING: This chart will apply only when
two 12,000 lb. side ctwts. and two 30,000 lb.
carbody ctwts. bear MEC registered Serial Numbers.

LIFTING CAPACITIES: Capacities for various boom lengths and operating radii may be based on percent of tipping, strength of structural components, operating speeds and other factors.

Capacities are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are shown by shaded areas.

Capacities are shown in pounds. Deduct 1200 pounds from capacities listed when single sheave upper boom point is attached and 1500 pounds when two sheave upper boom point is attached. To comply with B30.5 requirements, upper boompoinnt cannot be used on the 260 ft. boom. Weight of jib, (see chart A), all load blocks, hooks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., is considered part of the main boom load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate in a level position on a firm surface with crawlers fully extended and gantry in working position and be rigged in accordance with and under conditions referred to in rigging drawing No. 190693 and load line specification chart No. 6592-A.

| HOIST REEVING FOR MAIN LOAD BLOCK | | | | | | |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| No. Parts Of Line | 1 | 2 | 3 | 4 | 5 | |
| Max Load - Lbs. | 32,500 | 65,000 | 97,500 | 130,000 | 162,500 | 195,000 |
| No. Parts of Line | 7 | 8 | 9 | 10 | 11 | 12 |
| Max. Load - Lbs. | 227,500 | 260,000 | 292,500 | 325,000 | 357,500 | 400,000 |
| No. Parts of Line | 13 | | | | | |
| Max. Load - Lbs. | 430,000 | | | | | |

| BOOM LGH | OPR RAD. FEET | BOOM ANG DEC. | BOOM POINT ELEV. | CAPACITY: CRAWLERS EXTENDED |
|-------------|---------------------|---------------------|------------------------|-----------------------------------|
| 16.5 | 79.7 | 75.9 | 460,000 | |
| 17 | 79.3 | 75.8 | 400,000 | |
| 18 | 78.5 | 75.6 | 380,100 | |
| 19 | 77.6 | 75.4 | 362,100 | |
| 20 | 76.8 | 75.1 | 347,300 | |
| 22 | 75.1 | 74.6 | 319,600 | |
| 24 | 73.4 | 74.1 | 293,400 | |
| 26 | 71.7 | 73.5 | 266,100 | |
| 28 | 69.9 | 72.8 | 237,500 | |
| 30 | 68.2 | 72.0 | 214,300 | |
| 32 | 66.4 | 71.2 | 195,100 | |
| 34 | 64.6 | 70.2 | 178,900 | |
| 36 | 62.8 | 69.3 | 165,200 | |
| 38 | 60.9 | 68.2 | 153,300 | |
| 40 | 59.1 | 67.0 | 143,000 | |
| 45 | 54.1 | 63.7 | 122,100 | |
| 48 | 48.9 | 59.8 | 106,300 | |
| 55 | 43.2 | 54.9 | 93,900 | |
| 60 | 36.9 | 49.0 | 84,000 | |
| 65 | 29.4 | 41.3 | 75,800 | |
| 70 | 19.5 | 30.3 | 61,900 | |

| BOOM LGH FEET | OPR RAD. FEET | BOOM ANG DEC. | BOOM POINT ELEV. | CAPACITY: CRAWLERS EXTENDED |
|---------------------|---------------------|---------------------|------------------------|-----------------------------------|
| 17 | 80.6 | 85.9 | 392,800 | |
| 18 | 79.9 | 85.8 | 378,900 | |
| 19 | 79.2 | 85.6 | 361,800 | |
| 20 | 78.5 | 85.4 | 346,100 | |
| 22 | 77.0 | 84.9 | 318,400 | |
| 24 | 75.5 | 84.5 | 292,500 | |
| 26 | 74.0 | 83.9 | 265,600 | |
| 28 | 72.5 | 83.3 | 237,000 | |
| 30 | 71.0 | 82.7 | 213,800 | |
| 32 | 69.5 | 81.9 | 194,600 | |
| 34 | 68.0 | 81.2 | 178,500 | |
| 36 | 66.4 | 80.4 | 165,700 | |
| 38 | 64.8 | 79.4 | 152,800 | |
| 40 | 63.3 | 78.4 | 142,400 | |
| 45 | 59.2 | 75.7 | 121,500 | |
| 50 | 54.9 | 72.5 | 105,700 | |
| 54 | 49.4 | 68.6 | 93,300 | |
| 60 | 45.6 | 63.1 | 82,000 | |
| 65 | 40.3 | 58.8 | 75,200 | |
| 70 | 34.4 | 52.2 | 68,300 | |
| 75 | 27.4 | 43.9 | 52,500 | |
| 80 | 18.2 | 32.0 | 53,900 | |

Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions & physical machine depreciation.

OPERATOR RADIUS: Operating is the horizontal distance from the axis of rotation to the center of vertical hoist line or load block with the load freely suspended. Add 14" to boom point radius for radius of sheave when using single part hoist line.

Boom angle is the angle between horizontal and centerline of boom butt and inserts and is an indication of operating radius. In all cases, operating radius shall govern capacity.

BOOM POINT ELEVATION: Boom point elevation, in feet, is the vertical distance from ground level to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with 26'6" extendible crawlers, 48" treads, 17' retractable gantry, 12 part boom hoist reeving, four 1 3/8" boom pendants, 1st cwt. 41,900 lbs., 2nd cwt. 41,500 lbs., 3rd cwt. 39,000 lbs., two 12,000 lbs. side ctwl's. and two 30,000 lbs. carbody ctwt's.

LOAD AND WHIP LINE SPECIFICATIONS

LOADLINE: 1-1/8" - 6 x 31 Warrington-Seale, Extra Improved Flaw Steel, Regular Lay, IWRC, Minimum Breaking Strength 65 Ton, (Approx. Weight Per Ft. in Lbs. 2.34)

WHIPLINE: 1-1/8" - Warrington-Seale, Improved Flaw Steel, Regular Lay, IWRC, Minimum Breaking Strength 36.5 Ton, Maximum Load - 28,300 Lbs. Per Line, (Approx. Weight Per Ft. in Lbs. 2.34)

| OVERHEAD BLOCK/CRAWLERS | OVERHEAD EXTENDED CRAWLERS | MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED | | DISTANCE CAPACITIES WHEN JIB IS ATTACHED |
|----------------------------|-------------------------------|---|----------------------|--|
| | | BOOM LGH NO.123 | JIB LGH NO.123 | |
| 260' | -- | 260' | -- | 30' 3,000 lbs. |
| 250' | -- | 250' | -- | 40' 3,600 lbs. |
| 240' | 40' | 240' | 40' | 50' 4,200 lbs. |
| 230' | 60' | 230' | 60' | 60' 4,900 lbs. |

Load Block, hook and weight ball on ground at start.

FOR JIB CAPACITIES, CONSULT JIB CHART.

| BOOM LGH FEET | OPR RAD. FEET | BOOM ANG DEC. | BOOM POINT ELEV. | CAPACITY: CRAWLERS EXTENDED |
|---------------------|---------------------|---------------------|------------------------|-----------------------------------|
| 15 | 81.1 | 95.9 | 455,400 | 327,900 |
| 19 | 80.4 | 95.7 | 348,900 | 327,100 |
| 20 | 79.8 | 95.6 | 326,900 | 316,200 |
| 25 | 78.5 | 95.5 | 217,400 | 290,800 |
| 26 | 77.2 | 94.1 | 201,700 | 263,900 |
| 26 | 75.9 | 94.3 | 204,800 | 236,200 |
| 26 | 74.5 | 93.5 | 186,600 | 217,700 |
| 28 | 72.5 | 93.2 | 213,400 | 197,700 |
| 32 | 71.0 | 92.5 | 164,700 | 177,500 |
| 34 | 70.5 | 91.9 | 118,000 | 153,700 |
| 36 | 69.2 | 91.4 | 101,200 | 151,000 |
| 38 | 67.8 | 90.9 | 100,500 | 141,400 |
| 40 | 66.4 | 89.5 | 100,200 | 120,500 |
| 45 | 62.9 | 87.1 | 121,100 | 103,000 |
| 50 | 59.3 | 84.4 | 108,200 | 92,300 |
| 55 | 55.5 | 81.2 | 92,800 | 82,400 |
| 60 | 51.5 | 77.5 | 82,000 | 74,100 |
| 65 | 47.5 | 74.1 | 74,700 | 67,200 |
| 70 | 42.8 | 69.7 | 62,800 | 61,300 |
| 75 | 37.9 | 62.3 | 62,000 | 56,400 |
| 80 | 32.4 | 55.2 | 57,000 | 52,000 |
| 85 | 28.8 | 51.6 | 56,600 | 48,200 |
| 90 | 17.1 | 33.3 | 55,900 | 44,900 |

CAUTION! CHECK AMOUNT OF COUNTERWEIGHT ON MACHINE BEFORE USE OF THIS CHART.

© MANITOWOC 1977 These load charts are intended for informational purposes only. They were derived from manufacturers sales information which may not be complete or machine specific. Not responsible for typographical errors.

جرثقیل ۲۴۵ تن زنجیری



RIG RACOCRANE

| | |
|----------|---------------------------|
| AMERICAN | کارخانه سازنده |
| 9310 | مدل |
| 1985 | سال ساخت |
| ۲۴۵ تن | حداکثر ظرفیت باربرداری |
| ۸۸ متر | طول بوم |
| ۲۰ متر | طول حیب |
| آمریکا | کشور سازنده |

جرثقيل ٢٥٠ تون



خط ویژه: ۰۲۱-۸۴۳۱۶ فکس: ۰۲۱-۸۸۷۱۵۱۶۰ (۰۳خط)

میدان آزادی، خیابان احمد فتحی (پخارست)، خیابان سیزدهم پلکان ۱، طبقه ۱، واحد ۱



SGS

IR11/011



SGS

CH11/0655



SGS

CH11/0653



SGS

CH11/0654

AMERICAN قن ٢٤٥ جرثقيل

LIFT CRANE RATINGS IN KILOGRAMS

With 77H Tubular Chord Boom with Hammerhead and "T-T" Counterweight

(63504 Kgs.)

| Boom Length (Meters) | Radius in Meters | Boom Angle Degrees | Lift Rating in Kilograms | | | Meters From Boom Point |
|----------------------|------------------|--------------------|--------------------------|----------------------|------------------------|------------------------|
| | | | Side Frames Retracted | Side Frames Extended | Meters From Boom Point | |
| 21.3 meters | 4.9 | 82.8 | 204,120 * | 23 | | |
| | 5.5 | 81.1 | 183,840 * | 23 | | |
| | 6.0 | 79.8 | 163,020 | 23 | | |
| | 7.0 | 77.1 | 124,660 | 23 | | |
| | 8.0 | 74.3 | 100,650 | 22 | | |
| | 9.0 | 71.5 | 84,230 | 22 | | |
| | 10.0 | 68.7 | 72,300 | 21 | | |
| | 11.0 | 65.8 | 63,180 | 21 | | |
| | 12.0 | 62.8 | 56,000 | 21 | | |
| | 13.0 | 59.7 | 44,180 | 20 | | |
| | 14.0 | 56.5 | 40,080 | 20 | | |
| | 15.0 | 53.2 | 36,640 | 19 | | |
| | 16.0 | 49.8 | 33,690 | 18 | | |
| | 17.0 | 46.1 | 31,190 | 17 | | |
| | 18.0 | 42.2 | 28,960 | 16 | | |
| | 19.0 | 37.9 | 27,000 | 15 | | |
| | 20.0 | 33.2 | 25,250 | 28,480 | 13 | |
| 24.4 meters | 5.2 | 82.9 | 186,010 * | 26 | | |
| | 6.0 | 81.1 | 162,990 | 26 | | |
| | 7.0 | 78.7 | 124,610 | 26 | | |
| | 8.0 | 76.3 | 100,580 | 26 | | |
| | 9.0 | 73.9 | 84,150 | 25 | | |
| | 10.0 | 71.4 | 72,220 | 25 | | |
| | 11.0 | 68.9 | 63,080 | 25 | | |
| | 12.0 | 66.4 | 48,930 | 24 | | |
| | 13.0 | 63.8 | 44,070 | 24 | | |
| | 14.0 | 61.2 | 39,980 | 24 | | |
| | 15.0 | 58.5 | 36,520 | 24 | | |
| | 16.0 | 55.6 | 33,580 | 24 | | |
| | 17.0 | 52.7 | 31,090 | 21 | | |
| | 18.0 | 49.7 | 28,860 | 20 | | |
| | 19.0 | 46.5 | 26,900 | 19 | | |
| 27.4 meters | 20.0 | 43.1 | 25,150 | 18 | | |
| | 22.0 | 35.5 | 22,190 | 19 | | |
| | 24.0 | 26.0 | 19,780 | 22,300 | 12 | |
| | 5.6 | 82.9 | 165,890 * | 29 | | |
| | 6.0 | 81.1 | 162,940 | 29 | | |
| | 7.0 | 80.0 | 124,530 | 29 | | |
| | 8.0 | 77.8 | 100,490 | 29 | | |
| | 9.0 | 75.7 | 84,050 | 28 | | |
| | 10.0 | 73.6 | 72,120 | 28 | | |
| | 11.0 | 71.4 | 54,890 | 28 | | |
| | 12.0 | 69.2 | 48,810 | 27 | | |
| | 13.0 | 66.9 | 43,960 | 27 | | |
| | 14.0 | 64.6 | 39,860 | 27 | | |
| | 15.0 | 62.3 | 36,400 | 26 | | |
| | 16.0 | 59.9 | 33,450 | 26 | | |
| | 17.0 | 57.5 | 30,980 | 25 | | |
| 30.5 meters | 18.0 | 54.9 | 28,750 | 24 | | |
| | 19.0 | 52.3 | 26,780 | 24 | | |
| | 20.0 | 49.6 | 25,040 | 23 | | |
| | 22.0 | 43.8 | 22,090 | 21 | | |
| | 24.0 | 37.3 | 19,670 | 22,200 | 18 | |
| | 26.0 | 29.5 | 17,660 | 19,940 | 15 | |
| | 6.0 | 82.8 | 149,350 * | 32 | | |
| | 7.0 | 81.0 | 124,440 | 32 | | |
| | 8.0 | 79.1 | 100,380 | 32 | | |
| | 9.0 | 77.2 | 83,930 | 32 | | |
| | 10.0 | 75.2 | 62,390 | 31 | | |
| | 11.0 | 73.6 | 54,740 | 31 | | |
| | 12.0 | 71.3 | 48,660 | 31 | | |
| | 13.0 | 69.3 | 43,810 | 30 | | |
| | 14.0 | 67.3 | 39,710 | 30 | | |
| | 15.0 | 65.3 | 36,260 | 30 | | |
| | 16.0 | 63.2 | 33,300 | 29 | | |
| | 17.0 | 61.0 | 30,840 | 28 | | |
| | 18.0 | 58.9 | 28,610 | 28 | | |
| 33.5 meters | 19.0 | 56.6 | 26,640 | 27 | | |
| | 20.0 | 54.3 | 24,900 | 27 | | |
| | 22.0 | 49.5 | 21,940 | 25 | | |
| | 24.0 | 44.3 | 19,530 | 23 | | |
| | 26.0 | 38.6 | 17,520 | 21 | | |
| | 28.0 | 31.9 | 15,890 | 18 | | |
| | 30.0 | 23.6 | 14,410 | 16,320 | 14 | |
| | 6.3 | 83.0 | 134,570 * | 35 | | |
| | 7.0 | 81.8 | 124,340 | 35 | | |
| | 8.0 | 80.1 | 100,260 | 35 | | |
| | 9.0 | 78.3 | 83,820 | 35 | | |
| | 10.0 | 76.6 | 62,250 | 34 | | |
| | 11.0 | 74.8 | 54,590 | 34 | | |
| | 12.0 | 73.1 | 48,510 | 34 | | |
| | 13.0 | 71.3 | 43,670 | 34 | | |
| | 14.0 | 69.5 | 39,570 | 33 | | |
| | 15.0 | 67.6 | 38,110 | 33 | | |
| | 16.0 | 65.8 | 33,150 | 32 | | |
| | 17.0 | 63.9 | 30,700 | 32 | | |
| | 18.0 | 62.0 | 28,470 | 31 | | |
| | 19.0 | 60.0 | 26,500 | 29,990 | 31 | |
| | 20.0 | 58.0 | 24,760 | 28,000 | 30 | |
| | 22.0 | 53.9 | 21,800 | 24,650 | 29 | |
| | 24.0 | 49.5 | 19,390 | 21,930 | 27 | |
| 45.7 meters | 7.8 | 83.0 | 83,090 * | 47 | | |
| | 8.0 | 82.7 | 83,090 * | 47 | | |
| | 9.0 | 81.5 | 71,490 | 47 | | |
| | 10.0 | 80.2 | 61,680 | 47 | | |
| | 11.0 | 78.9 | 53,990 | 47 | | |
| | 12.0 | 77.7 | 48,040 | 47 | | |
| | 13.0 | 76.4 | 43,070 | 46 | | |
| | 14.0 | 75.1 | 38,950 | 46 | | |
| | 15.0 | 73.8 | 35,480 | 46 | | |
| | 16.0 | 72.5 | 32,520 | 45 | | |
| | 17.0 | 71.2 | 30,100 | 45 | | |
| | 18.0 | 69.8 | 27,060 | 45 | | |
| | 19.0 | 68.5 | 25,890 | 44 | | |
| | 20.0 | 67.2 | 24,140 | 44 | | |
| | 22.0 | 64.4 | 21,180 | 43 | | |
| 54.9 meters | 24.0 | 61.6 | 18,760 | 42 | | |
| | 26.0 | 59.3 | 16,930 | 42 | | |
| | 28.0 | 57.1 | 15,190 | 42 | | |
| | 30.0 | 54.9 | 13,550 | 42 | | |
| | 32.0 | 52.4 | 12,290 | 40 | | |
| | 34.0 | 49.3 | 11,190 | 39 | | |
| | 36.0 | 46.1 | 10,210 | 37 | | |
| | 38.0 | 43.8 | 9,340 | 35 | | |
| | 40.0 | 39.7 | 8,570 | 33 | | |
| | 42.0 | 35.2 | 7,870 | 30 | | |
| | 44.0 | 30.8 | 7,240 | 27 | | |
| | 46.0 | 25.8 | 6,670 | 23 | | |
| | 48.0 | 19.5 | 6,140 | 20 | | |
| | 50.0 | 22.3 | 5,520 | 21 | | |
| 51.8 meters | 8.9 | 83.0 | 60,560 * | 56 | | |
| | 9.0 | 82.9 | 60,560 * | 56 | | |
| | 10.0 | 81.8 | 60,560 * | 56 | | |
| | 11.0 | 80.8 | 53,510 | 56 | | |
| | 12.0 | 79.7 | 47,580 | 56 | | |
| | 13.0 | 78.7 | 42,600 | 56 | | |
| | 14.0 | 77.6 | 38,470 | 55 | | |
| | 15.0 | 76.5 | 34,990 | 55 | | |
| | 16.0 | 75.5 | 32,010 | 55 | | |
| | 17.0 | 74.4 | 29,620 | 55 | | |
| | 18.0 | 73.3 | 27,380 | 54 | | |
| | 19.0 | 72.2 | 25,400 | 54 | | |
| | 20.0 | 71.1 | 23,650 | 54 | | |
| | 22.0 | 68.9 | 20,680 | 53 | | |
| 59.0 meters | 24.0 | 66.6 | 18,250 | 52 | | |
| | 26.0 | 64.3 | 16,240 | 51 | | |
| | 28.0 | 62.0 | 14,700 | 50 | | |
| | 30.0 | 59.6 | 13,240 | 49 | | |
| | 32.0 | 57.2 | 11,980 | 48 | | |
| | 34.0 | 54.6 | 10,870 | 47 | | |
| | 36.0 | 52.0 | 9,900 | 45 | | |
| | 38.0 | 49.3 | 9,030 | 43 | | |
| | 40.0 | 46.5 | 8,260 | 42 | | |
| | 42.0 | 43.5 | 7,560 | 40 | | |
| | 44.0 | 40.3 | 6,980 | 37 | | |
| | 46.0 | 37.0 | 6,350 | 35 | | |
| | 48.0 | 33.3 | 5,830 | 32 | | |



LIFT CRANE RATINGS IN KILOGRAMS (continued)

With 77H Tubular Chord Boom with Hammerhead and "T-T" Counterweight

(63504 Kgs.)

| Boom Length (Meters) | Radius in Meters | Boom Angle Degrees | Lift Rating in Kilograms | | Meters From Boom Point |
|----------------------|------------------|--------------------|--------------------------|----------------------|------------------------|
| | | | Side Frames Retracted | Side Frames Extended | |
| 54.9 meters (cont) | 50.0 | 29.2 | 5,350 | 6,400 | 28 |
| | 52.0 | 24.5 | 4,910 | 5,920 | 24 |
| | 54.0 | 18.7 | 4,500 | 5,470 | 19 |
| | 9.3 | 83.8 | 55,080 * | 55,080 * | 59 |
| | 10.0 | 82.3 | 55,080 * | 55,080 * | 59 |
| | 11.0 | 81.3 | 53,350 | 55,080 * | 59 |
| | 12.0 | 80.3 | 47,410 | 54,500 | 59 |
| | 13.0 | 79.3 | 42,430 | 48,650 | 59 |
| | 14.0 | 78.3 | 38,290 | 43,820 | 59 |
| | 15.0 | 77.3 | 34,810 | 39,780 | 58 |
| 57.9 meters | 16.0 | 76.2 | 32,030 | 36,550 | 58 |
| | 17.0 | 75.2 | 29,460 | 33,590 | 58 |
| | 18.0 | 74.2 | 27,210 | 31,020 | 58 |
| | 19.0 | 73.2 | 25,230 | 28,760 | 57 |
| | 20.0 | 72.1 | 23,480 | 26,770 | 57 |
| | 22.0 | 70.1 | 20,510 | 23,390 | 56 |
| | 24.0 | 67.9 | 18,080 | 20,650 | 56 |
| | 26.0 | 65.8 | 16,060 | 18,380 | 55 |
| | 28.0 | 63.6 | 14,530 | 16,950 | 54 |
| | 30.0 | 61.4 | 13,070 | 15,010 | 53 |
| | 32.0 | 59.1 | 11,810 | 13,590 | 52 |
| | 34.0 | 56.7 | 10,700 | 12,360 | 50 |
| | 36.0 | 54.3 | 9,720 | 11,280 | 49 |
| | 38.0 | 51.8 | 8,860 | 10,310 | 47 |
| | 40.0 | 49.3 | 8,080 | 9,450 | 46 |
| | 42.0 | 46.6 | 7,390 | 8,680 | 44 |
| | 44.0 | 43.8 | 6,750 | 7,980 | 42 |
| 59.8 meters | 46.0 | 40.8 | 6,180 | 7,340 | 40 |
| | 48.0 | 37.7 | 5,660 | 6,770 | 37 |
| | 50.0 | 34.3 | 5,180 | 6,240 | 34 |
| | 52.0 | 30.5 | 4,740 | 5,750 | 31 |
| | 54.0 | 26.3 | 4,330 | 5,300 | 27 |
| | 56.0 | 21.3 | 3,950 | 4,890 | 23 |
| | 9.7 | 82.9 | 49,770 * | 49,770 * | 62 |
| | 10.0 | 82.7 | 49,770 * | 49,770 * | 62 |
| | 11.0 | 81.7 | 49,770 * | 49,770 * | 62 |
| | 12.0 | 80.8 | 47,250 | 49,770 * | 62 |
| | 13.0 | 79.8 | 42,260 | 46,480 | 62 |
| | 14.0 | 78.9 | 38,120 | 43,660 | 62 |
| | 15.0 | 77.9 | 34,630 | 39,620 | 61 |
| | 16.0 | 76.9 | 31,830 | 36,380 | 61 |
| | 17.0 | 76.0 | 29,280 | 33,430 | 61 |
| 61.0 meters | 18.0 | 75.0 | 27,030 | 30,850 | 61 |
| | 19.0 | 74.0 | 25,060 | 28,590 | 60 |
| | 20.0 | 73.1 | 23,300 | 26,590 | 60 |
| | 22.0 | 71.1 | 20,320 | 23,210 | 60 |
| | 24.0 | 69.1 | 17,890 | 20,470 | 59 |
| | 26.0 | 67.1 | 15,870 | 18,200 | 58 |
| | 28.0 | 65.0 | 14,360 | 16,470 | 57 |
| | 30.0 | 62.9 | 12,900 | 14,830 | 56 |
| | 32.0 | 60.8 | 11,630 | 13,420 | 55 |
| | 34.0 | 58.5 | 10,520 | 12,190 | 54 |
| | 36.0 | 56.4 | 9,550 | 11,100 | 53 |
| | 38.0 | 54.1 | 8,680 | 10,130 | 51 |
| | 40.0 | 51.7 | 7,900 | 9,270 | 50 |
| | 42.0 | 49.3 | 7,210 | 8,500 | 48 |
| | 44.0 | 46.7 | 6,580 | 7,800 | 46 |
| | 46.0 | 44.1 | 6,010 | 7,170 | 44 |
| 62.9 meters | 48.0 | 41.3 | 5,480 | 6,590 | 42 |
| | 50.0 | 38.3 | 5,000 | 6,060 | 40 |
| | 52.0 | 35.2 | 4,560 | 5,570 | 37 |
| | 54.0 | 31.7 | 4,150 | 5,130 | 34 |
| | 56.0 | 27.9 | 3,770 | 4,700 | 30 |
| | 58.0 | 23.4 | 3,430 | 4,320 | 26 |
| | 60.0 | 18.0 | 3,110 | 3,960 | 20 |
| | 10.1 | 82.9 | 45,480 * | 45,480 * | 65 |
| | 11.0 | 82.1 | 45,480 * | 45,480 * | 65 |
| | 12.0 | 81.2 | 45,480 * | 45,480 * | 65 |
| | 13.0 | 80.3 | 42,090 | 45,480 * | 65 |
| | 14.0 | 79.4 | 37,950 | 43,490 | 65 |
| | 15.0 | 78.5 | 34,460 | 39,440 | 65 |
| | 16.0 | 77.6 | 31,690 | 36,220 | 64 |
| | 17.0 | 76.7 | 29,110 | 33,260 | 64 |
| | 18.0 | 75.7 | 26,860 | 30,680 | 64 |
| 64.0 meters | 19.0 | 74.8 | 24,880 | 28,420 | 64 |
| | 20.0 | 73.9 | 23,120 | 26,420 | 63 |
| | 22.0 | 72.0 | 20,140 | 23,040 | 62 |
| | 24.0 | 70.1 | 17,710 | 20,290 | 62 |
| | 26.0 | 68.2 | 15,890 | 18,220 | 61 |
| | 28.0 | 66.3 | 14,190 | 16,310 | 60 |
| | 30.0 | 64.3 | 12,720 | 14,670 | 60 |
| | 32.0 | 62.3 | 11,460 | 13,250 | 59 |
| | 34.0 | 60.3 | 10,350 | 12,010 | 57 |
| | 36.0 | 58.2 | 9,370 | 10,930 | 56 |
| 66.0 meters | 38.0 | 56.0 | 8,500 | 9,960 | 55 |
| | 40.0 | 53.8 | 7,730 | 9,100 | 53 |
| | 42.0 | 51.6 | 7,030 | 8,330 | 52 |
| | 44.0 | 49.2 | 6,400 | 7,630 | 50 |
| | 46.0 | 46.8 | 5,820 | 6,990 | 48 |
| | 48.0 | 44.3 | 5,300 | 6,410 | 46 |
| | 50.0 | 41.7 | 4,820 | 5,880 | 44 |

| Boom Length (Meters) | Radius in Meters | Boom Angle Degrees | Lift Rating in Kilograms | | Meters From Boom Point |
|----------------------|------------------|--------------------|--------------------------|----------------------|------------------------|
| | | | Side Frames Retracted | Side Frames Extended | |
| 67.1 meters | 52.0 | 38.9 | 4,380 | 5,390 | 42 |
| | 54.0 | 35.9 | 3,970 | 4,940 | 39 |
| | 56.0 | 32.7 | 3,600 | 4,540 | 36 |
| | 58.0 | 29.2 | 3,250 | 4,150 | 33 |
| | 60.0 | 25.2 | 2,930 | 3,790 | 29 |
| | 62.0 | 20.5 | 2,630 | 3,460 | 24 |
| | 64.0 | 14.4 | 2,340 | 3,150 | 18 |
| | 10.4 | 83.0 | 41,840 * | 41,640 * | 68 |
| | 11.0 | 82.5 | 41,640 * | 41,640 * | 68 |
| | 12.0 | 81.6 | 41,640 * | 41,640 * | 68 |
| 68.0 meters | 13.0 | 80.7 | 41,640 * | 41,640 * | 68 |
| | 14.0 | 79.9 | 37,790 | 41,640 * | 68 |
| | 15.0 | 79.0 | 34,290 | 39,290 | 68 |
| | 16.0 | 78.1 | 31,540 | 36,070 | 67 |
| | 17.0 | 77.3 | 28,960 | 33,110 | 67 |
| | 18.0 | 76.4 | 26,700 | 30,530 | 67 |
| | 19.0 | 75.5 | 24,730 | 28,270 | 67 |
| | 20.0 | 74.6 | 22,970 | 26,260 | 67 |
| | 22.0 | 72.9 | 19,980 | 22,880 | 66 |
| | 24.0 | 71.1 | 17,550 | 20,130 | 65 |
| 69.0 meters | 26.0 | 69.2 | 15,740 | 18,070 | 65 |
| | 28.0 | 67.4 | 14,030 | 16,150 | 64 |
| | 30.0 | 65.6 | 12,560 | 14,510 | 63 |
| | 32.0 | 63.7 | 11,300 | 13,090 | 62 |
| | 34.0 | 61.7 | 10,190 | 11,860 | 61 |
| | 36.0 | 59.8 | 9,220 | 10,770 | 60 |
| | 38.0 | 57.9 | 8,350 | 9,810 | 59 |
| | 40.0 | 55.7 | 7,570 | 8,940 | 57 |
| | 42.0 | 53.6 | 6,880 | 8,170 | 56 |
| | 44.0 | 51.5 | 6,240 | 7,470 | 54 |
| 70.1 meters | 46.0 | 49.2 | 5,670 | 6,840 | 53 |
| | 48.0 | 46.9 | 5,140 | 6,250 | 51 |
| | 50.0 | 44.5 | 4,660 | 5,720 | 49 |
| | 52.0 | 42.0 | 4,230 | 5,240 | 47 |
| | 54.0 | 39.4 | 3,810 | 4,790 | 44 |
| | 56.0 | 36.6 | 3,440 | 4,370 | 42 |
| | 58.0 | 33.6 | 3,090 | 3,990 | 39 |
| | 60.0 | 30.3 | 2,770 | 3,630 | 36 |
| | 62.0 | 26.7 | 2,470 | 3,300 | 32 |
| | 64.0 | 23.5 | 2,180 | 2,980 | 27 |
| 71.2 meters | 66.0 | 17.4 | 1,920 | 2,700 | 22 |
| | 68.0 | 14.9 | 1,670 | 2,470 | 20 |
| | 70.0 | 12.5 | 1,430 | 2,270 | 18 |
| | 72.0 | 10.2 | 1,200 | 1,990 | 16 |
| | 74.0 | 7.9 | 970 | 1,780 | 14 |
| | 76.0 | 5.6 | 740 | 1,570 | 12 |
| | 78.0 | 3.3 | 510 | 1,360 | 10 |
| | 80.0 | 1.0 | 280 | 1,150 | 8 |
| | 82.0 | - | 0 | 940 | 6 |
| | 84.0 | - | 0 | 730 | 4 |
| 72.2 meters | 11.2 | 82.9 | 34,550 * | 34,550 * | 74 |
| | 12.0 | 82.3 | 34,550 * | 34,550 * | 74 |
| | 13.0 | 81.5 | 34,550 * | 34,550 * | 74 |
| | 14.0 | 80.7 | 34,650 * | 34,550 * | 74 |
| | 15.0 | 79.9 | 34,190 | 34,550 * | 74 |
| | 16.0 | 79.1 | 31,200 | 34,550 * | 74 |
| | 17.0 | 78.3 | 28,610 | 32,780 | 74 |
| | 18.0 | 77.5 | 26,360 | 30,190 | 73 |
| | 19.0 | 76.7 | 24,370 | 27,920 | 73 |
| | 20.0 | 75.9 | 22,610 | 25,920 | 73 |
| 73.2 meters | 22.0 | 74.3 | 19,620 | 22,530 | 72 |
| | 24.0 | 72.7 | 17,180 | 19,780 | 72 |
| | 26.0 | 71.1 | 15,390 | 17,740 | 71 |
| | 28.0 | 69.4 | 13,680 | 15,810 | 70 |
| | 30.0 | 67.7 | 12,210 | 14,170 | 70 |
| | 32.0 | 66.0 | 10,940 | 12,750 | 69 |
| | 34.0 | 64.3 | 9,830 | 11,510 | 68 |
| | 36.0 | 62.5 | 8,860 | 10,420 | 67 |
| | 38.0 | 60.7 | 7,990 | 9,450 | 66 |
| | 40.0 | 58.9 | 7,210 | 8,590 | 64 |
| 74.2 meters | 42.0 | 57.1 | 6,510 | 7,820 | 63 |
| | 44.0 | 55.2 | 5,880 | 7,110 | 62 |
| | 46 | | | | |

LIFT CRANE RATINGS IN KILOGRAMS

With 77H Tubular Chord Boom with Tapered Tip and "T-T" Counterweight (63504 Kgs.)

| Boom Length (Meters) | Radius In Meters | Boom Angle Degrees | Lift Rating in Kilograms | | Meters From Boom Point |
|----------------------|------------------|--------------------|--------------------------|----------------------|------------------------|
| | | | Side Frames Retracted | Side Frames Extended | |
| 30.5 meters | 6.4 | 80.8 | 110,580 * | 32 | |
| | 7.0 | 79.7 | 110,580 * | 32 | |
| | 8.0 | 77.8 | 100,450 * | 31 | |
| | 9.0 | 75.8 | 85,230 | 31 | |
| | 10.0 | 73.9 | 73,380 | 31 | |
| | 11.0 | 71.9 | 64,250 | 31 | |
| | 12.0 | 69.9 | 57,100 | 30 | |
| | 13.0 | 67.9 | 51,420 | 30 | |
| | 14.0 | 65.9 | 46,670 | 29 | |
| | 15.0 | 63.8 | 42,690 | 29 | |
| | 16.0 | 61.7 | 39,290 | 28 | |
| | 17.0 | 59.5 | 36,470 | 28 | |
| | 18.0 | 57.3 | 33,930 | 27 | |
| | 19.0 | 55.1 | 28,240 | 27 | |
| | 20.0 | 52.7 | 26,500 | 27 | |
| | 22.0 | 47.8 | 23,560 | 24 | |
| | 24.0 | 42.5 | 21,170 | 22 | |
| | 26.0 | 36.6 | 19,180 | 20 | |
| | 28.0 | 29.8 | 17,500 | 17 | |
| | 30.0 | 21.0 | 16,100 | 16 | |
| | | | 18,010 | 12 | |
| 33.5 meters | 6.8 | 81.0 | 110,580 * | 35 | |
| | 7.0 | 80.8 | 110,580 * | 35 | |
| | 8.0 | 78.9 | 100,390 | 34 | |
| | 9.0 | 77.2 | 85,090 | 34 | |
| | 10.0 | 75.4 | 73,220 | 34 | |
| | 11.0 | 73.6 | 64,110 | 34 | |
| | 12.0 | 71.8 | 56,840 | 33 | |
| | 13.0 | 70.0 | 51,270 | 33 | |
| | 14.0 | 68.2 | 46,520 | 33 | |
| | 15.0 | 66.3 | 42,530 | 32 | |
| | 16.0 | 64.5 | 39,140 | 32 | |
| | 17.0 | 62.5 | 32,250 | 31 | |
| | 18.0 | 60.6 | 30,030 | 31 | |
| | 19.0 | 58.6 | 28,080 | 30 | |
| | 20.0 | 56.6 | 26,340 | 29 | |
| | 22.0 | 52.4 | 23,410 | 28 | |
| | 24.0 | 48.0 | 21,010 | 26 | |
| | 26.0 | 43.2 | 19,020 | 24 | |
| | 28.0 | 37.9 | 17,340 | 22 | |
| | 30.0 | 31.8 | 15,960 | 19 | |
| | 32.0 | 24.7 | 14,710 | 16 | |
| 36.8 meters | 7.3 | 80.9 | 100,320 * | 38 | |
| | 8.0 | 79.8 | 100,320 * | 38 | |
| | 9.0 | 78.2 | 84,950 | 37 | |
| | 10.0 | 76.6 | 73,070 | 37 | |
| | 11.0 | 75.0 | 69,990 | 37 | |
| | 12.0 | 73.4 | 56,790 | 37 | |
| | 13.0 | 71.7 | 51,130 | 36 | |
| | 14.0 | 70.1 | 46,370 | 36 | |
| | 15.0 | 68.4 | 42,370 | 26 | |
| | 16.0 | 66.7 | 34,520 | 35 | |
| | 17.0 | 65.0 | 32,100 | 35 | |
| | 18.0 | 63.3 | 29,880 | 34 | |
| | 19.0 | 61.5 | 27,930 | 34 | |
| | 20.0 | 59.7 | 26,190 | 33 | |
| | 22.0 | 56.0 | 23,250 | 32 | |
| | 24.0 | 52.1 | 20,860 | 30 | |
| | 26.0 | 48.0 | 18,860 | 29 | |
| | 28.0 | 43.7 | 17,180 | 27 | |
| | 30.0 | 38.9 | 15,920 | 25 | |
| | 32.0 | 33.8 | 14,560 | 22 | |
| | 34.0 | 27.5 | 13,470 | 18 | |
| | 36.0 | 19.6 | 12,510 | 14 | |
| 39.6 meters | 7.8 | 80.9 | 100,250 * | 41 | |
| | 8.0 | 80.6 | 100,250 * | 41 | |
| | 9.0 | 79.2 | 84,790 | 40 | |
| | 10.0 | 77.7 | 72,920 | 40 | |
| | 11.0 | 76.2 | 63,790 | 40 | |
| | 12.0 | 74.7 | 56,620 | 40 | |
| | 13.0 | 73.2 | 50,970 | 39 | |
| | 14.0 | 71.7 | 48,200 | 39 | |
| | 15.0 | 70.2 | 37,290 | 39 | |
| | 16.0 | 68.6 | 34,350 | 38 | |
| | 17.0 | 67.0 | 31,930 | 38 | |
| | 18.0 | 65.5 | 29,710 | 38 | |
| | 19.0 | 63.9 | 27,750 | 37 | |
| | 20.0 | 62.2 | 26,020 | 37 | |
| | 22.0 | 58.9 | 23,080 | 35 | |
| | 24.0 | 55.5 | 20,680 | 34 | |
| | 26.0 | 51.9 | 18,680 | 33 | |
| | 28.0 | 48.1 | 17,010 | 31 | |
| | 30.0 | 44.1 | 15,650 | 29 | |
| | 32.0 | 39.8 | 14,400 | 27 | |
| | 34.0 | 35.0 | 13,310 | 24 | |
| | 36.0 | 29.6 | 12,340 | 21 | |
| | 38.0 | 23.1 | 11,480 | 17 | |
| 42.7 meters | 8.3 | 80.9 | 91,210 * | 44 | |
| | 9.0 | 79.9 | 84,630 | 44 | |
| | 10.0 | 78.6 | 72,760 | 43 | |
| | 11.0 | 77.2 | 63,630 | 43 | |
| | 12.0 | 75.8 | 56,450 | 43 | |

| Boom Length (Meters) | Radius In Meters | Boom Angle Degrees | Lift Rating in Kilograms | | Meters From Boom Point |
|----------------------|------------------|--------------------|--------------------------|----------------------|------------------------|
| | | | Side Frames Retracted | Side Frames Extended | |
| 42.7 meters (cont.) | 13.0 | 74.4 | 50,810 | 43 | |
| | 14.0 | 73.0 | 40,560 | 42 | |
| | 15.0 | 71.8 | 37,120 | 42 | |
| | 16.0 | 70.2 | 34,170 | 42 | |
| | 17.0 | 68.8 | 31,770 | 41 | |
| | 18.0 | 67.3 | 26,540 | 41 | |
| | 19.0 | 65.8 | 27,590 | 40 | |
| | 20.0 | 64.4 | 25,850 | 40 | |
| | 22.0 | 61.3 | 22,910 | 39 | |
| | 24.0 | 58.2 | 20,510 | 38 | |
| | 26.0 | 55.0 | 18,510 | 37 | |
| | 28.0 | 51.7 | 16,830 | 35 | |
| | 30.0 | 48.2 | 15,490 | 33 | |
| | 32.0 | 44.5 | 14,240 | 31 | |
| | 34.0 | 40.5 | 13,150 | 29 | |
| | 36.0 | 38.2 | 12,180 | 27 | |
| | 38.0 | 31.3 | 11,030 | 24 | |
| | 40.0 | 25.7 | 10,560 | 20 | |
| | 42.0 | 18.5 | 9,870 | 15 | |
| | | | | | |
| 45.7 meters | 8.7 | 81.0 | 82,340 * | 47 | |
| | 9.0 | 80.8 | 82,340 * | 47 | |
| | 10.0 | 79.3 | 72,630 | 46 | |
| | 11.0 | 78.1 | 63,490 | 46 | |
| | 12.0 | 76.8 | 56,310 | 46 | |
| | 13.0 | 75.5 | 44,500 | 46 | |
| | 14.0 | 74.2 | 40,410 | 46 | |
| | 15.0 | 72.9 | 38,960 | 45 | |
| | 16.0 | 71.6 | 34,020 | 45 | |
| | 17.0 | 70.2 | 31,620 | 45 | |
| | 18.0 | 68.9 | 29,400 | 44 | |
| | 19.0 | 67.6 | 27,440 | 44 | |
| | 20.0 | 66.2 | 25,710 | 43 | |
| | 22.0 | 63.4 | 22,780 | 42 | |
| | 24.0 | 60.8 | 20,360 | 41 | |
| | 26.0 | 57.7 | 18,370 | 40 | |
| | 28.0 | 54.6 | 16,880 | 39 | |
| | 30.0 | 51.5 | 15,360 | 37 | |
| | 32.0 | 48.2 | 14,110 | 36 | |
| | 34.0 | 44.8 | 13,010 | 34 | |
| | 36.0 | 41.1 | 12,050 | 32 | |
| | 38.0 | 37.1 | 11,190 | 30 | |
| | 40.0 | 32.7 | 10,420 | 26 | |
| | 42.0 | 27.8 | 9,730 | 23 | |
| | 44.0 | 21.8 | 9,110 | 19 | |
| 48.8 meters | 9.2 | 81.0 | 74,890 * | 50 | |
| | 10.0 | 80.0 | 72,470 | 50 | |
| | 11.0 | 78.8 | 63,320 | 49 | |
| | 12.0 | 77.6 | 49,090 | 49 | |
| | 13.0 | 75.4 | 44,330 | 49 | |
| | 14.0 | 73.2 | 40,230 | 49 | |
| | 15.0 | 70.4 | 36,780 | 48 | |
| | 16.0 | 68.2 | 33,840 | 48 | |
| | 17.0 | 65.5 | 31,440 | 48 | |
| | 18.0 | 70.3 | 29,220 | 47 | |
| | 19.0 | 69.0 | 27,270 | 47 | |
| | 20.0 | 67.8 | 25,530 | 47 | |
| | 22.0 | 65.2 | 22,580 | 46 | |
| | 24.0 | 62.6 | 20,180 | 45 | |
| | 26.0 | 59.9 | 18,180 | 44 | |
| | 28.0 | 57.1 | 16,500 | 43 | |
| | 30.0 | 54.3 | 15,190 | 41 | |
| | 32.0 | 51.3 | 13,930 | 40 | |
| | 34.0 | 48.3 | 12,840 | 38 | |
| | 36.0 | 45.0 | 11,870 | 36 | |
| | 38.0 | 41.6 | 11,010 | 34 | |
| | 40.0 | 37.9 | 10,250 | 32 | |
| | 42.0 | 33.9 | 9,560 | 29 | |
| | 44.0 | 29.5 | 8,940 | 28 | |
| | 46.0 | 24.3 | 8,370 | 22 | |
| | 48.0 | 17.7 | 7,860 | 16 | |
| 51.8 meters | 9.7 | 80.9 | 67,960 * | 53 | |
| | 10.0 | 80.6 | 67,960 * | 53 | |
| | 11.0 | 79.5 | 54,980 | 53 | |
| | 12.0 | 78.4 | 48,920 | 52 | |
| | 13.0 | 77.2 | 44,140 | 52 | |
| | 14.0 | 76.1 | 40,050 | 52 | |
| | 15.0 | 74.9 | 36,600 | 51 | |
| | 16.0 | 73.8 | 33,650 | 51 | |
| | 17.0 | 72.6 | 31,270 | 51 | |
| | 18.0 | 71.5 | 29,050 | 51 | |
| | 19.0 | 70.3 | 27,090 | 50 | |
| | 20.0 | 69.1 | 25,350 | 50 | |
| | 22.0 | 66.7 | 22,400 | 49 | |
| | 24.0 | 64.3 | 20,000 | 48 | |
| | 26.0 | 61.6 | 18,000 | 47 | |
| | 28.0 | 59.3 | 16,320 | 46 | |
| | 30.0 | 56.7 | 15,020 | 45 | |
| | 32.0 | 54.0 | 13,770 | 43 | |
| | 34.0 | 51.2 | 12,670 | 42 | |
| | 36.0 | 48.3 | 11,7 | | |



SGS
IR11/011



SGS
CH11/0655



SGS
CH11/0653



SGS
CH11/0654

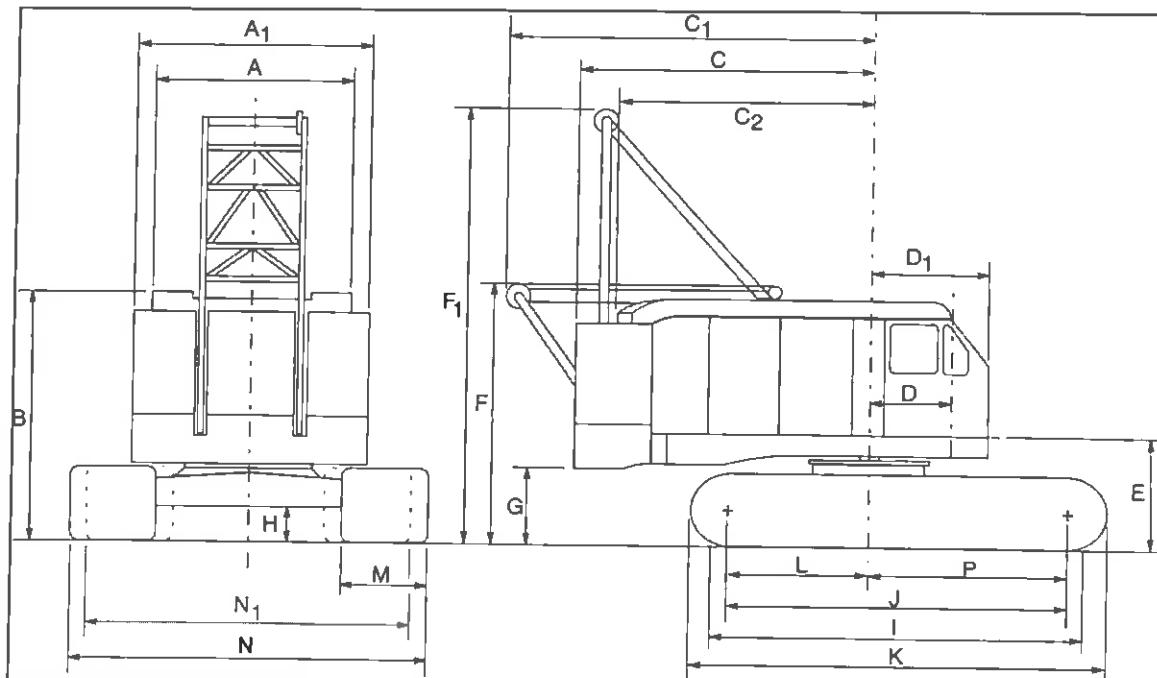
AMERICAN جرثقيل ٢٣٥ لتن

LIFT CRANE RATINGS IN KILOGRAMS (continued)

With 77H Tubular Chord Boom with Tapered Tip and "T-T" Counterweight (63504 Kgs.)

| Boom Length (Meters) | Radius in Meters | Boom Angle Degrees | Lift Rating in Kilograms | | Meters From Boom Point | Boom Length (Meters) | Radius in Meters | Boom Angle Degrees | Lift Rating in Kilograms | | Meters From Boom Point | Boom Length (Meters) | Radius in Meters | Boom Angle Degrees | Lift Rating in Kilograms | | Meters From Boom Point | | | |
|----------------------|------------------|--------------------|--------------------------|----------------------|------------------------|----------------------|------------------|--------------------|--------------------------|----------------------|------------------------|----------------------|------------------|--------------------|--------------------------|----------------------|------------------------|--|--|--|
| | | | Side Frames Retracted | Side Frames Extended | | | | | Side Frames Retracted | Side Frames Extended | | | | | Side Frames Retracted | Side Frames Extended | | | | |
| 54.0 meters | 11.8 | 81.0 | 47,510 | 47,510 | 65 | 70.1 meters (cont.) | 62.0 | 30.4 | 3,970 | 4,800 | 37 | 42.0 | 69.3 | 7,790 | 9,090 | 70 | | | | |
| | 12.0 | 80.6 | 47,510 | 47,510 | 65 | | 62.0 | 27.0 | 3,700 | 4,500 | 33 | 44.0 | 57.6 | 7,160 | 8,400 | 68 | | | | |
| | 13.0 | 79.7 | 45,440 | 47,510 | 65 | | 63.0 | 23.1 | 3,440 | 4,210 | 29 | 46.0 | 55.9 | 6,590 | 7,770 | 67 | | | | |
| | 14.0 | 78.0 | 39,330 | 44,860 | 64 | | 63.0 | 18.5 | 3,200 | 3,950 | 24 | 48.0 | 54.1 | 6,070 | 7,190 | 66 | | | | |
| | 15.0 | 77.9 | 35,870 | 40,850 | 64 | | 70.0 | 12.4 | 2,980 | 3,710 | 17 | 50.0 | 52.3 | 5,600 | 6,880 | 64 | | | | |
| | 16.0 | 76.9 | 32,910 | 37,430 | 64 | | | | | | | 52.0 | 50.5 | 5,160 | 6,180 | 63 | | | | |
| | 17.0 | 76.0 | 30,570 | 34,710 | 64 | | | | | | | 54.0 | 48.5 | 4,780 | 5,740 | 61 | | | | |
| | 18.0 | 75.1 | 25,340 | 32,150 | 63 | | | | | | | 56.0 | 46.6 | 4,390 | 5,320 | 59 | | | | |
| | 19.0 | 74.2 | 20,380 | 29,910 | 63 | | | | | | | 58.0 | 44.6 | 4,050 | 4,950 | 57 | | | | |
| | 20.0 | 73.2 | 24,830 | 27,930 | 63 | | | | | | | 60.0 | 42.5 | 3,720 | 4,590 | 55 | | | | |
| | 22.0 | 71.4 | 21,880 | 24,580 | 62 | | | | | | | 62.0 | 40.3 | 3,420 | 4,260 | 53 | | | | |
| | 24.0 | 69.5 | 19,270 | 21,850 | 61 | | | | | | | 64.0 | 38.0 | 3,150 | 3,960 | 50 | | | | |
| | 26.0 | 67.5 | 17,270 | 19,590 | 61 | | | | | | | 66.0 | 35.6 | 2,820 | 3,680 | 48 | | | | |
| | 28.0 | 65.6 | 15,780 | 17,880 | 60 | | | | | | | 68.0 | 33.0 | 2,640 | 3,400 | 45 | | | | |
| | 30.0 | 63.6 | 14,320 | 16,270 | 59 | | | | | | | 70.0 | 30.2 | 2,410 | 3,150 | 41 | | | | |
| | 32.0 | 61.8 | 13,070 | 14,880 | 58 | | | | | | | 72.0 | 27.2 | 2,190 | 2,910 | 38 | | | | |
| | 34.0 | 59.5 | 11,970 | 13,840 | 57 | | | | | | | 74.0 | 23.9 | 2,000 | 2,680 | 34 | | | | |
| | 36.0 | 57.4 | 11,010 | 12,560 | 56 | | | | | | | 76.0 | 20.0 | 1,800 | 2,480 | 30 | | | | |
| | 38.0 | 55.3 | 10,150 | 11,810 | 54 | | | | | | | 78.0 | 15.2 | 1,630 | 2,280 | 22 | | | | |
| | 40.0 | 53.1 | 9,380 | 10,750 | 53 | | | | | | | | | | | | | | | |
| | 42.0 | 50.8 | 8,690 | 9,980 | 51 | | | | | | | | | | | | | | | |
| | 44.0 | 48.5 | 8,062 | 9,290 | 49 | | | | | | | | | | | | | | | |
| | 46.0 | 46.0 | 7,500 | 8,680 | 48 | | | | | | | | | | | | | | | |
| | 48.0 | 43.5 | 6,920 | 8,060 | 46 | | | | | | | | | | | | | | | |
| | 50.0 | 40.8 | 6,510 | 7,670 | 43 | | | | | | | | | | | | | | | |
| | 52.0 | 38.0 | 6,070 | 7,080 | 41 | | | | | | | | | | | | | | | |
| | 54.0 | 35.0 | 5,870 | 6,840 | 38 | | | | | | | | | | | | | | | |
| | 56.0 | 31.7 | 5,300 | 6,230 | 35 | | | | | | | | | | | | | | | |
| | 58.0 | 28.1 | 4,980 | 5,880 | 32 | | | | | | | | | | | | | | | |
| | 60.0 | 24.0 | 4,640 | 5,510 | 28 | | | | | | | | | | | | | | | |
| | 62.0 | 19.2 | 4,350 | 5,160 | 23 | | | | | | | | | | | | | | | |
| | 64.0 | 12.8 | 4,020 | 4,880 | 18 | | | | | | | | | | | | | | | |
| 67.1 meters | 12.1 | 60.9 | 43,840 | 43,840 | 68 | 73.2 meters | 62.0 | 31.0 | 33,800 | 33,800 | 77 | 14.5 | 80.9 | 29,150 | 29,150 | 63 | | | | |
| | 13.0 | 60.2 | 43,250 | 43,840 | 68 | | 62.0 | 34.3 | 3,790 | 4,620 | 43 | 15.0 | 80.6 | 29,150 | 29,150 | 63 | | | | |
| | 14.0 | 79.3 | 39,150 | 43,840 | 67 | | 64.0 | 31.4 | 3,510 | 4,310 | 40 | 16.0 | 79.9 | 29,030 | 29,030 | 63 | | | | |
| | 15.0 | 78.4 | 35,580 | 40,960 | 67 | | 66.0 | 28.2 | 3,250 | 4,030 | 38 | 17.0 | 79.2 | 28,940 | 28,940 | 62 | | | | |
| | 16.0 | 77.5 | 32,730 | 37,250 | 67 | | 68.0 | 24.7 | 3,010 | 3,760 | 32 | 18.0 | 76.5 | 27,250 | 28,830 | 62 | | | | |
| | 17.0 | 76.7 | 30,390 | 34,540 | 67 | | 70.0 | 20.6 | 2,780 | 3,510 | 27 | 19.0 | 77.8 | 25,280 | 28,710 | 62 | | | | |
| | 18.0 | 75.8 | 26,160 | 31,970 | 67 | | 72.0 | 15.8 | 2,570 | 3,270 | 21 | 20.0 | 77.0 | 23,530 | 26,850 | 62 | | | | |
| | 19.0 | 74.8 | 26,200 | 29,730 | 68 | | | | | | | 22.0 | 75.8 | 20,570 | 23,490 | 61 | | | | |
| | 20.0 | 74.0 | 24,450 | 27,750 | 68 | | | | | | | 24.0 | 74.2 | 18,150 | 20,750 | 61 | | | | |
| | 22.0 | 72.2 | 21,500 | 24,390 | 65 | | | | | | | 26.0 | 72.8 | 16,150 | 18,480 | 60 | | | | |
| | 24.0 | 70.4 | 19,090 | 21,870 | 65 | | | | | | | 28.0 | 70.8 | 14,820 | 17,480 | 59 | | | | |
| | 26.0 | 68.8 | 17,080 | 19,410 | 64 | | | | | | | 30.0 | 68.0 | 13,600 | 16,250 | 58 | | | | |
| | 28.0 | 66.8 | 15,600 | 17,720 | 63 | | | | | | | 32.0 | 66.2 | 12,200 | 14,800 | 57 | | | | |
| | 30.0 | 64.9 | 14,150 | 16,090 | 62 | | | | | | | 34.0 | 64.0 | 10,260 | 12,820 | 56 | | | | |
| | 32.0 | 63.0 | 12,890 | 14,690 | 61 | | | | | | | 36.0 | 62.0 | 9,000 | 10,900 | 57 | | | | |
| | 34.0 | 61.0 | 11,800 | 13,460 | 60 | | | | | | | 38.0 | 61.0 | 8,070 | 9,070 | 56 | | | | |
| | 36.0 | 59.1 | 10,630 | 12,380 | 59 | | | | | | | 40.0 | 60.2 | 8,260 | 9,370 | 56 | | | | |
| | 38.0 | 57.1 | 9,970 | 11,430 | 58 | | | | | | | 42.0 | 60.5 | 7,600 | 8,900 | 57 | | | | |
| | 40.0 | 55.0 | 9,200 | 10,570 | 55 | | | | | | | 44.0 | 58.9 | 6,980 | 8,210 | 52 | | | | |
| | 42.0 | 52.9 | 8,510 | 9,810 | 55 | | | | | | | 46.0 | 57.3 | 6,410 | 7,580 | 51 | | | | |
| | 44.0 | 50.7 | 7,880 | 9,110 | 53 | | | | | | | 48.0 | 55.8 | 5,820 | 7,010 | 58 | | | | |
| | 46.0 | 48.5 | 7,320 | 8,490 | 52 | | | | | | | 50.0 | 53.9 | 5,410 | 6,480 | 58 | | | | |
| | 48.0 | 45.1 | 6,800 | 7,910 | 50 | | | | | | | 52.0 | 52.2 | 4,000 | 6,000 | 67 | | | | |
| | 50.0 | 43.7 | 6,330 | 7,390 | 48 | | | | | | | 54.0 | 50.4 | 4,580 | 6,580 | 65 | | | | |
| | 52.0 | 41.2 | 5,890 | 6,910 | 46 | | | | | | | 56.0 | 48.6 | 4,200 | 5,140 | 63 | | | | |
| | 54.0 | 38.5 | 5,490 | 6,460 | 43 | | | | | | | 58.0 | 46.7 | 3,900 | 4,780 | 61 | | | | |
| | 56.0 | 35.7 | 5,120 | 6,060 | 41 | | | | | | | 60.0 | 44.7 | 3,540 | 4,410 | 59 | | | | |
| | 58.0 | 32.7 | 4,780 | 5,670 | 38 | | | | | | | 62.0 | 42.7 | 3,240 | 4,070 | 57 | | | | |
| | 60.0 | 29.3 | 4,460 | 5,320 | 34 | | | | | | | 64.0 | 40.6 | 2,960 | 3,760 | 55 | | | | |
| | 62.0 | 26.8 | 4,160 | 4,990 | 31 | | | | | | | 66.0 | 38.4 | 2,700 | 3,480 | 53 | | | | |
| | 64.0 | 21.3 | 3,890 | 4,590 | 28 | | | | | | | 68.0 | 36.1 | 2,450 | 3,210 | 50 | | | | |
| | 66.0 | 16.0 | 3,630 | 4,410 | 20 | | | | | | | 70.0 | 33.7 | 2,220 | 2,960 | 47 | | | | |
| 70.1 meters | 12.6 | 80.9 | 40,380 | 40,380 | 71 | 75.2 meters | 52.0 | 44.4 | 4,880 | 5,810 | 55 | 12.0 | 76.1 | 20,380 | 23,300 | 64 | | | | |
| | 13.0 | 80.8 | 40,380 | 40,380 | 71 | | 52.0 | 42.2 | 4,240 | 5,130 | 53 | 14.0 | 74.7 | 17,960 | 20,580 | 64 | | | | |
| | 14.0 | 79.8 | 38,960 | 40,380 | 71 | | 53.0 | 39.9 | 3,810 | 4,780 | 50 | 16.0 | 70.5 | 20,970 | 26,970 | 68 | | | | |
| | 15.0 | 76.9 | 35,490 | 38,380 | 70 | | 54.0 | 37.5 | 3,620 | 4,450 | 48 | 17.0 | 73.6 | 20,930 | 26,930 | 65 | | | | |
| | 16.0 | 78.1 | 32,830 | 37,080 | 70 | | 54.0 | 35.0 | 3,340 | 4,150 | 45 | 18.0 | 70.9 | 20,700 | 26,700 | 65 | | | | |
| | 17.0 | 77.3 | 30,210 | 34,360 | 69 | | 55.0 | 32.2 | 3,070 | 3,860 | 42 | 19.0 | 73.2 | 20,090 | 26,590 | 65 | | | | |
| | 18.0 | 75.4 | 27,970 | 31,790 | 70 | | 56.0 | 29.3 | 2,830 | 3,590 | 39 | 20.0 | 77.5 | 23,340 | 26,440 | 68 | | | | |
| | 19.0 | 75.6 | 26,010 | 29,550 | 69 | | 57.0 | 26.0 | 2,610 | 3,34 | | | | | | | | | | |

AMERICAN MODEL 9310A CRAWLER CRANE



9310A GENERAL DIMENSIONS

| | FT | MM |
|---|------------|------|
| A Width of cab | 11'-0" | 3353 |
| A₁ Width over counterweight | 13'-2" | 4013 |
| B Height over cab | 13'-7 1/8" | 4143 |
| C Tailswing | 17'-0" | 5182 |
| C₁ Tailswing with A-frame, lowered | 24'-9" | 7544 |
| C₂ Tailswing less A-frame and counterweight | 14'-11" | 4546 |
| D Center of rotation to center of boom foot | 5'-0 3/4" | 1544 |
| D₁ Center of pivot to front of cab | 6'-10 1/2" | 2095 |
| E Ground to center boom foot | 6'-9 1/8" | 2061 |
| F Height over A-frame, lowered - cwrt. on | 14'-8 5/8" | 4485 |
| F₁ Height over A-frame, lowered - cwrt. off | 14'-9 7/8" | 4518 |
| G Ground to bottom of counterweight | 30'-4 7/8" | 9268 |
| H Minimum ground clearance under crawler base | 1'-9" | 533 |
| I Crawler bearing length | 25'-6" | 7772 |
| J Center to center crawler tumblers | 24'-2" | 7366 |
| K Overall length of crawlers | 28'-2" | 8585 |
| L Center of rotation to center of drive tumbler | 11'-0 1/4" | 3359 |
| M Width of tread shoes | 44'-0" | 1118 |
| N Overall width over crawlers - extended | 20'-7" | 6274 |
| N₁ Overall width over crawlers - retracted | 13'-1 3/4" | 5511 |
| P Center of rotation to center of idler tumbler | 13'-1 3/4" | 4007 |

جرثقیل ۱۶۰ تن تلسکوپی



KRACOCRANE

| | |
|---------|--------------------------|
| KATO | کارخانه سازنده |
| NK 1600 | مدل |
| 1994 | سال ساخت |
| ۱۶۰ تن | حداکثر قدرت باربرداری |
| ۵۰ متر | طول بوم |
| ۴۵ متر | طول حیب |
| ۷ این | کشور سازنده |

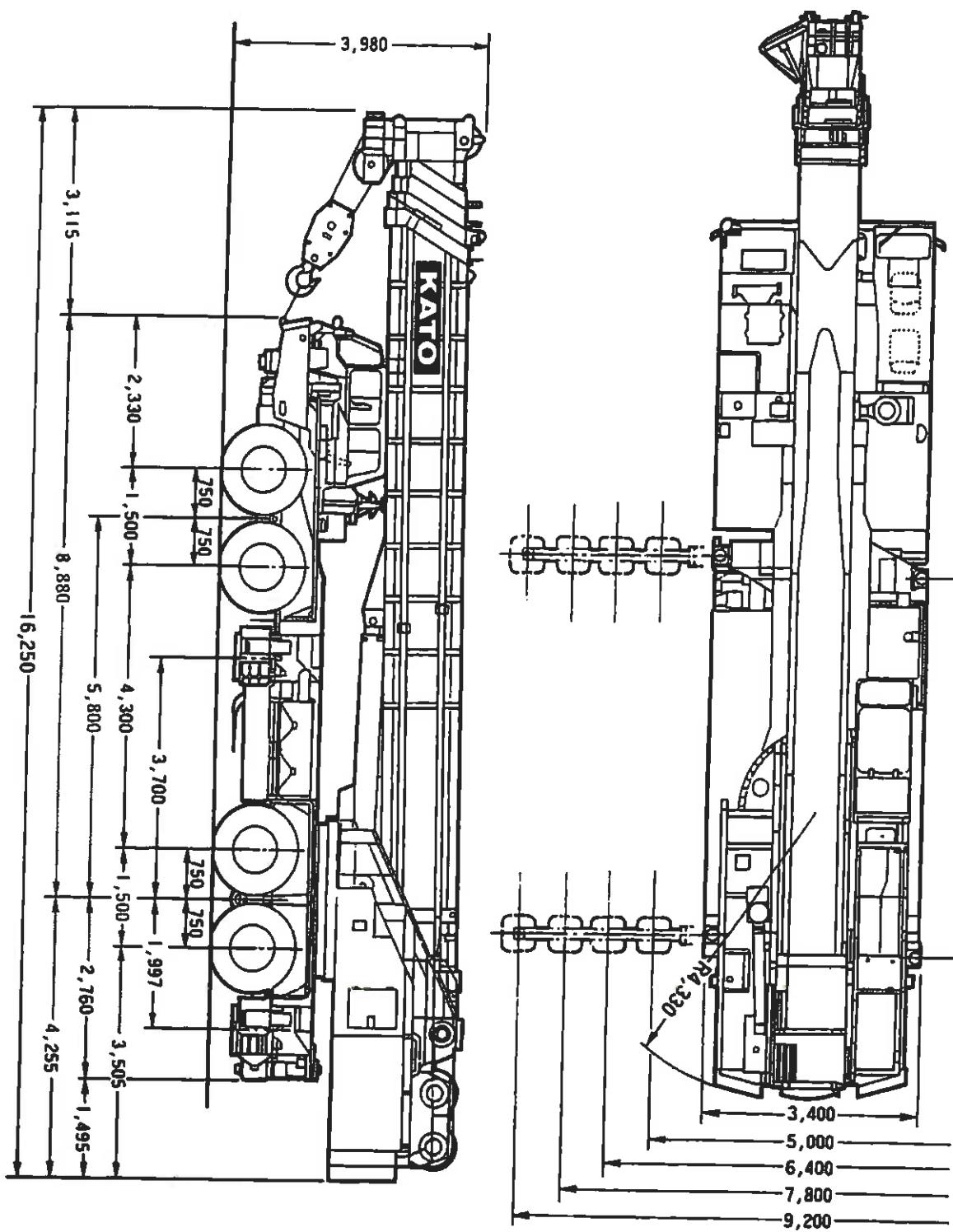
جرثقيل ١٦٠ تون KATO



خط ویژه: ۰۲۱-۸۷۳۱۱۴۰ (۰۲۱-۸۷۳۱۱۴۵۶) فکس:

میدان آرژانتین، خیابان احمد قمیر(پذارست)، خیابان سیزدهم پلک ۱، طبقه ۱، واحد ۱

| 作業半径 | 10.15mブーム | | | | | 22.1mブーム | | | | | 31.8mブーム | | | | | 40.9mブーム | | | | | 51.5mブーム | | | | | | |
|--------|-----------|-------|-------|-------|-------|----------|-------|-------|-------|-------|----------|-------|-------|-------|-------|----------|------|------|------|------|----------|------|------|--------|--------|------|------|
| | 各 部 分 | | | | | 各 部 分 | | | | | 各 部 分 | | | | | 各 部 分 | | | | | 各 部 分 | | | | | | |
| | A | B | C | D | E | A | B | C | D | E | A | B | C | D | E | A | B | C | D | E | A | B | C | D | E | | |
| 12.0 m | 160.0 | 160.0 | 160.0 | 160.0 | 160.0 | | | | | | | | | | | | | | | | | | | | | | |
| 12.5 m | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | | | | | | | | | | | | | | | | | | | | | | |
| 13.0 m | 130.0 | 130.0 | 130.0 | 130.0 | 130.0 | | | | | | | | | | | | | | | | | | | | | | |
| 13.5 m | 125.0 | 125.0 | 125.0 | 125.0 | 125.0 | | | | | | | | | | | | | | | | | | | | | | |
| 14.0 m | 115.5 | 115.5 | 115.5 | 115.5 | 115.5 | 107.1 | 107.1 | 107.1 | 107.1 | 107.1 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 95.0 | 95.0 | 95.0 | 95.0 | 95.0 | 85.0 | 85.0 | 85.0 | 85.0 | | | |
| 14.5 m | 95.0 | 95.0 | 95.0 | 95.0 | 95.0 | 82.2 | 82.2 | 82.2 | 82.2 | 82.2 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 84.0 | 84.0 | 84.0 | 84.0 | 84.0 | 85.0 | 85.0 | 85.0 | 85.0 | | | |
| 15.0 m | 85.1 | 85.1 | 85.1 | 85.1 | 85.1 | 80.7 | 75.9 | 68.0 | 66.0 | 73.0 | 74.2 | 73.4 | 73.4 | 73.4 | 72.9 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 47.0 | 47.0 | 47.0 | 47.0 | | | |
| 15.5 m | 74.9 | 74.9 | 74.9 | 74.9 | 74.9 | 64.0 | 76.4 | 76.4 | 73.5 | 66.1 | 62.2 | 65.1 | 65.1 | 65.1 | 65.0 | 61.0 | 56.2 | 56.2 | 56.2 | 56.2 | 45.0 | 45.0 | 45.0 | 45.0 | | | |
| 16.0 m | 67.1 | 67.1 | 67.1 | 67.1 | 67.1 | 54.5 | 53.5 | 57.3 | 82.7 | 57.8 | 51.5 | 58.3 | 58.3 | 58.3 | 51.7 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 41.0 | 41.0 | 41.0 | 41.0 | | | |
| 16.5 m | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 45.1 | 43.0 | 60.1 | 60.1 | 51.8 | 45.4 | 41.0 | 52.0 | 52.0 | 42.4 | 39.9 | 45.5 | 45.5 | 45.5 | 45.5 | 37.3 | 37.3 | 37.3 | 37.3 | | | |
| 17.0 m | 49.0 | 49.0 | 49.0 | 49.0 | 49.0 | 35.2 | 45.5 | 54.1 | 53.3 | 43.8 | 35.4 | 33.6 | 47.0 | 47.8 | 42.8 | 35.4 | 32.4 | 41.4 | 41.4 | 37.7 | 35.0 | 34.6 | 34.6 | 34.6 | | | |
| 17.5 m | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 37.6 | 31.1 | 26.0 | 43.7 | 36.6 | 30.1 | 26.9 | 37.9 | 37.9 | 37.9 | 32.2 | 29.3 | 32.1 | 32.1 | 32.1 | 23.1 | 23.1 | 23.1 | 23.1 | | | |
| 18.0 m | 41.4 | 36.8 | 28.6 | 23.3 | 20.2 | 37.1 | 35.0 | 27.7 | 22.3 | 18.1 | 32.2 | 32.2 | 29.8 | 24.3 | 21.3 | 28.2 | 28.2 | 28.2 | 28.2 | 25.4 | 22.5 | 24.6 | 24.6 | 24.6 | | | |
| 18.5 m | 23.1 | 23.1 | 22.6 | 18.1 | 14.9 | 31.9 | 27.9 | 21.6 | 17.1 | 13.7 | 27.8 | 27.8 | 23.4 | 18.9 | 15.8 | 25.0 | 25.0 | 24.5 | 19.9 | 16.8 | 21.4 | 21.4 | 21.4 | 21.4 | | | |
| 19.0 m | | | | | | | | | | | 27.8 | 22.3 | 17.1 | 13.1 | 10.0 | 24.4 | 24.4 | 18.8 | 14.9 | 11.8 | 21.9 | 19.3 | 15.9 | 12.8 | 12.8 | | |
| 19.5 m | | | | | | | | | | | 19.5 | 18.1 | 13.8 | 10.9 | 7.0 | 21.4 | 19.8 | 15.4 | 11.7 | 9.0 | 19.2 | 16.3 | 12.7 | 10.0 | 10.0 | | |
| 20.0 m | | | | | | | | | | | | | | | 18.9 | 16.5 | 12.7 | 9.2 | 6.6 | 17.0 | 17.0 | 13.6 | 10.2 | 7.7 | 15.3 | 14.2 | 10.9 |
| 20.5 m | | | | | | | | | | | | | | | 16.0 | 13.8 | 10.5 | 7.1 | 4.5 | 16.1 | 14.7 | 11.3 | 8.1 | 5.7 | 13.8 | 12.0 | 8.8 |
| 21.0 m | | | | | | | | | | | | | | | 14.6 | 11.7 | 8.7 | 5.2 | | 13.5 | 12.5 | 9.5 | 6.3 | 3.9 | 12.5 | 10.1 | 7.1 |
| 21.5 m | | | | | | | | | | | | | | | 12.6 | 9.9 | 7.1 | | | 12.1 | 10.7 | 8.0 | 4.7 | | 11.2 | 11.2 | 5.3 |
| 22.0 m | | | | | | | | | | | | | | | | | | | 10.9 | 9.1 | 6.5 | 3.3 | | 10.0 | 9.7 | 2.0 | |
| 22.5 m | | | | | | | | | | | | | | | | | | | 9.8 | 7.8 | 5.1 | | | 9.0 | 8.4 | 5.9 | |
| 23.0 m | | | | | | | | | | | | | | | | | | | 8.8 | 6.8 | 3.9 | | | 8.1 | 7.2 | 4.6 | |
| 23.5 m | | | | | | | | | | | | | | | | | | | 7.7 | 5.4 | 2.9 | | | 7.0 | 6.0 | 3.5 | |
| 24.0 m | | | | | | | | | | | | | | | | | | | 6.0 | 4.4 | | | | 6.5 | 5.0 | | |
| 24.5 m | | | | | | | | | | | | | | | | | | | | | | | | 5.9 | 4.0 | | |
| 25.0 m | | | | | | | | | | | | | | | | | | | | | | | | 5.2 | 3.2 | | |
| 25.5 m | | | | | | | | | | | | | | | | | | | | | | | | 4.4 | 2.4 | | |
| 26.0 m | | | | | | | | | | | | | | | | | | | | | | | | 3.9 | 1.8 | | |
| 26.5 m | | | | | | | | | | | | | | | | | | | | | | | | 3.3 | 1.5 | | |
| 27.0 m | | | | | | | | | | | | | | | | | | | | | | | | 3.0 | 1.0 | | |
| 27.5 m | | | | | | | | | | | | | | | | | | | | | | | | 1.000t | 1.000t | | |
| 28.0 m | | | | | | | | | | | | | | | | | | | | | | | | 6.5 | 6.5 | | |
| 28.5 m | | | | | | | | | | | | | | | | | | | | | | | | 1.000t | 1.000t | | |
| 29.0 m | | | | | | | | | | | | | | | | | | | | | | | | 4.5 | 4.5 | | |



جرثقیل ۱۵۰ تن تلسکوپی



GROVE
R&O CRACOCRANE

| | |
|--------|--------------------------|
| GROVE | کارخانه سازنده |
| TM1500 | مدل |
| ۱۹۹۵ | سال ساخت |
| ۱۵۰ تن | حداکثر قدرت باربرداری |
| ۵۰ | طول بوم |
| ۳۱ | طول جیب |
| آمریکا | کشور سازنده |



RACOCRANE



جرثقیل ۱۵۰ تن تلسکوپی GROVE





SGS
IR11/011



SGS
CH11/0655



SGS
CH11/0653



SGS
CH11/0654

جرشغيل ٥٥ طن تلسکوپی GROVE

RATED LIFTING CAPACITIES IN POUNDS 46 FT. - 173 FT. BOOM ON OUTRIGGERS - OVER REAR

| Radius in Feet | #0001 | | | | | | | | | | #0002 |
|--|---|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|-----------------------------------|
| | Main Boom Length in Feet (Power Pinned Fly Retracted) | | | | | | | | | | Power P. Fly Ext. & 141 ft. |
| | 46 | 58 | 70 | 82 | 94 | 106 | 118 | 130 | 141 | 173 | |
| 10 | 300,000 (74.6) | | | | | | | | | | |
| 12 | 260,000 (72) | 143,500 (76) | 142,000 (79) | | | | | | | | |
| 18 | 235,000 (67.5) | 143,500 (72.6) | 141,500 (78.6) | 130,000 (78.6) | | | | | | | |
| 20 | 173,500 (60.6) | 143,500 (67.6) | 123,500 (72) | 112,000 (75) | 102,000 (77.5) | 90,300 (79.5) | | | | | |
| 25 | 138,500 (52) | 131,500 (61.5) | 110,500 (62.6) | 95,550 (71) | 89,250 (74) | 78,550 (76.5) | 73,700 (78.5) | 68,300 (80) | | | |
| 30 | 108,000 (43) | 108,000 (65.5) | 98,000 (63) | 88,350 (67.5) | 78,750 (71) | 69,250 (73.5) | 65,100 (76) | 61,000 (77.5) | 50,000 (78.5) | | |
| 35 | 84,700 (30.6) | 84,700 (49) | 84,700 (58) | 80,150 (83.6) | 69,000 (67.6) | 60,750 (70.8) | 57,150 (73) | 54,000 (75.8) | 52,160 (77.5) | | |
| 40 | | 70,500 (41) | 70,500 (52.5) | 70,500 (59.5) | 61,300 (64) | 54,000 (67.5) | 50,600 (70.5) | 48,300 (73) | 45,850 (75) | 38,000 (79) | |
| 45 | | 58,850 (32) | 58,850 (47) | 58,850 (55) | 55,000 (60.6) | 48,500 (64.5) | 46,200 (68) | 43,050 (71) | 40,400 (73) | 36,760 (77) | |
| 50 | | 49,800 (17.5) | 49,600 (40.6) | 49,600 (50.5) | 48,750 (67) | 43,050 (61.5) | 40,700 (65) | 38,250 (68.5) | 35,750 (71) | 32,100 (76.5) | |
| 60 | | | 36,200 (27.5) | 36,200 (38.6) | 36,200 (48.6) | 34,300 (56) | 33,600 (60.6) | 30,750 (63.5) | 28,500 (66.6) | 26,350 (72) | |
| 70 | | | | 26,050 (25) | 26,050 (38.5) | 26,050 (47.5) | 26,050 (53) | 24,750 (56) | 23,100 (61.6) | 22,000 (68.5) | |
| 80 | | | | | 18,850 (27) | 18,850 (39) | 18,850 (46.5) | 18,850 (52.5) | 18,700 (56.6) | 18,600 (64.6) | |
| 90 | | | | | | 13,500 (28) | 13,500 (38.5) | 13,500 (46.5) | 13,500 (51.5) | 13,250 (56.5) | |
| 100 | | | | | | | 9,390 (29) | 9,390 (38) | 9,390 (45.6) | 12,600 (56.5) | |
| 110 | | | | | | | 6,080 (12.5) | 6,080 (30.5) | 6,080 (39) | 10,100 (52) | |
| 120 | | | | | | | | 3,390 (17.6) | 3,390 (31) | 7,530 (47.6) | |
| 130 | | | | | | | | | 1,150 (19.6) | 5,390 (42.5) | |
| 140 | | | | | | | | | | 3,810 (36.5) | |
| 150 | | | | | | | | | | 2,100 (30) | |
| Minimum boom angle (deg.) for indicated length (no load) | | | | | | | | | | 10 | 19 |
| Maximum boom length (ft.) at 0 deg. boom angle (no load) | | | | | | | | | | 140 | 167 |



SGS
IR11/011



SGS
CH11/0655



SGS
CH11/0653

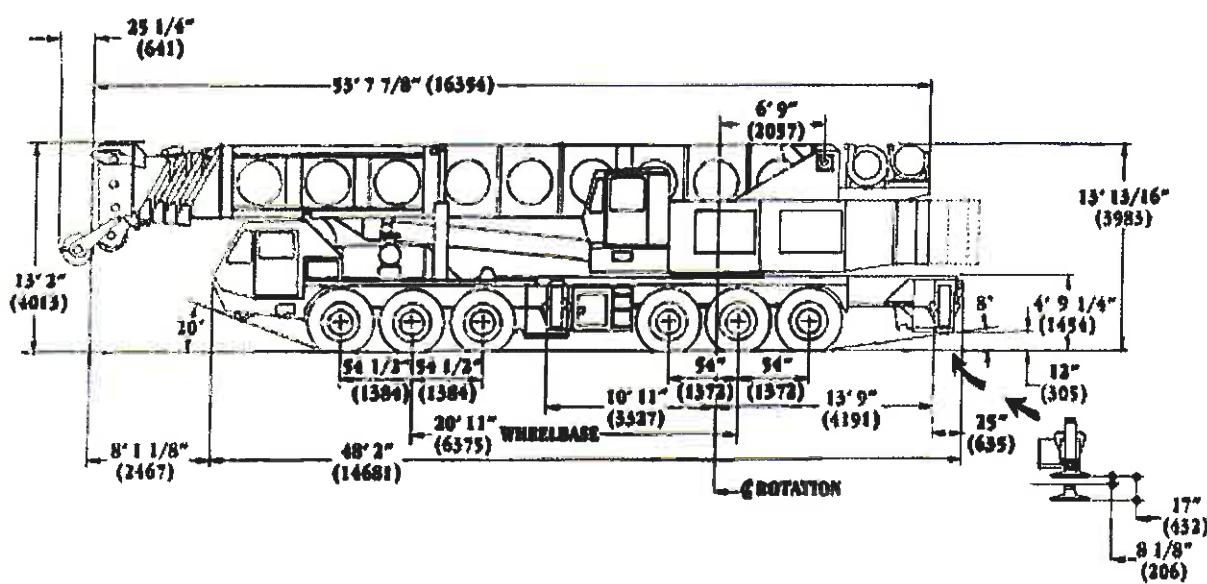
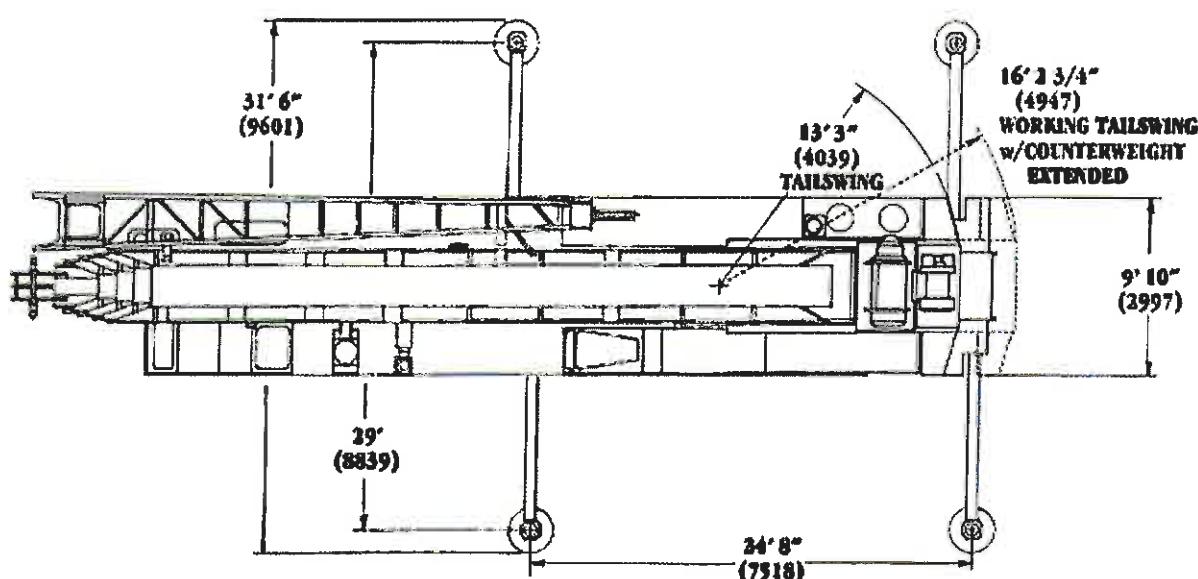


SGS
CH11/0654

جربة قليل ١٥٠ تون تلسكوبي GROVE

Dimensions

TM1500



جرثقیل ۱۵۰ تن زنجیری



RACOCRANE

| | |
|--------|---------------------------|
| DEMAG | کارخانه سازنده |
| CC600 | مدل |
| 1986 | سال ساخت |
| ۱۵۰ تن | حداکثر ظرفیت باربرداری |
| ۶ متر | طول بوم |
| ۴۸ متر | طول حیب |
| آلمان | کشور سازنده |

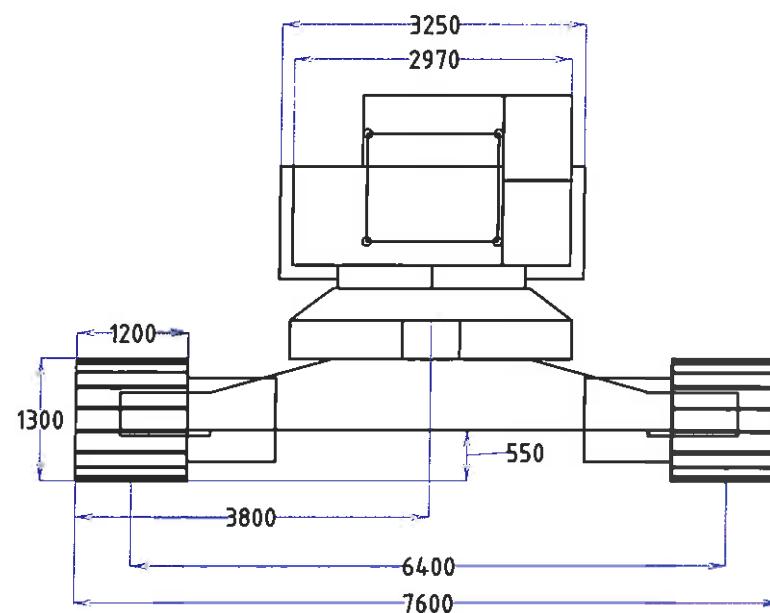
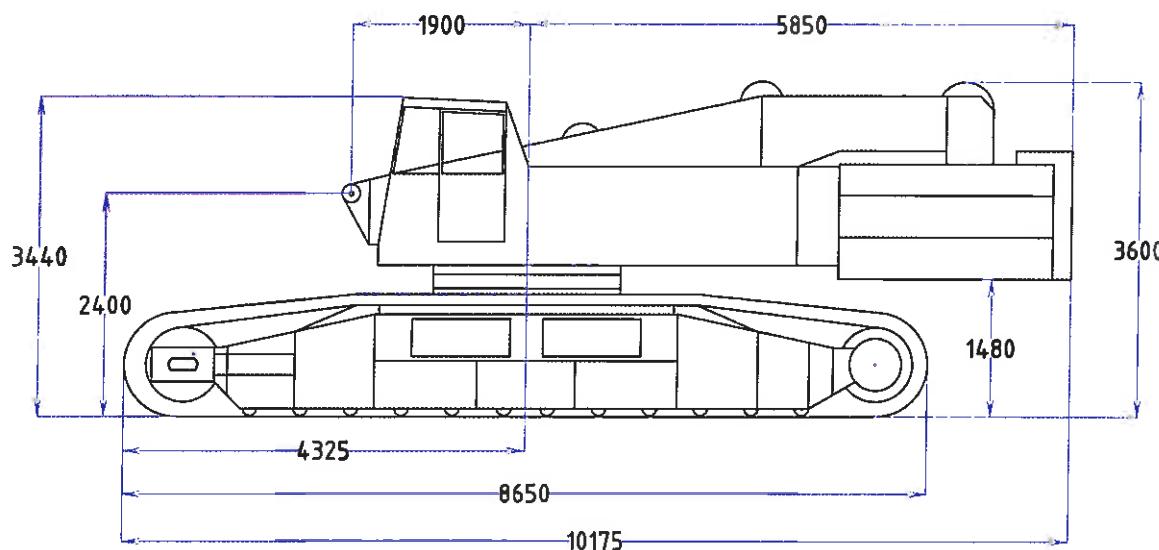
جر تغیل ۱۵۰ تن زنجیری Demag



خط ویژه: ۰۲۱-۸۴۳۱۶ فکس: ۰۲۱-۸۸۷۱۵۱۶ (۳۰ خط)

میدان آزادگان، خیابان احمد قمیر (پخارست)، خیابان سیزدهم پیلاک ۱، طبقه ۱، واحد ۱

DEMAG CC 600 DIMENSIONS



DEMAG CC 600

Counterweight - 55 t

Track - 6.4 m

Slope - 0°

Capacity = cargo + hook block

Main boom capacities 71.4%

| Boom Radius (m) | Main boom length (m) | | | | | | | | | | | |
|-----------------|----------------------|-------|-------|-------|------|------|------|------|------|------|------|------|
| | 9 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
| 4 | 140.0 | 140.0 | | | | | | | | | | |
| 4.5 | 135.0 | 134.0 | | | | | | | | | | |
| 5 | 122.0 | 122.0 | 120.0 | 120.0 | | | | | | | | |
| 6 | 102.0 | 101.0 | 101.0 | 100.0 | | | | | | | | |
| 7 | 86.0 | 85.9 | 85.3 | 84.7 | 84.0 | 82.0 | | | | | | |
| 8 | 74.3 | 74.2 | 73.6 | 73.1 | 72.5 | 71.9 | 65.0 | | | | | |
| 9 | 65.4 | 65.1 | 64.6 | 64.1 | 63.5 | 62.9 | 61.9 | 56.0 | | | | |
| 10 | 58.4 | 58.0 | 57.6 | 57.0 | 56.2 | 55.9 | 55.2 | 52.4 | 46.0 | 37.0 | | |
| 12 | | 47.9 | 47.1 | 46.6 | 46.0 | 45.5 | 44.7 | 44.3 | 39.0 | 34.2 | 26.0 | |
| 14 | | | 38.3 | 37.9 | 37.4 | 37.0 | 36.5 | 36.1 | 34.3 | 30.9 | 25.2 | 19.0 |
| 16 | | | | 31.8 | 31.5 | 31.0 | 30.6 | 30.1 | 29.7 | 29.2 | 27.6 | 23.3 |
| 18 | | | | | 26.8 | 26.4 | 25.9 | 25.4 | 24.9 | 24.6 | 24.0 | 21.4 |
| 20 | | | | | | 23.7 | 22.8 | 23.4 | 21.8 | 21.4 | 20.9 | 20.5 |
| 22 | | | | | | | 20.6 | 20.0 | 19.6 | 19.0 | 18.6 | 18.2 |
| 24 | | | | | | | | 17.8 | 17.3 | 16.8 | 16.3 | 15.9 |
| 26 | | | | | | | | | 16.0 | 15.5 | 14.9 | 14.5 |
| 28 | | | | | | | | | | 14.5 | 14.0 | 13.3 |
| 30 | | | | | | | | | | | 12.7 | 12.1 |
| 34 | | | | | | | | | | | | 10.0 |
| 38 | | | | | | | | | | | | |
| 42 | | | | | | | | | | | | |
| 46 | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | |
| | Reaving | | | | | | | | | | | |
| | 16 | 16 | 15 | 15 | 10 | 10 | 8.0 | 7 | 6 | 5 | 4 | 3 |

جرثقیل ۱۵۰ تن رنجیری



RACOCRANE

| | |
|----------|---------------------------|
| IHI | کارخانه سازنده |
| CC H1500 | مدل |
| 1990 | سال ساخت |
| ۱۵۰ تن | حداکثر ظرفیت باربرداری |
| ۶۰ متر | طول بوم |
| ۲۰ متر | طول حیب |
| ژاین | کشور سازنده |

جتنیل ۱۵۰ تن زنجیری IHI



خط ویژه: ۰۲۱-۸۴۳۱۶ فکس: ۰۲۱-۸۸۷۱۵۱۶ (خط)

میدان آزادی، خیابان احمد قمیر(پخارست)، خیابان سیزدهم میلاد، طبقه ۱، واحد ۱

CCH 1500-2
150 Ton Crawler

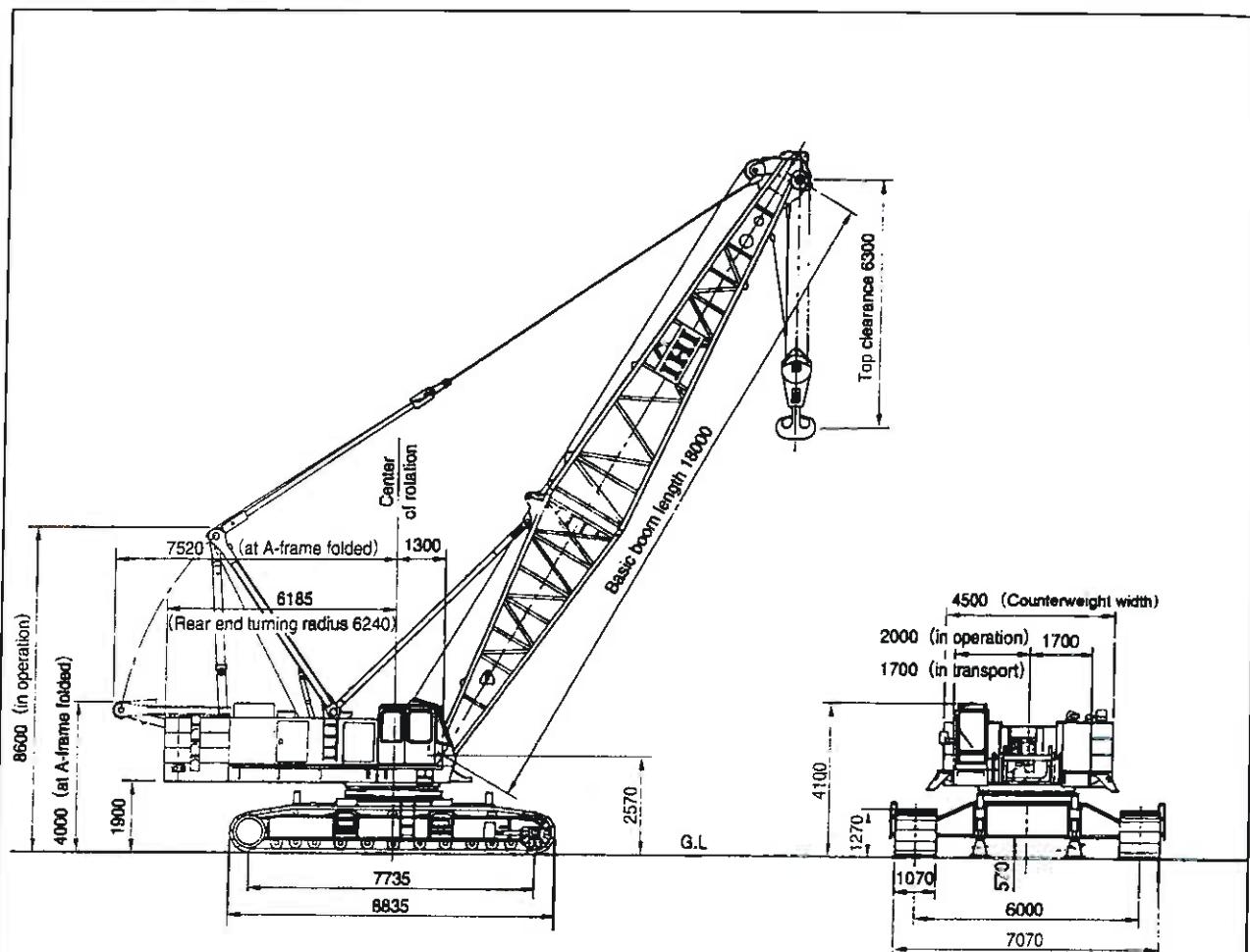
Rated lifting loads (with 56 000kg counterweight)

Unit: metric ton

| Welding method (mm) | | Boom length (m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|-------|-----------------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|--|--|
| | | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 51.0 | 54.0 | 57.0 | 60.0 | 63.0 | 66.0 | 69.0 | 72.0 | 75.0 | 78.0 | 81.0 | | | | | | |
| 5.0 | 150.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | 140.0 | 138.8 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 | 123.3 | 123.6 | 123.4 | 123.2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 | 99.4 | 99.2 | 99.1 | 99.0 | 98.9 | 98.8 | | | | | | | | | | | | | | | | | | | | | | |
| 9.0 | 82.3 | 82.6 | 82.5 | 82.4 | 82.3 | 82.2 | 82.1 | 81.9 | | | | | | | | | | | | | | | | | | | | |
| 10.0 | 70.8 | 70.6 | 70.5 | 70.4 | 70.3 | 70.2 | 70.1 | 69.9 | 69.8 | 69.6 | | | | | | | | | | | | | | | | | | |
| 12.0 | 54.3 | 54.7 | 54.6 | 54.5 | 54.4 | 54.3 | 54.2 | 54.0 | 53.9 | 53.7 | 53.6 | 53.5 | 53.4 | 53.3 | | | | | | | | | | | | | | |
| 14.0 | 44.8 | 44.8 | 44.5 | 44.4 | 44.3 | 44.2 | 44.1 | 43.9 | 43.8 | 43.6 | 43.5 | 43.4 | 43.3 | 43.0 | 42.8 | 41.8 | 41.7 | | | | | | | | | | | |
| 16.0 | 37.5 | 37.6 | 37.5 | 37.4 | 37.3 | 37.2 | 37.1 | 36.9 | 36.8 | 36.6 | 36.5 | 36.4 | 36.3 | 36.2 | 36.0 | 35.8 | 35.5 | 35.2 | 34.9 | 34.7 | 33.5 | 21.9 | | | | | | |
| 18.0 | 32.3 | 32.3 | 32.2 | 32.1 | 32.0 | 31.9 | 31.8 | 31.7 | 31.6 | 31.4 | 31.3 | 31.2 | 31.1 | 31.0 | 30.8 | 30.6 | 30.4 | 30.1 | 29.8 | 29.6 | 26.5 | 20.1 | | | | | | |
| 20.0 | 28.2 | 28.1 | 27.9 | 27.7 | 27.5 | 27.3 | 27.1 | 27.0 | 26.9 | 26.8 | 26.7 | 26.6 | 26.5 | 26.4 | 26.3 | 26.2 | 26.1 | 26.0 | 25.9 | 24.6 | 19.3 | | | | | | | |
| 22.0 | 25.0 | 24.8 | 24.6 | 24.4 | 24.1 | 23.9 | 23.8 | 23.7 | 23.6 | 23.5 | 23.4 | 23.3 | 23.2 | 23.1 | 23.0 | 22.9 | 22.8 | 22.6 | 21.7 | 18.4 | | | | | | | | |
| 24.0 | | 22.0 | 21.2 | 21.5 | 21.2 | 21.0 | 20.9 | 20.8 | 20.6 | 20.5 | 20.4 | 20.2 | 20.1 | 20.0 | 19.8 | 19.7 | 19.6 | 17.6 | | | | | | | | | | |
| 26.0 | | | 19.8 | 19.6 | 19.4 | 19.1 | 19.0 | 18.8 | 18.6 | 18.5 | 18.4 | 18.3 | 18.1 | 18.0 | 17.9 | 17.7 | 17.6 | 17.5 | 16.7 | | | | | | | | | |
| 28.0 | | | | 17.3 | 17.5 | 17.3 | 17.2 | 17.0 | 16.8 | 16.6 | 16.7 | 16.5 | 16.5 | 16.3 | 16.2 | 16.1 | 15.9 | 15.8 | 15.7 | 15.5 | | | | | | | | |
| 30.0 | | | | | 16.4 | 16.0 | 15.9 | 15.7 | 15.5 | 15.3 | 15.1 | 15.0 | 14.8 | 14.7 | 14.6 | 14.5 | 14.3 | 14.2 | 14.1 | 14.0 | | | | | | | | |
| 32.0 | | | | | | 14.7 | 14.5 | 14.3 | 14.1 | 13.9 | 13.7 | 13.5 | 13.4 | 13.3 | 13.2 | 13.1 | 12.9 | 12.8 | 12.7 | 12.6 | 12.5 | | | | | | | |
| 34.0 | | | | | | | 13.4 | 13.2 | 13.0 | 12.8 | 12.6 | 12.4 | 12.3 | 12.2 | 12.1 | 12.0 | 11.9 | 11.8 | 11.4 | 11.3 | 11.2 | | | | | | | |
| 36.0 | | | | | | | | 12.0 | 12.0 | 11.8 | 11.6 | 11.4 | 11.3 | 11.1 | 11.1 | 10.9 | 10.8 | 10.4 | 10.1 | 10.0 | | | | | | | | |
| 38.0 | | | | | | | | | 11.4 | 11.1 | 10.9 | 10.8 | 10.6 | 10.5 | 10.4 | 10.3 | 10.2 | 10.0 | 9.6 | 9.4 | 9.2 | | | | | | | |
| 40.0 | | | | | | | | | | 10.4 | 10.1 | 9.9 | 9.7 | 9.5 | 9.4 | 9.3 | 9.1 | 8.6 | 8.5 | 8.3 | 8.2 | | | | | | | |
| 42.0 | | | | | | | | | | | 9.3 | 9.1 | 8.9 | 8.8 | 8.7 | 8.5 | 8.3 | 8.2 | 7.9 | 7.8 | 7.3 | | | | | | | |
| 44.0 | | | | | | | | | | | | 8.4 | 8.3 | 8.2 | 8.1 | 7.8 | 7.7 | 7.6 | 7.3 | 7.1 | 6.9 | 6.6 | | | | | | |
| 46.0 | | | | | | | | | | | | | 7.6 | 7.5 | 7.5 | 7.0 | 7.0 | 6.9 | 6.8 | 6.4 | 6.2 | 6.0 | | | | | | |
| 48.0 | | | | | | | | | | | | | | 7.1 | 6.9 | 6.8 | 6.4 | 6.4 | 6.3 | 6.0 | 5.8 | 5.3 | | | | | | |
| 50.0 | | | | | | | | | | | | | | | 6.4 | 6.4 | 6.4 | 6.3 | 6.0 | 5.8 | 5.6 | 5.3 | | | | | | |
| 52.0 | | | | | | | | | | | | | | | | 6.3 | 6.0 | 5.9 | 5.7 | 5.4 | 5.0 | 4.8 | | | | | | |
| 54.0 | | | | | | | | | | | | | | | | | 5.8 | 5.4 | 5.2 | 4.9 | 4.7 | 4.5 | 4.3 | | | | | |
| 56.0 | | | | | | | | | | | | | | | | | | 5.2 | 5.0 | 4.7 | 4.4 | 4.2 | 4.0 | 3.8 | | | | |
| 58.0 | | | | | | | | | | | | | | | | | | | 4.5 | 4.3 | 4.0 | 3.8 | 3.5 | 3.4 | | | | |
| 60.0 | | | | | | | | | | | | | | | | | | | | 4.1 | 3.9 | 3.6 | 3.4 | 3.1 | 2.8 | | | |
| 62.0 | | | | | | | | | | | | | | | | | | | | | | 3.6 | 3.2 | 3.0 | 2.7 | 2.5 | | |



چراغیل ۱۵۰ تن زنجیری IHI



■ Specifications

| Max. lifting capacity x working radius | | 150 metric tons x 5.0 m | | | | |
|---|---------------------------|---|----------------|------------------|--------|---------------------------|
| Max. boom length w/jib boom | | 103 m (72 m main + 31m jib) | | | | |
| | Main drum hoist/lowering | <ul style="list-style-type: none"> * Hi : 100/60 m/min * Lo : 50/30 m/min | | | | |
| Rope speed | Aux. drum hoist/lowering | <ul style="list-style-type: none"> * Hi : 100/60 m/min * Lo : 50/30 m/min | | | | |
| | Boom drum hoist/lowering | * 28 x 2 m/min | | | | |
| Part line | 150 ton hook block | 16 part line | | | | |
| | 15 ton hook block | 2 part line | | | | |
| | 11 ton hook block | 2 part line | | | | |
| | Boom drum hoist/lowering | 9 x 2 part line | | | | |
| Counterweight | | <table border="1" style="width: 100%;"> <thead> <tr> <th>Standard spec.</th> <th>Additional spec.</th> </tr> </thead> <tbody> <tr> <td>56 ton</td> <td>69ton+16ton (carbody wt.)</td> </tr> </tbody> </table> | Standard spec. | Additional spec. | 56 ton | 69ton+16ton (carbody wt.) |
| Standard spec. | Additional spec. | | | | | |
| 56 ton | 69ton+16ton (carbody wt.) | | | | | |
| Total operating weight (with 18 m boom & 150 ton hook block) | | 152.6 ton | | | | |
| Average ground bearing pressure | | 0.86 kg/cm ² | | | | |
| Average ground bearing pressure | | 1.02 kg/cm ² | | | | |

The rope speed will be changed depending on the load.

جرثقیل ۱۰۵ تن زنجیری



RIG RACOCRANE

| | |
|------------|---------------------------|
| Manitowoc | کارخانه سازنده |
| Vicon 3900 | مدل |
| 1988 | سال ساخت |
| ۱۰۵ تن | حداکثر ظرفیت باربرداری |
| ۶۰ متر | طول بوم |
| ۴۰ متر | طول جیب |
| آمریکا | کشور سازنده |

جرثقیل ۱۰۰ تن زنجیری Manitowoc



فکس: ۰۲۱-۸۸۷۱۵۱۶۰ - ۰۲۱-۸۳۱۰۱۶۱ (۰۲۱) - ۰۲۱-۸۸۷۱۵۱۶۰

میدان آرمانیتین، خیابان احمد قصیر(بخارست)، خیابان سیزدهم پیلوک ۱، طبقه ۱، واحد ۱



MANITOWOC ENGINEERING CO.

A Division of The Manitowoc Company, Inc. Manitowoc, Wisconsin 54220



LIFTCRANE CAPACITIES

BOOM NO. 8 WITH OPEN THROAT TOP 74,000 LB. COUNTERWEIGHT

MEETS
ANSI B30.5
REQUIREMENTS

3900
CRAWLER

LIFTING CAPACITIES: Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are shown by shaded areas.

Upper boom point capacity (whip line) for single part line is 22,500 lbs. (20,000 lbs. when rear auxiliary drum is used). In all cases, upper boom point capacities cannot exceed those listed for the main boom capacity.

Capacities are shown in pounds. Weight of jib, (see chart A), all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is to be considered part of the main boom load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved. See boom raising capability chart.

OPERATING CONDITIONS: Machine to operate in a level position on a firm surface with gantry in working position and be rigged in accordance with and under conditions referred to in rigging drawing No. 48029 or No. 48237 and load line specification chart No. 4899.

Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation.

OPERATING RADIUS: Operating radius is the horizontal distance from the axis of rotation to the center of vertical hoist line or load block with the load freely suspended. Add 11° to boom point radius for radius of sheave when using single part hoist line.

Boom angle is the angle between horizontal and centerline of boom butt and inserts and is an indication of operating radius. In all cases, operating radius shall govern capacity.

BOOM POINT ELEVATION: Boom point elevation, in feet, is the vertical distance from ground level to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with 20' crawler, 38" or 48" treads, 15' retractable gantry, 10 or 12 part boom hoist reeving, two 1-1/2" boom pendants, 1st cwt. = 32,000 lbs., 2nd cwt. = 26,500 lbs., 3rd cwt. = 15,500 lbs.

| HOIST REEVING FOR MAIN LOAD BLOCK | | | | |
|-----------------------------------|---------|---------|---------|---------|
| No. Parts of Line | 1 | 2 | 3 | 4 |
| Maximum Load - lbs | 22,500 | 45,000 | 67,500 | 90,000 |
| No. Parts of Line | 6 | 7 | 8 | 9 |
| Maximum Load - lbs | 135,000 | 157,500 | 180,000 | 200,000 |

LOAD AND WHIP LINE SPECIFICATIONS

LOAD LINE 1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. (Approx. Weight Per Ft. in lbs. 1.85)

WHIP LINE 1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. Maximum load = 22,500 lbs. per line. (Approx. Weight Per Ft. in lbs. 1.85)

| MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED | | | | | |
|--|-------------|--------------------------|----------|--------------|--------------|
| OVER FRONT OF BLOCKED CRAWLERS | | OVER SIDE OF CRAWLERS | | | |
| Bm. Lgh. | Jib No. 123 | Jib No. 124 | Bm. Lgh. | Jib. No. 123 | Jib. No. 124 |
| 210' | — | — | 190' | — | — |
| 200' | — | — | 180' | — | — |
| 190' | 30' | 60' | 170' | 30' | 60' |
| 180' | 50' | 60' | 160' | 60' | 60' |
| 170' | 60' | 60' | — | — | — |

Load block, hook and weight ball on ground at start.

| (A) DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED | | |
|--|-------------|-------------|
| Jib Lgh. | Jib No. 123 | Jib No. 124 |
| 30' | 2,500 lb. | 1,800 lb. |
| 40' | 3,100 lb. | 2,050 lb. |
| 50' | 3,700 lb. | 2,300 lb. |
| 60' | 4,400 lb. | 2,500 lb. |

For jib capacities, consult jib chart.

| Boom Lgh. Ft. | Oper. Rad. Ft. | Boom Ang. Deg. | Boom Point Elev. Deg. | Capacity: Ft. | Boom Lgh.: Ft. | Oper. Rad.: Ft. | Boom Ang.: Deg. | Boom Point Elev. Deg. | Capacity: | | |
|---------------------|----------------------|----------------------|--------------------------------|------------------|----------------------|-----------------------|-----------------------|--------------------------------|-----------|------|---------|
| 15 | 79.1 | 65.6 | 1200.000 | 40 | 58.7 | 66.5 | 51,100 | 18 | 80.8 | 95.5 | 162,600 |
| 16 | 78.1 | 65.4 | 1200.000 | 45 | 53.1 | 62.1 | 43,800 | 19 | 80.2 | 94.3 | 148,500 |
| 17 | 77.1 | 65.1 | 180,200 | 50 | 50.5 | 59.1 | 38,100 | 20 | 79.1 | 95.2 | 135,600 |
| 18 | 76.1 | 64.9 | 163,400 | 55 | 42.8 | 42.8 | 33,700 | 22 | 78.2 | 94.8 | 117,600 |
| 19 | 75.2 | 64.7 | 149,400 | 60 | 36.4 | 48.2 | 30,000 | 24 | 76.9 | 94.3 | 103,100 |
| 20 | 74.2 | 64.4 | 137,500 | 65 | 28.7 | 40.3 | 27,100 | 26 | 75.6 | 93.5 | 91,700 |
| 22 | 72.2 | 63.8 | 116,500 | 70 | 18.5 | 28.9 | 24,500 | 28 | 74.3 | 93.3 | 82,400 |
| 24 | 70.1 | 63.1 | 104,100 | 16 | 81.1 | 85.7 | 200,000 | 30 | 73.0 | 92.7 | 74,700 |
| 26 | 68.1 | 62.3 | 92,700 | 17 | 80.4 | 85.5 | 179,700 | 32 | 71.6 | 92.1 | 68,300 |
| 28 | 66.0 | 61.5 | 83,400 | 19 | 78.9 | 85.4 | 162,900 | 34 | 70.3 | 91.4 | 62,800 |
| 30 | 63.9 | 60.5 | 75,800 | 20 | 78.2 | 85.0 | 149,800 | 36 | 68.9 | 90.6 | 58,100 |
| 32 | 61.8 | 59.5 | 69,400 | 22 | 76.7 | 84.5 | 118,000 | 38 | 67.5 | 89.8 | 54,000 |
| 34 | 59.6 | 58.4 | 63,900 | 24 | 75.2 | 84.0 | 103,500 | 40 | 66.2 | 89.0 | 50,400 |
| 36 | 57.1 | 57.2 | 59,200 | 26 | 73.8 | 83.5 | 92,000 | 45 | 62.6 | 86.6 | 43,000 |
| 38 | 55.0 | 55.8 | 55,100 | 28 | 72.3 | 82.0 | 82,000 | 50 | 59.0 | 83.8 | 37,400 |
| 40 | 52.7 | 54.4 | 51,400 | 30 | 68.1 | 81.5 | 76,000 | 55 | 56.2 | 80.6 | 29,900 |
| 45 | 46.4 | 50.1 | 44,200 | 32 | 69.2 | 81.5 | 68,700 | 60 | 51.2 | 76.8 | 29,300 |
| 50 | 39.4 | 44.7 | 38,500 | 34 | 67.7 | 80.7 | 63,200 | 65 | 47.0 | 72.5 | 26,300 |
| 55 | 31.1 | 37.6 | 34,100 | 36 | 66.1 | 79.4 | 59,500 | 70 | 42.5 | 67.4 | 23,800 |
| 60 | 20.0 | 27.2 | 30,500 | 38 | 64.5 | 78.9 | 54,400 | 75 | 37.5 | 61.5 | 21,600 |
| 15 | 80.6 | 75.7 | 200,000 | 45 | 58.9 | 75.1 | 43,500 | 80 | 31.9 | 54.3 | 19,800 |
| 16 | 79.8 | 75.6 | 199,000 | 50 | 54.6 | 71.8 | 37,800 | 85 | 26.3 | 45.1 | 18,200 |
| 17 | 79.0 | 75.4 | 149,100 | 55 | 50.0 | 68.0 | 33,300 | 90 | 16.3 | 31.9 | 16,700 |
| 18 | 78.1 | 75.2 | 163,100 | 60 | 45.2 | 63.4 | 29,700 | 95 | — | — | — |
| 19 | 77.3 | 74.9 | 149,100 | 65 | 39.9 | 58.0 | 26,700 | 100 | — | — | — |
| 20 | 76.5 | 74.7 | 137,200 | 70 | 33.9 | 51.3 | 24,200 | 105 | — | — | — |
| 22 | 74.8 | 74.2 | 118,200 | 75 | 26.9 | 42.8 | 22,100 | 110 | — | — | — |
| 24 | 73.1 | 73.6 | 103,700 | 80 | 17.3 | 30.5 | 20,200 | 115 | — | — | — |
| 26 | 71.4 | 73.0 | 92,300 | — | — | — | — | 120 | — | — | — |
| 28 | 69.6 | 72.3 | 83,000 | — | — | — | — | 125 | — | — | — |
| 30 | 67.9 | 71.5 | 75,400 | — | — | — | — | 130 | — | — | — |
| 32 | 66.1 | 70.5 | 69,000 | — | — | — | — | 135 | — | — | — |
| 34 | 64.3 | 69.7 | 63,500 | — | — | — | — | 140 | — | — | — |
| 36 | 62.5 | 68.7 | 58,800 | — | — | — | — | 145 | — | — | — |
| 38 | 60.6 | 67.6 | 54,700 | — | — | — | — | 150 | — | — | — |



SGS
IR11/011



SGS
CH11/0655



SGS
ISO 9001
CH11/0655



SGS
ISO 9001
CH11/0654

جرثيل ١٠٠ تون زنجيري Manitowoc



SEE CONDITIONS ON REVERSE SIDE

| Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. | Beam | Oper. |
|-------------|-------------|-----------------------|-----------------------|-----------------|-----------------------|-----------------------|-----------------------|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------|
| Lift: Ft | Lift: Ft | Ext. Ang.: Deg. | Ext. Ang.: Deg. | Point: Elev. | Ext. Ang.: Deg. | Ext. Ang.: Deg. | Ext. Ang.: Deg. | Point: Elev. | Ext. Ang.: Deg. | |
| 22 | 80.4 | 115.1 | 117.200 | 28 | 80.6 | 154.7 | 80.800 | 32 | 80.9 | 154.4 | 85.700 | 36 | 81.1 | 214.1 | 54.600 | 38 | 80.3 | 183.1 | 50.400 | 40 | 80.0 | 213.8 | 52.800 | 42 | 80.2 | 213.5 | 45.000 |
| 24 | 79.3 | 114.8 | 102.700 | 30 | 79.9 | 154.3 | 73.100 | 34 | 80.3 | 183.1 | 55.200 | 36 | 79.6 | 183.7 | 55.500 | 38 | 79.0 | 183.3 | 51.300 | 40 | 78.8 | 182.5 | 49.800 | 42 | 78.5 | 211.5 | 53.000 |
| 26 | 78.3 | 114.4 | 91.200 | 32 | 79.1 | 153.9 | 66.600 | 40 | 78.3 | 182.9 | 47.700 | 42 | 77.9 | 211.2 | 51.700 | 44 | 77.2 | 211.5 | 53.700 | 46 | 76.9 | 210.3 | 52.200 | 48 | 76.6 | 209.8 | 50.800 |
| 28 | 77.2 | 113.9 | 82.000 | 34 | 78.3 | 153.5 | 61.100 | 48 | 76.7 | 181.8 | 40.300 | 50 | 76.4 | 210.1 | 50.400 | 52 | 76.0 | 209.5 | 48.800 | 54 | 75.7 | 207.2 | 46.800 | 56 | 75.4 | 205.9 | 45.800 |
| 30 | 76.1 | 113.4 | 74.300 | 36 | 77.5 | 153.1 | 56.400 | 52 | 75.1 | 180.6 | 34.600 | 54 | 74.8 | 204.2 | 48.000 | 56 | 74.5 | 202.9 | 46.000 | 60 | 74.2 | 201.5 | 44.000 | 64 | 73.9 | 200.2 | 42.000 |
| 32 | 75.1 | 112.9 | 67.900 | 38 | 76.8 | 152.7 | 52.300 | 60 | 73.4 | 179.2 | 30.100 | 64 | 71.7 | 177.6 | 26.500 | 66 | 70.7 | 175.9 | 23.500 | 70 | 70.1 | 204.2 | 17.800 | 74 | 70.0 | 202.9 | 15.800 |
| 34 | 74.0 | 112.4 | 62.400 | 40 | 76.0 | 152.2 | 48.600 | 70 | 68.6 | 174.1 | 21.900 | 76 | 66.6 | 171.9 | 18.800 | 80 | 64.1 | 202.3 | 15.900 | 84 | 63.8 | 200.2 | 13.900 | 92 | 63.5 | 198.1 | 11.900 |
| 36 | 72.9 | 111.8 | 57.700 | 42 | 74.0 | 150.8 | 41.300 | 78 | 66.5 | 169.8 | 15.600 | 84 | 64.9 | 169.6 | 15.900 | 90 | 63.1 | 167.2 | 15.300 | 98 | 62.7 | 165.2 | 11.500 | 106 | 62.5 | 163.2 | 10.400 |
| 38 | 71.8 | 111.1 | 53.500 | 44 | 72.0 | 149.3 | 15.600 | 90 | 60.0 | 147.6 | 31.100 | 100 | 58.4 | 174.0 | 20.800 | 104 | 56.1 | 190.6 | 9.400 | 112 | 55.8 | 187.7 | 8.500 | 120 | 55.0 | 184.7 | 7.700 |
| 40 | 70.7 | 110.5 | 49.500 | 46 | 70.0 | 147.6 | 21.400 | 106 | 56.6 | 171.9 | 18.800 | 110 | 54.8 | 170.5 | 18.000 | 114 | 52.4 | 184.7 | 6.000 | 122 | 51.6 | 181.5 | 6.000 | 130 | 51.4 | 179.0 | 5.000 |
| 45 | 67.9 | 108.6 | 42.600 | 48 | 67.5 | 145.7 | 27.500 | 116 | 54.4 | 170.0 | 12.500 | 120 | 51.7 | 168.7 | 12.700 | 124 | 49.7 | 144.0 | 7.000 | 132 | 48.6 | 140.6 | 6.000 | 140 | 48.4 | 138.7 | 5.000 |
| 50 | 65.1 | 106.4 | 34.400 | 50 | 65.1 | 144.5 | 24.400 | 128 | 51.2 | 167.9 | 11.400 | 132 | 48.8 | 136.4 | 11.600 | 136 | 45.4 | 134.8 | 6.600 | 144 | 43.1 | 129.7 | 6.000 | 150 | 42.7 | 128.3 | 4.400 |
| 55 | 62.2 | 103.9 | 32.400 | 52 | 63.7 | 142.3 | 21.900 | 136 | 50.0 | 161.3 | 12.400 | 140 | 40.7 | 124.1 | 5.400 | 144 | 38.2 | 118.1 | 4.300 | 152 | 36.9 | 116.1 | 4.000 | 160 | 35.9 | 114.2 | 3.700 |
| 60 | 59.2 | 101.1 | 28.800 | 54 | 61.5 | 139.6 | 19.800 | 140 | 47.5 | 172.2 | 11.400 | 144 | 42.7 | 118.1 | 4.300 | 152 | 40.1 | 114.1 | 4.000 | 160 | 38.9 | 112.2 | 3.700 | 168 | 37.9 | 110.2 | 3.400 |
| 65 | 56.1 | 97.9 | 25.600 | 56 | 59.4 | 135.8 | 17.900 | 148 | 49.5 | 152.7 | 16.300 | 152 | 45.7 | 150.7 | 16.500 | 156 | 43.1 | 144.1 | 16.300 | 164 | 41.9 | 139.0 | 16.000 | 172 | 40.9 | 137.2 | 15.000 |
| 70 | 52.9 | 94.4 | 23.300 | 60 | 57.1 | 132.7 | 16.300 | 160 | 52.1 | 142.4 | 10.500 | 164 | 49.7 | 144.0 | 7.000 | 168 | 47.6 | 158.7 | 11.400 | 176 | 45.7 | 163.4 | 10.400 | 184 | 43.7 | 161.9 | 9.400 |
| 75 | 49.5 | 90.4 | 21.100 | 62 | 58.2 | 130.5 | 9.700 | 168 | 52.1 | 141.3 | 9.700 | 172 | 50.7 | 158.3 | 9.900 | 176 | 49.4 | 163.9 | 35.200 | 184 | 47.4 | 168.3 | 34.400 | 192 | 45.4 | 176.3 | 32.000 |
| 80 | 46.0 | 85.8 | 19.300 | 64 | 62.1 | 128.2 | 8.900 | 172 | 50.0 | 139.6 | 8.900 | 176 | 48.4 | 161.9 | 9.500 | 180 | 46.4 | 160.6 | 10.400 | 188 | 44.4 | 168.7 | 9.700 | 196 | 42.4 | 176.0 | 9.000 |
| 85 | 42.1 | 80.7 | 17.500 | 66 | 64.0 | 126.1 | 7.800 | 176 | 48.0 | 127.6 | 7.800 | 180 | 44.4 | 148.4 | 7.000 | 188 | 42.1 | 144.0 | 7.000 | 196 | 40.1 | 140.0 | 6.000 | 204 | 38.1 | 137.2 | 5.000 |
| 90 | 38.7 | 74.6 | 16.200 | 68 | 64.9 | 124.9 | 6.500 | 180 | 45.9 | 126.2 | 6.500 | 184 | 43.1 | 138.1 | 6.000 | 192 | 41.1 | 134.1 | 6.000 | 200 | 39.1 | 131.2 | 5.000 | 208 | 37.1 | 128.2 | 4.000 |
| 95 | 33.8 | 67.9 | 15.000 | 70 | 68.5 | 122.4 | 5.200 | 184 | 42.9 | 118.7 | 5.200 | 192 | 40.1 | 114.7 | 5.200 | 196 | 38.2 | 110.1 | 4.000 | 204 | 36.2 | 107.1 | 4.000 | 212 | 34.2 | 104.1 | 4.000 |
| 100 | 28.8 | 58.7 | 13.800 | 72 | 70.0 | 120.3 | 4.200 | 192 | 40.9 | 114.1 | 4.200 | 196 | 38.4 | 106.7 | 4.000 | 204 | 36.7 | 103.0 | 4.000 | 212 | 34.7 | 99.0 | 4.000 | 220 | 32.7 | 96.0 | 4.000 |
| 105 | 22.8 | 49.4 | 12.800 | 74 | 71.5 | 118.2 | 3.200 | 196 | 40.9 | 113.7 | 3.200 | 200 | 38.4 | 104.7 | 3.200 | 208 | 36.7 | 101.7 | 3.200 | 216 | 34.7 | 98.7 | 3.200 | 224 | 32.7 | 95.7 | 3.200 |
| 22 | 81.2 | 125.2 | 112.500 | 76 | 72.0 | 116.9 | 102.400 | 200 | 42.6 | 115.2 | 7.000 | 204 | 39.6 | 106.7 | 7.000 | 212 | 37.6 | 103.7 | 7.000 | 220 | 35.6 | 100.7 | 7.000 | 228 | 33.6 | 97.7 | 7.000 |
| 24 | 80.2 | 124.9 | 102.400 | 78 | 72.6 | 115.6 | 94.900 | 204 | 43.2 | 114.8 | 6.200 | 208 | 40.6 | 107.6 | 6.200 | 216 | 38.6 | 104.6 | 6.200 | 224 | 36.6 | 101.6 | 6.200 | 232 | 34.6 | 98.6 | 6.200 |
| 26 | 78.3 | 124.6 | 94.900 | 80 | 73.1 | 114.3 | 87.500 | 208 | 43.8 | 113.9 | 5.200 | 212 | 41.6 | 109.6 | 5.200 | 220 | 39.6 | 106.4 | 5.200 | 228 | 37.6 | 103.4 | 5.200 | 236 | 35.6 | 100.4 | 5.200 |
| 28 | 76.2 | 124.3 | 87.500 | 82 | 73.7 | 113.0 | 79.400 | 212 | 44.4 | 113.5 | 4.200 | 216 | 42.6 | 107.2 | 4.200 | 224 | 40.4 | 104.2 | 4.200 | 232 | 38.4 | 101.2 | 4.200 | 240 | 36.4 | 98.2 | 4.200 |
| 30 | 75.3 | 124.0 | 73.700 | 84 | 74.3 | 112.6 | 61.700 | 216 | 45.0 | 112.7 | 3.200 | 220 | 43.2 | 105.0 | 3.200 | 232 | 41.2 | 101.8 | 3.200 | 240 | 39.2 | 98.0 | 3.200 | 248 | 37.2 | 95.0 | 3.200 |
| 32 | 73.4 | 123.5 | 67.900 | 86 | 74.8 | 111.2 | 48.400 | 220 | 45.6 | 112.3 | 2.200 | 224 | 44.0 | 102.8 | 2.200 | 236 | 41.8 | 99.6 | 2.200 | 244 | 39.8 | 96.6 | 2.200 | 252 | 37.8 | 93.6 | 2.200 |
| 34 | 71.4 | 123.1 | 61.600 | 88 | 75.3 | 110.8 | 42.000 | 224 | 46.2 | 111.8 | 1.200 | 228 | 44.8 | 102.4 | 1.200 | 236 | 42.8 | 97.2 | 1.200 | 244 | 40.8 | 94.8 | 1.200 | 252 | 38.8 | 91.8 | 1.200 |
| 36 | 69.5 | 121.1 | 51.800 | 90 | 76.8 | 109.4 | 31.500 | 228 | 46.8 | 111.4 | 66.000 | 232 | 45.4 | 101.0 | 66.000 | 240 | 43.0 | 95.6 | 66.000 | 248 | 41.2 | 93.2 | 66.000 | 256 | 39.2 | 90.8 | 66.000 |
| 38 | 67.6 | 120.8 | 46.200 | 92 | 77.3 | 108.0 | 21.800 | 232 | 47.4 | 110.9 | 19.200 | 236 | 46.0 | 100.6 | 19.200 | 244 | 43.6 | 93.8 | 19.200 | 252 | 41.6 | 91.6 | 19.200 | 260 | 39.6 | 89.6 | 19.200 |
| 40 | 65.6 | 120.5 | 41.800 | 94 | 77.9 | 106.6 | 19.000 | 236 | 48.0 | 109.5 | 17.300 | 240 | 44.6 | 98.4 | 17.300 | 252 | 43.2 | 91.4 | 17.300 | 260 | 41.4 | 89.2 | 17.300 | 268 | 39.4 | 87.2 | 17.300 |
| 42 | 63.7 | 120.2 | 37.500 | 96 | 78.5 | 105.2 | 17.000 | 240 | 48.6 | 108.1 | 15.400 | 244 | 45.2 | 96.2 | 15.400 | 256 | 43.8 | 89.0 | 15.400 | 264 | 42.0 | 86.8 | 15.400 | 272 | 39.2 | 84.8 | 15.400 |
| 44 | 61.7 | 118.9 | 34.400 | 98 | 79.1 | 103.8 | 15.200 | 244 | 49.2 | 106.7 | 13.500 | 252 | 45.8 | 94.0 | 13.500 | 260 | 44.0 | 87.6 | 13.500 | 268 | 42.8 | 85.6 | 13.500 | 276</ | | | |



RACOCRANE

ریکارن مالکین اثاث ساختمان و فوچی ساختمان

WWW.RACOCRANE.COM