



# MAST CLIMBING WORK PLATFORM MC-36/15

# Index

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1. Introduction

2. Product Certificate

3. Technical Characteristics

4. Applications of MC-36/15 MCWP

5. Engineering Service

6. References

# Index

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1. Introduction

2. Product Certificate

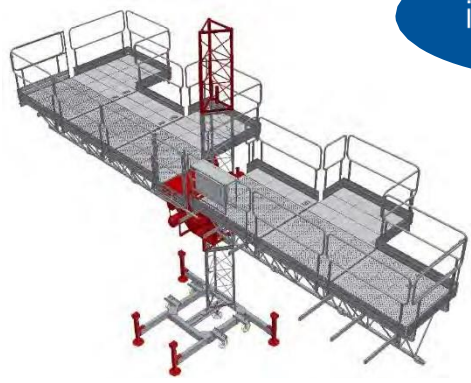
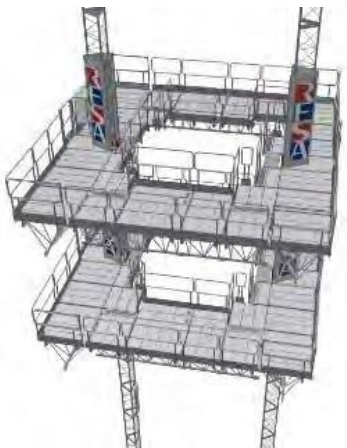
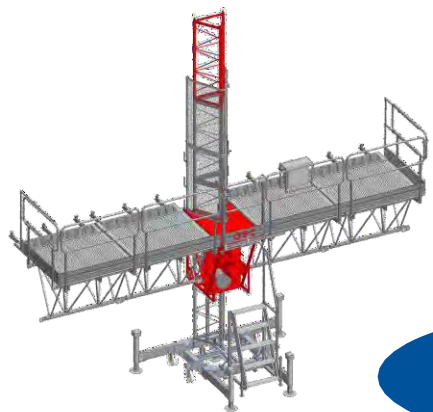
3. Technical Characteristics

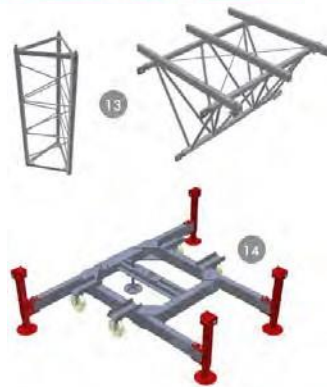
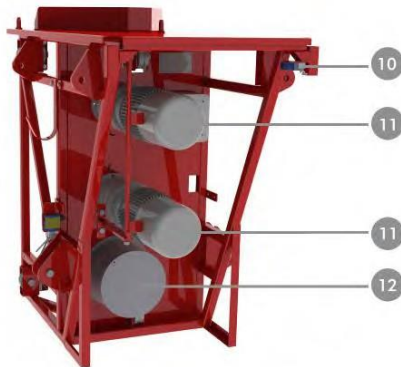
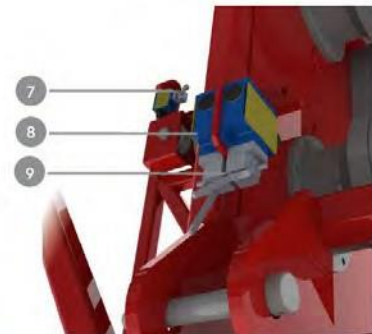
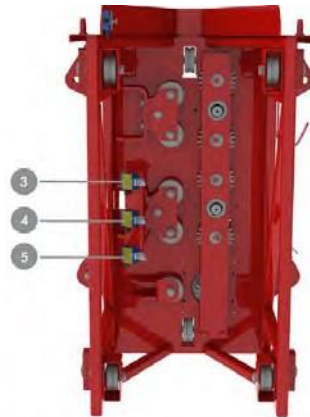
4. Applications of MC-36/15 MCWP

5. Engineering Service

6. References

# Product Description





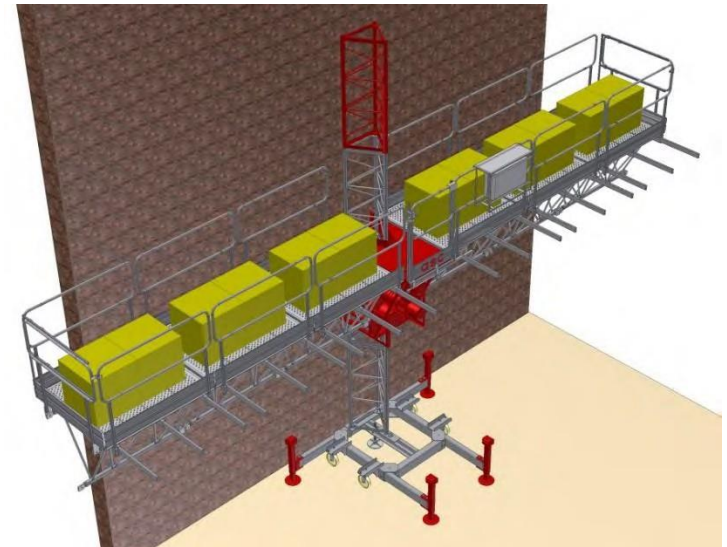
- |    |  |
|----|--|
| 1  | Number plate of drive unit                             |
| 2  | Technical data plate                                   |
| 3  | Limit switch for going up                              |
| 4  | Emergency limit switch for going up & going down       |
| 5  | Limit switch for going down                            |
| 6  | Gear with indirect contact                             |
| 7  | Limit switch for right assembly of mast sections       |
| 8  | Emergency limit switch for monitoring of the levelling |
| 9  | Limit switch for monitoring of the levelling           |
| 10 | Limit switch for machine block when the door is open   |
| 11 | 2 x Gearmotors with brake                              |
| 12 | Emergency parachute brake with independent operation   |
| 13 | Galvanized components                                  |
| 14 | Base with integrated outrigger                         |

# Great Load Capacity

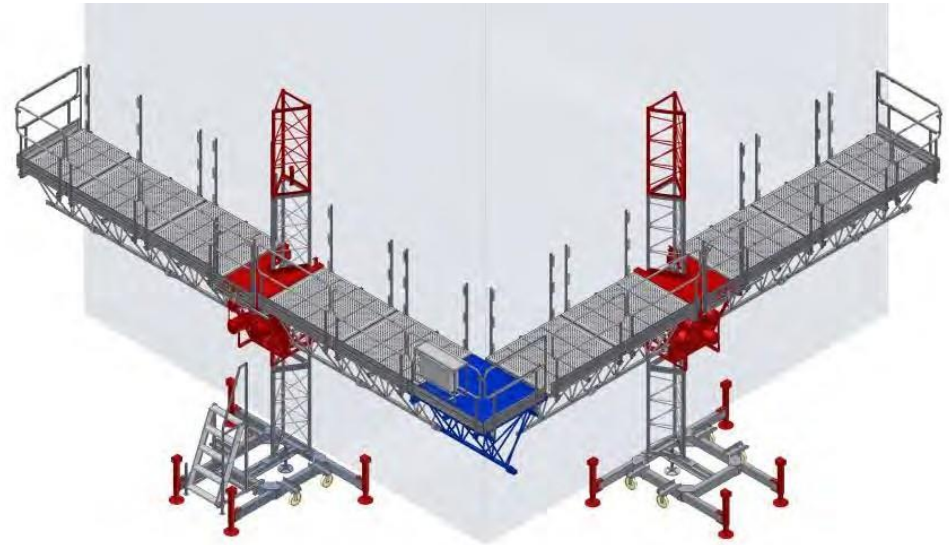
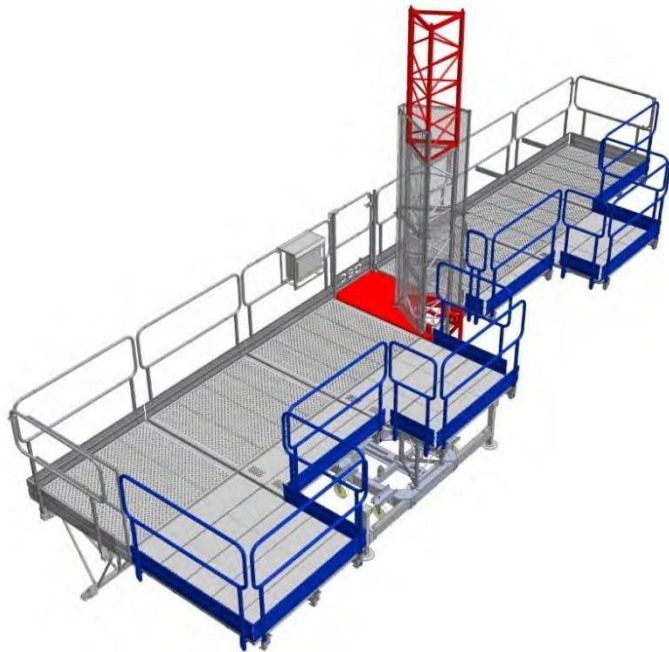
The MC-36/15 MCWP is able to load 1.500 kg with a configuration of single mast and 3.600 kg with a configuration twin mast.



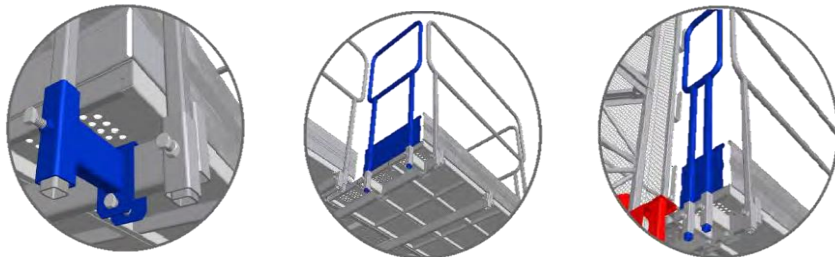
**Maximum nominal Load**  
**3.600 kg**



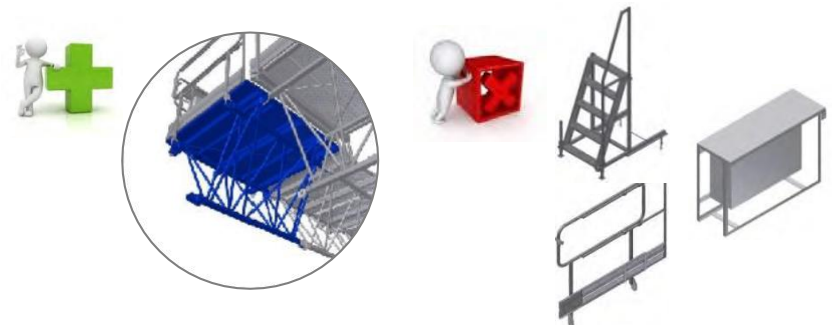
The **great versatility** of the MCWP makes that suits to every kind of facade.



**Perfect adaptation** to the facade outline



There are **cost savings** thanks to the corner beam that reduces the amount of elements needed



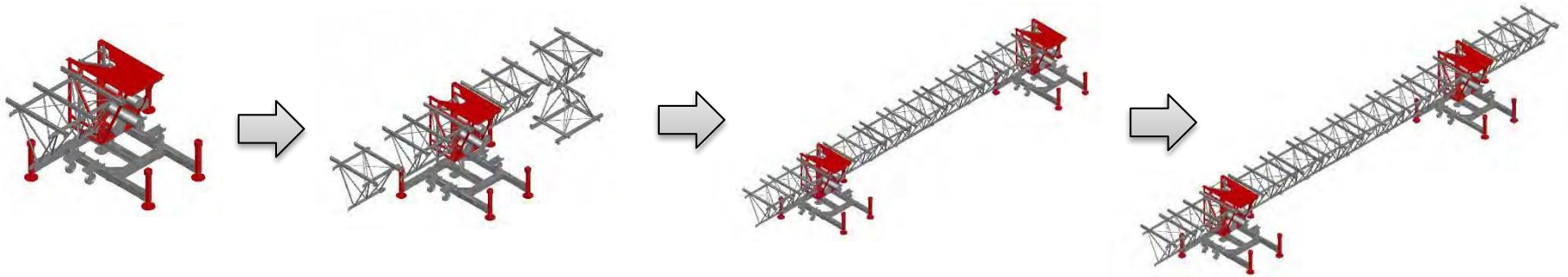
# Comfortable

The great accessibility gotten by the MC-36/15 platform makes that workers could work with safety and comfortable manner.

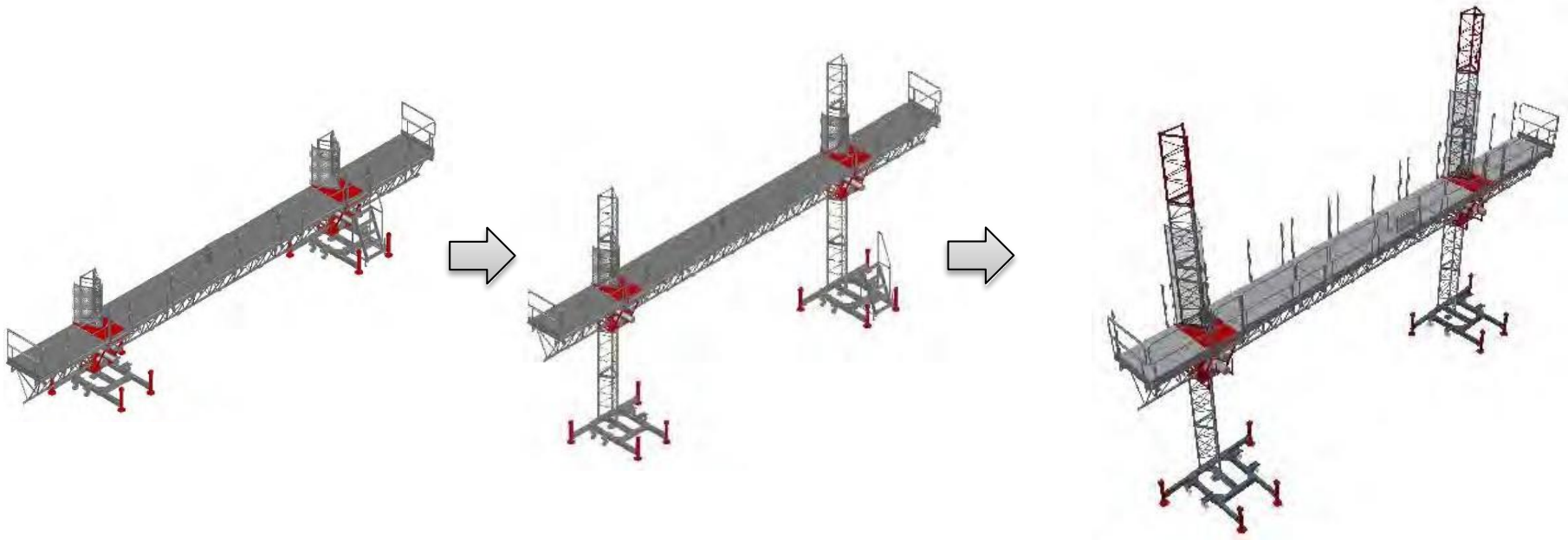


# Quick Assembly

Introduction



Less assembly / disassembly time – **Safe, Quick and Easy Assembly**



# Productivity increasing for user

Introduction

The MC-36/15 has a work platform of 30,10 m long and it is able to hoist to 150 m high.

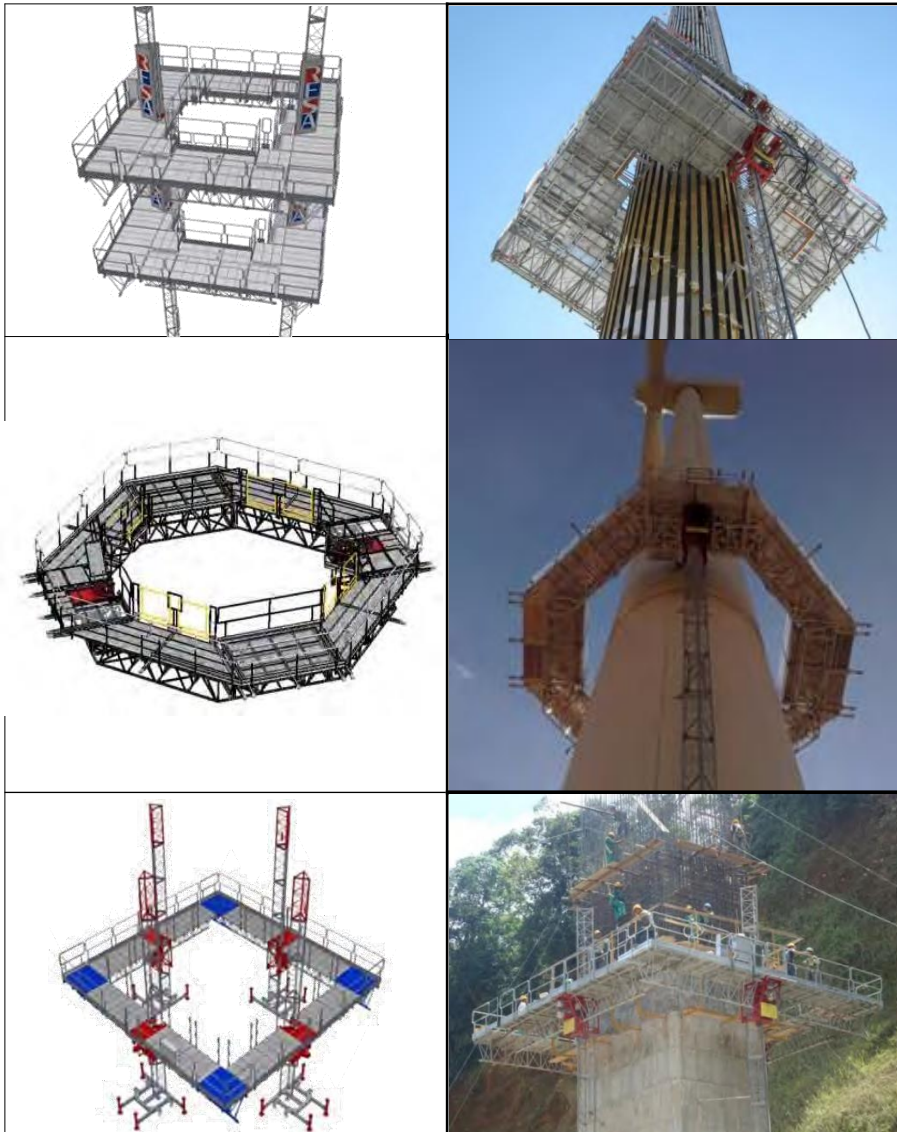
**One unique Platform covers a Very Big Work Surface.**



**Savings at:**

- Assembly / Disassembly
- Warehousing
- Transport

It is perfect for access at **great heights.**



- ❑ Tailor-made solutions
- ❑ Solutions for complex accesses
- ❑ Systems with multiple options:
  - Overload detectors
  - Impact detectors
  - Wind gauge system
  - Locking system (GSM)
  - Electronic synchronization



# Index

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1. Introduction

**2. Product Certificate**

3. Technical Characteristics

4. Applications of MC-36/15 MCWP

5. Engineering Service

6. References

## Certification number: A13/99BP0090

# AENOR

**AENOR** Asociación Española de Normalización y Certificación

### CERTIFICADO DE EXAMEN CÉ DE TIPO DIRECTIVA DE MÁQUINAS EC TYPE EXAM CERTIFICATE MACHINERY DIRECTIVE

Nº CERTIFICADO: A13/99BP0090

La Asociación Española de Normalización y Certificación (AENOR) certifica que una máquina representativa de la producción ha sido ensayada y comprobada, y ha resultado conforme a los requisitos esenciales de la Directiva 98/37/CE y sus modificaciones vigentes a la emisión de este documento.

The Spanish Association for Standardization and Certification (AENOR) certifies that the machine described below has been checked and tested, and it has been found in conformity with the Essential Health and Safety Requirements included in Annex I of the 98/37/CE Machinery Directive.

Máquina  
Machine:

**PLATAFORMAS ELEVADORAS DE TRABAJO SOBRE MÁSTILES.  
MAST CLIMBING WORK PLATFORMS.**

Marca	Modelo	Características/ Características
ASCLIMB/IR	MC-3615	Ver Anexo/ See on Annex
ASCLIMBER	ME-3615/E	Ver Anexo I/ See on Annex I

Peticionario  
Applicant:

**ACCESS SYSTEM CLIMBER, S.L.**  
CL. SERRANÍA DE RONDA, 6-8 AREA EMPRESARIAL ANDALUCÍA  
28320 PINTO  
(Madrid - ESPAÑA)

Fabricante  
Manufacturer:

**RUSA ANDAMIOS QUALITY, S.A.**  
AREA EMPRESARIAL ANDALUCÍA, CL. SERRANÍA DE RONDA, 6  
28320 PINTO (Madrid - ESPAÑA)

Nº de expediente  
No of technical file:

A13/S000077

Nº de informe  
No of reports related:

200402500074, 200603100103

El presente Certificado ha sido extendido por AENOR en cumplimiento de su obligación como Organismo Notificado a la Comisión Europea y a los demás Estados Miembros para la Directiva 98/37/CE de Máquinas, de acuerdo con las disposiciones del Artículo 9 de la misma.

This Certificate has been performed by AENOR in accordance to its obligation as a Notified Body to the European Council and to the Member States for the 98/37/EC Machinery Directive, according to Directive Article 9 dispositions.

Este Certificado resulta de las comprobaciones y ensayos efectuados sobre una muestra representativa del producto. No implica valoración alguna del conjunto de la producción.

This Certificate is the result of the checkings and testing made on a sample representative of the product. It doesn't imply any valuation over the hole production.

Fecha de emisión:  
Date of issue:

2004-04-21

Fecha de modificación:  
Modification date:

2006-06-28

**AENOR** Asociación Española de Normalización y Certificación  
Ramón NAZ PAJARES  
El Director General/General Manager

Este certificado puede y también el certificado A13/99BP0090, de RUSA 2904-09-25. No está autorizada la reproducción parcial de este documento.

This certificate represents certificate A13/99BP0090, dated 2004-04-21. The partial reproduction of this document is not permitted.

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### CERTIFICADO DE EXAMEN CÉ DE TIPO DIRECTIVA DE MÁQUINAS EC TYPE EXAM CERTIFICATE MACHINERY DIRECTIVE

Nº CERTIFICADO: A13/99BP0090

#### CARACTERÍSTICAS TÉCNICAS / TECHNICAL FEATURES

TIPO/ TYPE	MC-3615		MC-3615E	
	Bimástil	Monomástil	Bimástil	Monomástil
ALTURA MÁXIMA / MAXIMUM HEIGHT	101,25 m		101,25 m	
DISTANCIA MÁXIMA DESDE TIERRA AL PRIMER ANCLAJE / MAXIMUM DISTANCE FROM THE FLOOR TO THE FIRST ANCHORAGE	6 m		6 m	
CARGA NOMINAL MÁXIMA / MAXIMUM RATED LOAD	3600 daN / 1500 daN		1500 daN	
DISTANCIA MÁXIMA ENTRE ANCLAJES / MAXIMUM DISTANCE BETWEEN ANCHORAGES	6 m		6 m	
NÚMERO DE PERSONAS / NUMBER OF PEOPLE	5	3	4	2
LONGITUD MÁXIMA DEL PLANO DE TRABAJO / MAXIMUM LENGTH OF THE WORKING PLANE	30,10 m	9,8 m	30,10 m	9,8 m
ANCHURA DEL PLANO DE TRABAJO / WIDTH OF THE WORKING PLANE	1,35 m		1,35 m	
PROLONGACIÓN MÁXIMA HACIA LA PARED / MAXIMUM EXTENSION TO THE WALL	0,95 m		0,95 m	
POTENCIA GRUPOS MOTORES / MOTOR'S POWER	4 x 2,2 kW	2 x 2,2 kW	4 x 2,2 kW	2 x 2,2 kW
VELOCIDAD DE ELEVACIÓN / RAISING SPEED	6,2 m/min		6,2 m/min	
CONSUMO MOTORREDUCTORES / MOTOR'S CONSUMPTION	2 x 5,4 A	3,4 A	2 x 5,4 A	5,4 A
CONSUMO DE ARRANQUE / STARTING CONSUMPTION	2 x 24,3 A	24,3 A	24,3 A	
ALIMENTACIÓN / SUPPLY	400 V - 50 Hz		400 V - 50 Hz	
VELOCIDAD MÁXIMA ADMISIBLE DEL VIENTO EN SERVICIO-SIN ANCLAJES / MAXIMUM ADMISSIBLE SPEED OF THE WIND IN SERVICE - WITHOUT ANCHORAGES	45,7 Km/h		45,7 Km/h	
DISPOSITIVO CONTRA EMBALEAMIENTO / Device against overwind	Pasecán / Safety gear		Freno centrifugo / brake in each drive	
VELOCIDAD MÁXIMA ADMISIBLE DEL VIENTO EN SERVICIO / MAXIMUM ADMISSIBLE SPEED OF THE WIND IN SERVICE	55,8 Km/h		55,8 Km/h	
ESFUERZO MÁXIMO SOBRE LAS BARRANDILLAS / MAXIMUM FORCE AGAINST GUARDRAILS	90 daN		90 daN	
VELOCIDAD MÁXIMA DEL VIENTO DURANTE MONTAJE/DES-MONTAJE / MAXIMUM SPEED OF THE WIND DURING ASSEMBLING / DISASSEMBLING	45,7 Km/h		45,7 Km/h	
VELOCIDAD MÁXIMA DEL VIENTO PARA CONDICIÓN DE FUERA DE SERVICIO / MAXIMUM SPEED OF THE WIND FOR CONDITIONS OF OUT OF ORDER	165,2 Km/h		165,2 Km/h	
NIVEL ACÚSTICO / Leq / ACOUSTIC LEVEL	60 dB (A)		60 dB (A)	

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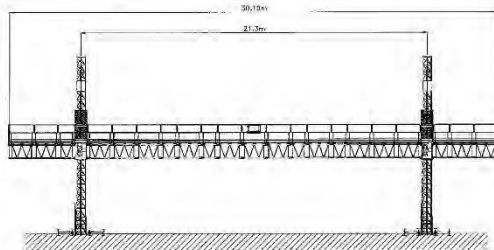
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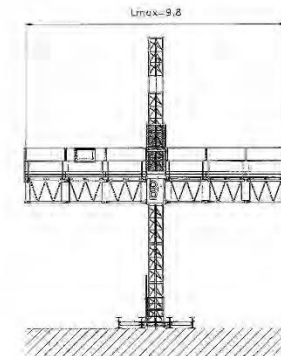
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SULOS METÁLICOS/ METALLIC FLOORS
ALTURA MÍNIMA DEL PLANO DE TRABAJO AL SULO/ MINIMUM HEIGHT FROM THE WORKING PLANE TO FLOOR: 1,8 m
ANCLAJES A LA PARED/ ANCHORAGES TO WALL: SUCESIVAMENTE CADA 6 m/ SUCCESSIVELY EVERY 6 m
BARANDILLAS EXTERIORES CON CHAPA RODAPIÉ DE 200 mm DE ALTURA/ OUTSIDE GUARDRAILS WITH SHEET SKIRTING BOARD OF HEIGHT OF 200 mm
BARANDILLAS LADO PARA DISTANCIA A LA MISMA SUPERIOR A 300 mm/ WALL GUARDRAILS FOR DISTANCE TO WALL OVER 300 mm
GUARDACUERPOS(DF.SERIE)/ BODYGUARDS (IN SERIES)/



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# Index

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1. Introduction

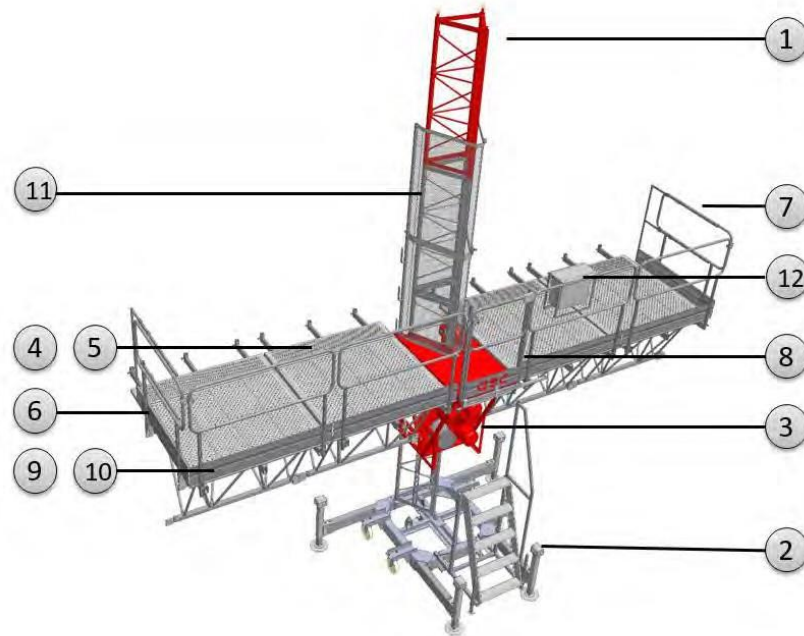
2. Product Certificate

**3. Technical Characteristics**

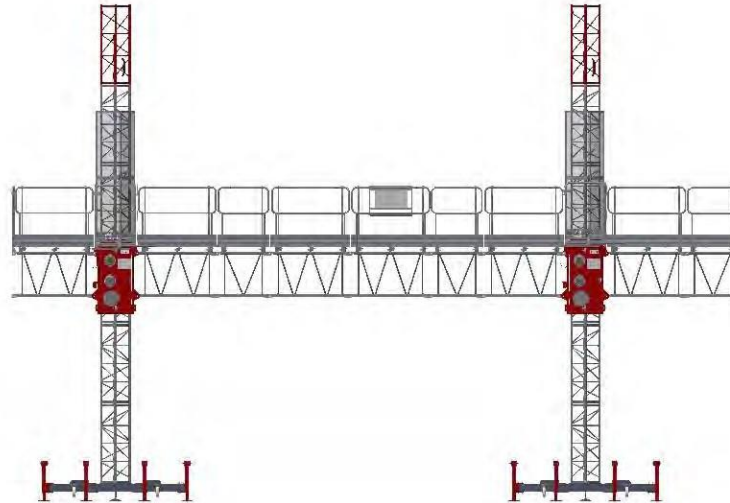
4. Applications of MC-36/15 MCWP

5. Engineering Service

6. References

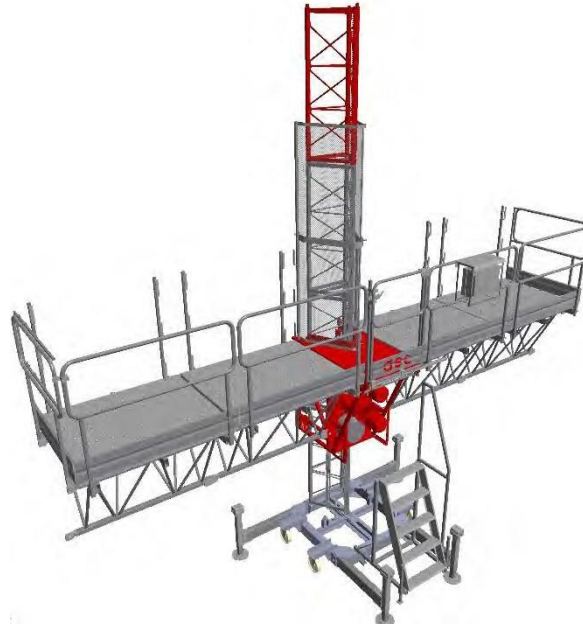


Nº	ELEMENT	Nº	ELEMENT
1	Mast Section	7	Left lateral handrail
2	Base frame ST	8	Access gate
3	Drive Unit	9	1,5 m Handrail
4	1,0 m Beam	10	1,0 m Handrail
5	1,5 m Beam	11	Complete tie-inn kit
6	Right lateral handrail	12	Panel Control

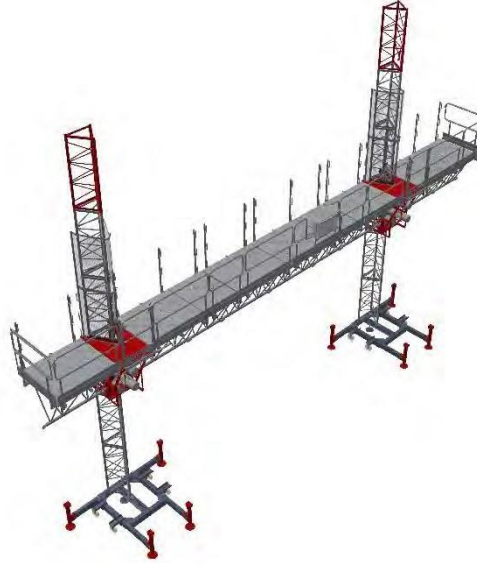


	<b>TWIN-MAST</b>	<b>SINGLE-MAST</b>
Maximum height		*150 m
Maximum distance from ground to first tie		6 m
Maximum total capacity	3.600 kg	1.500 kg
Maximum distance between ties		6 m
People number (maximum capacity)	5	3
Platform length	30,10 m	9,8 m
Platform width		1,35 m
Platform width with extensions		2,31 m

\*Contact Group Resa when exceeds the maximum height 101,25 m



	<b>TWIN &amp; SINGLE MAST</b>
Allowed maximum speed of wind during assembly/disassembly	45,7 km/h
Allowed maximum speed of wind during operation	55,8 km/h
Allowed maximum speed of wind during out of service	165,2 km/h
Maximum force against rails	90 kg
Speed	5,8 m/min
Acoustic level	60 dB (A)



	<b>TWIN-MAST</b>	<b>SINGLE-MAST</b>
Power	4 x 1,85 kW	2 x 1,85 kW
Nominal current	4 x 4,2 A	2 x 4,2 A
Starting current	100 A	50 A
Consumption power	12 kVA	6 kVA
Voltage / Frequency	400/50 V/Hz	
Control Voltage / Frequency	24/50 V/Hz	
Outlet for hand tools	1 x 230 V x 16 A	

# Index

---

1. Introduction

2. Product Certificate

3. Technical Characteristics

**4. Applications of MC-36/15 MCWP**

5. Engineering Service

6. References

# Building

## Applications of MC-36/15 MCWP

The construction is the core business of the MCWP. It can reach until 150 m of height being the assembly time very low.

They are very useful for assembling of windows and screens since workers can hoist the material while they are working on the facade.



Besides using Platform for each work at building sector, the MC-36/15 MCWP is enough versatile for introducing it on every kind of facades for other sectors.

They are very useful for tank repairs, dismantling of chimneys in Power Plants,...



# Resa Wind Platform

The huge experience of **Resa Group** in the elevation domain made possible its Innovation and Engineering department to launch an specific product for **Wind Farms**.

Resa Wind Platform provides a comfortable and safety access to carry out construction, inspection and maintenance works at Wind Farms.

### RESA WIND CHARACTERISTICS

FEATURES	RESA WIND
Maximum Height	66 m
Speed	5,5 m/min
Maximum Load Capacity	1.200 Kg
Max. N° of people	4
Interior Diameter	Ø 3- 6,42 m

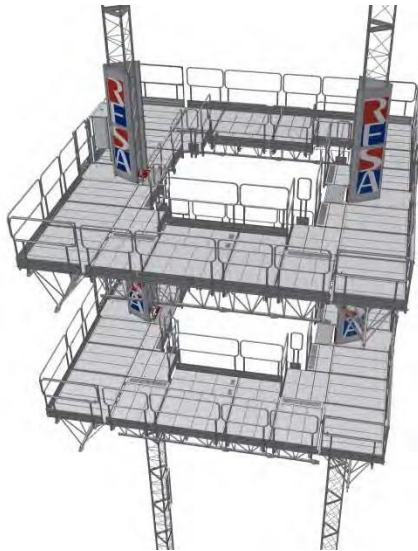


# Double and Perimeter Platforms

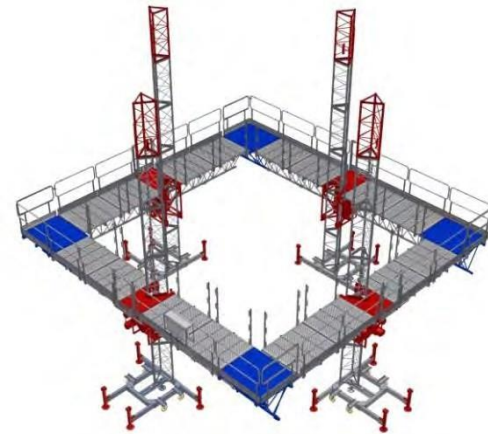
Applications of MC-36/15 MCWP

The great versatility of the work platform MC-36/15 allow us make geometrical and structural modifications to adapt to the requirements and needs of the client:

- More ergonomics, comfort and safety for operators.
- Reduced installation time and labour.
- Access to each height around the perimeter better finish quality.
- Increased productivity (Reducing execution times).



Working Double Platform



Working Platform for Perimeter Surfaces

# Index

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1. Introduction

2. Product Certificate

3. Technical Characteristics

4. Applications of MC-36/15 MCWP

**5. Engineering Service**

6. References

# Working Process

## Engineering Service



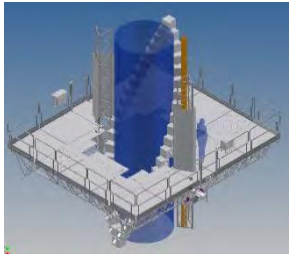
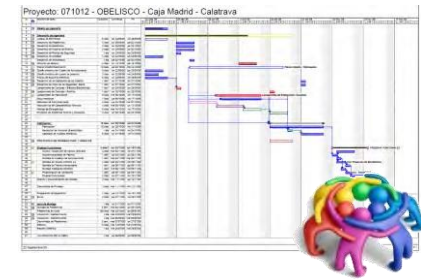
### Incoming Information 1

Drawings  
Phone calls  
Mail  
Meetings



### Analysis 2

Project study  
Project planning  
Experience in similar projects



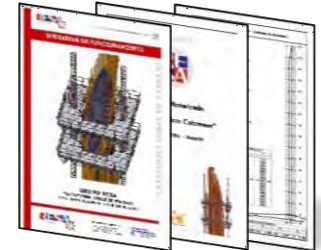
### Previous Development 3

Designs  
Previous Calculations

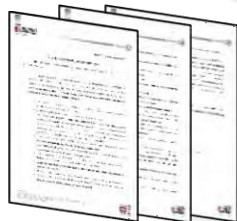


### Final Solution 4

Calculation Reports  
Test  
Project  
Use and maintenance manual

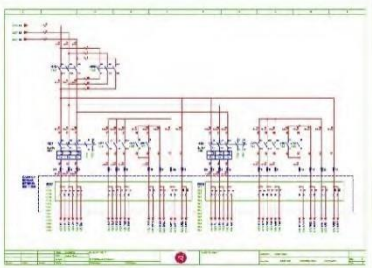
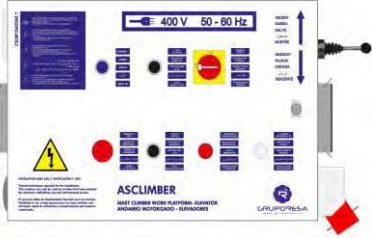
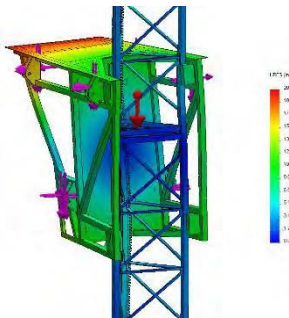

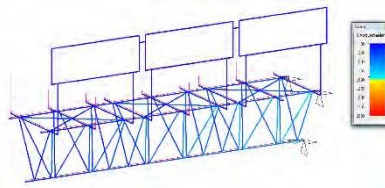

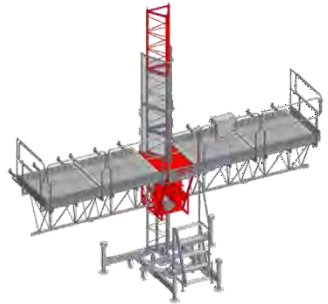



### Commissioning 5



### Regular Inspections 6



ELECTRIC DRAWING	COMPONENT CALCULATION	STRUCTURAL CALCULATIONS	3D DRAWING
Autocad Electrical	SolidWorks Simulations	Tricalc	Inventor
 	 	 	 


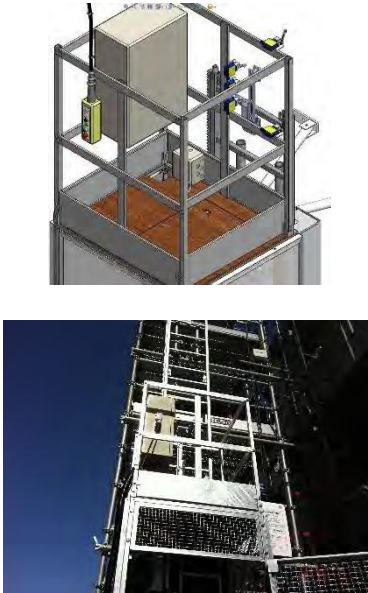

Project

International normative

Assembly Plan

Programmable Logic Controller



DRAWING	COMPONENT DESIGN	MANAGEMENT SOFTWARE
<b>Autocad</b>	<b>SolidWorks</b>	<b>RGM</b>
		

Project

International normative

Assembly Plan

Programmable Logic Controller



# Index

---

1. Introduction

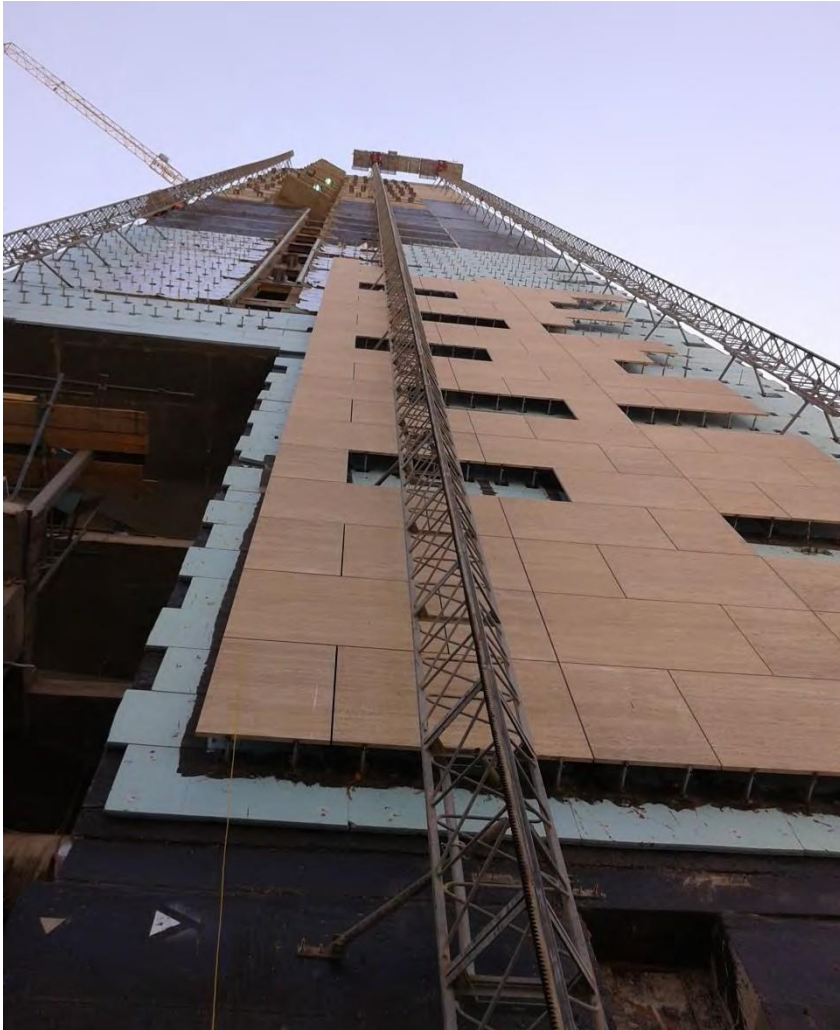
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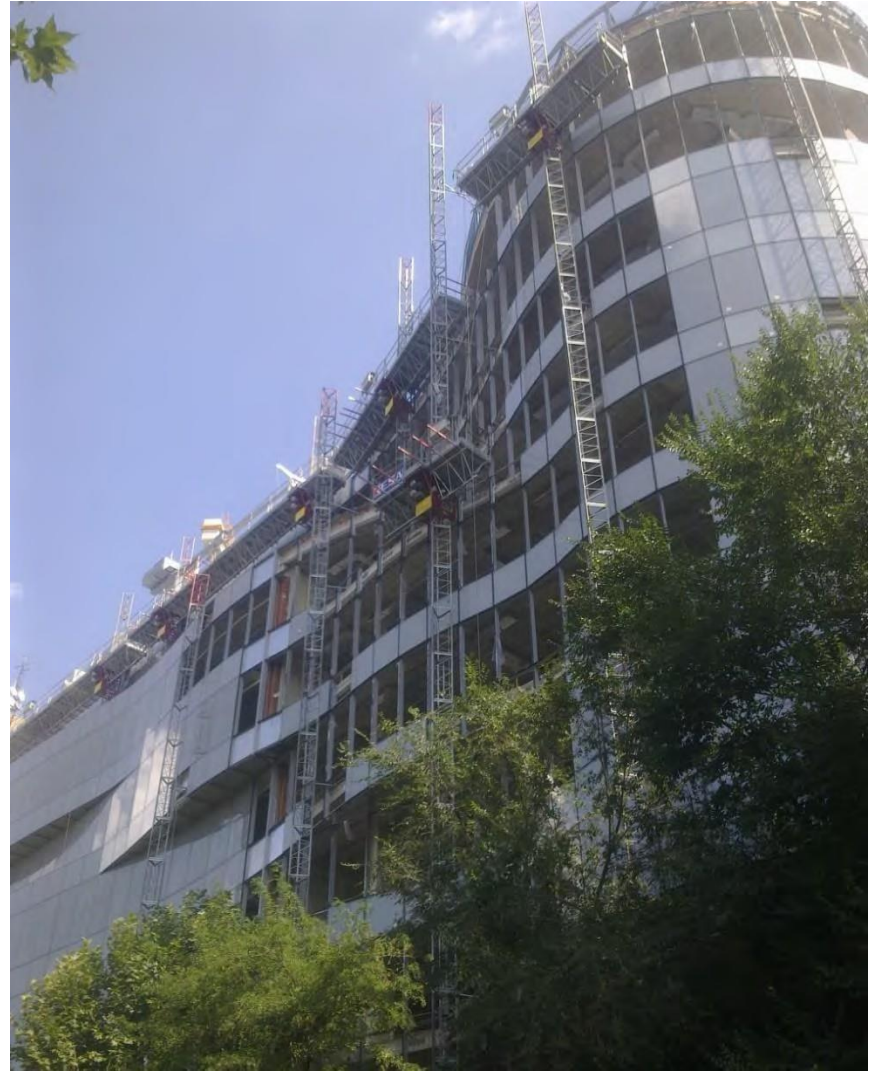
4. Applications of MC-36/15 MCWP

5. Engineering Service

**6. References**



King Abdullah Financial District, Riad (Kingdom of Saudi Arabia)



Castellana 200 Complex – Castellana Avenue, Madrid (Spain)



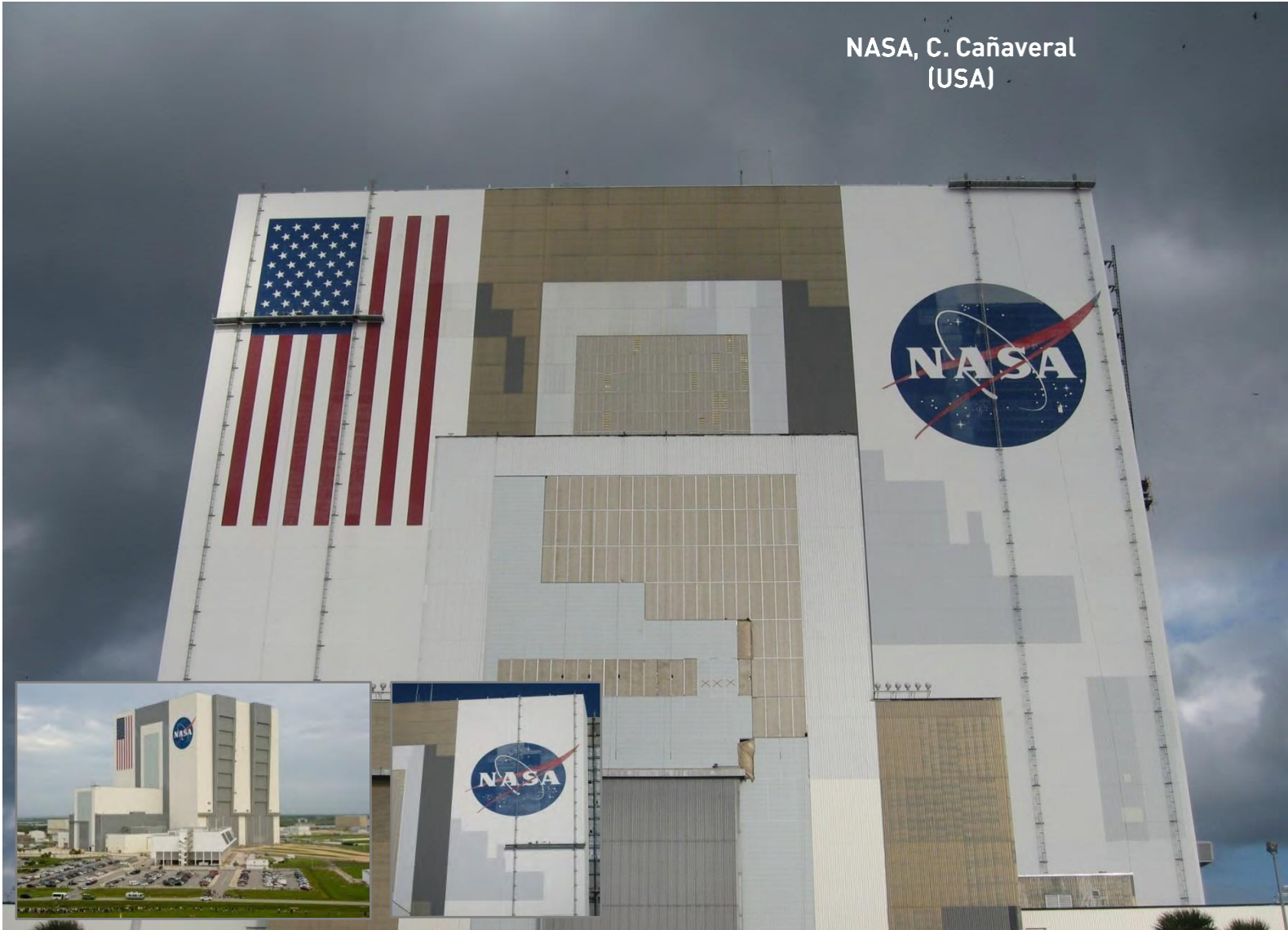
Av/ de la Albufera 319  
Madrid (Spain)



# Refurbishment

References

NASA, C. Cañaveral  
(USA)





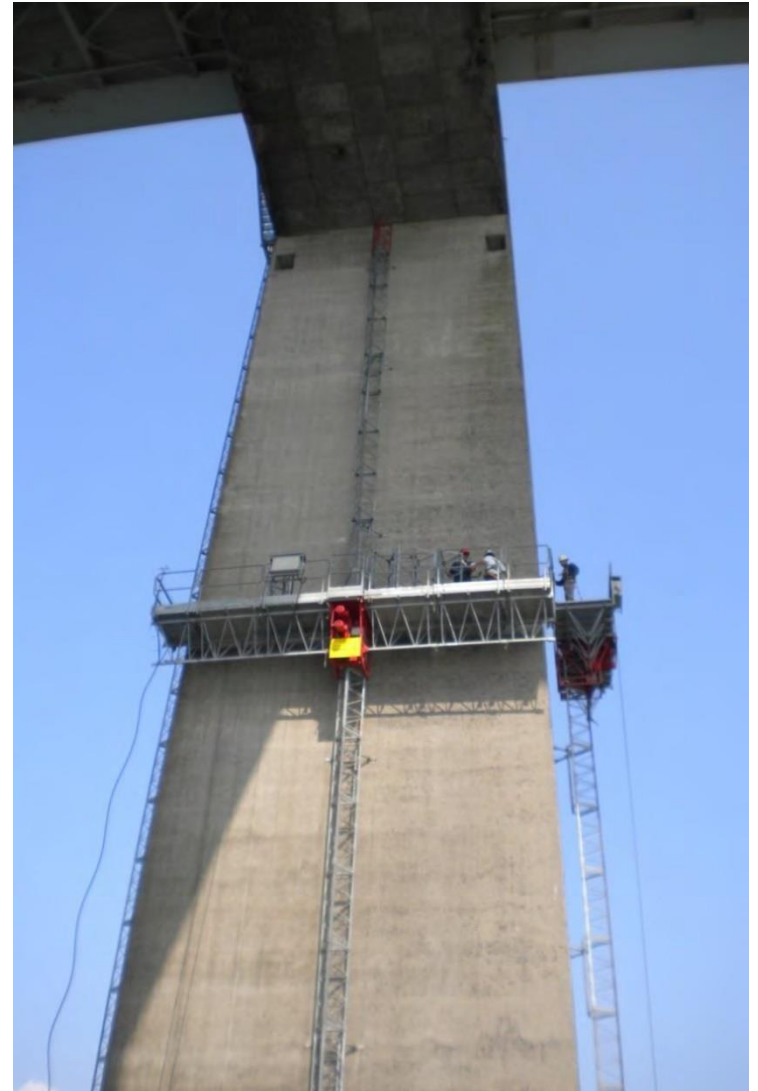
MC-36/15 MCWP  
Torre El Cairo (Egypt)



**Ksu Stadium, Riyadh (Kingdom of Saudi Arabia)**



Working Platform MC-36/15  
Refurbishment  
Rande Bridge – Vigo (Spain)





Working Platform for a bridge building (Colombia)

Enagas, San Roque (Spain)





Working Platform Double  
Castilla Square, Madrid (Spain)

