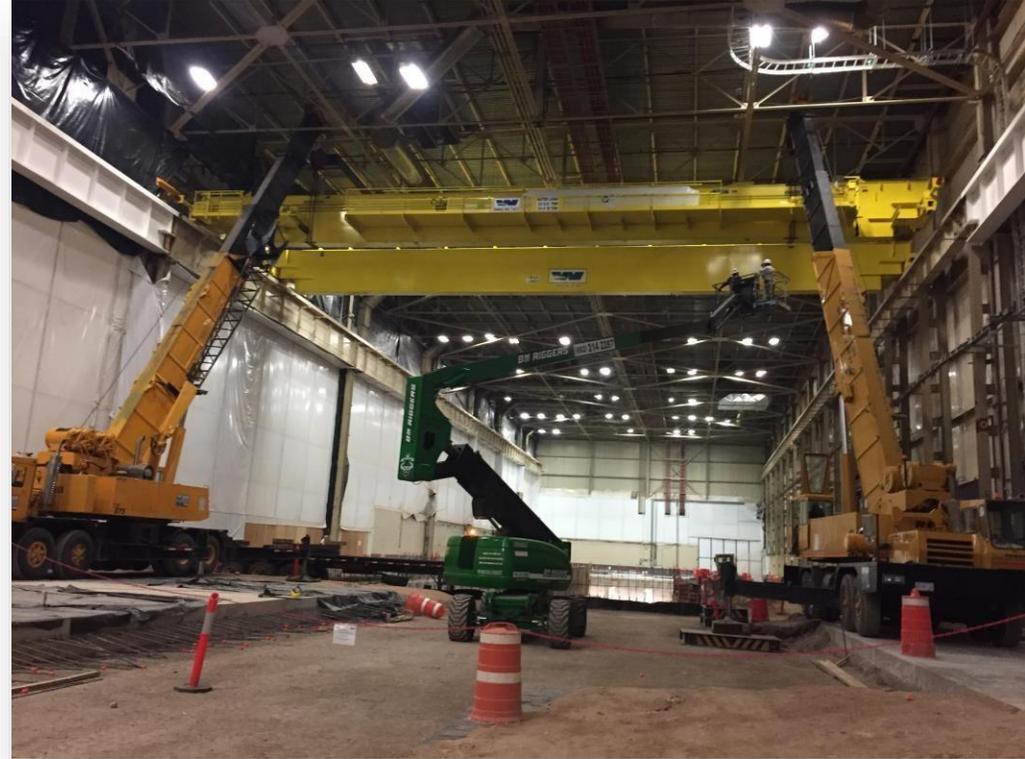


**Enterprise Resume 2020.**

- **Services**
- **About us**
- **Quality politics**
- **Organization chart**
- **Location**
- **Certifications**
- **Customers**
- **Machinery and equipment**
- **Our experience**



## CONTEXT

ICY describes at a practical and generally way in this document the management system, human capital, infrastructure, resources, experience and organization. ICY, connects scope of certification, ISO-9001 and this includes: preventive maintenance ification with its processes and / or corrective to different systems, mechanical, hydraulic, pneumatic, electric, control, projects development of metal-mechanical and manufacturing of metal parts. Accreditation number: 04/10



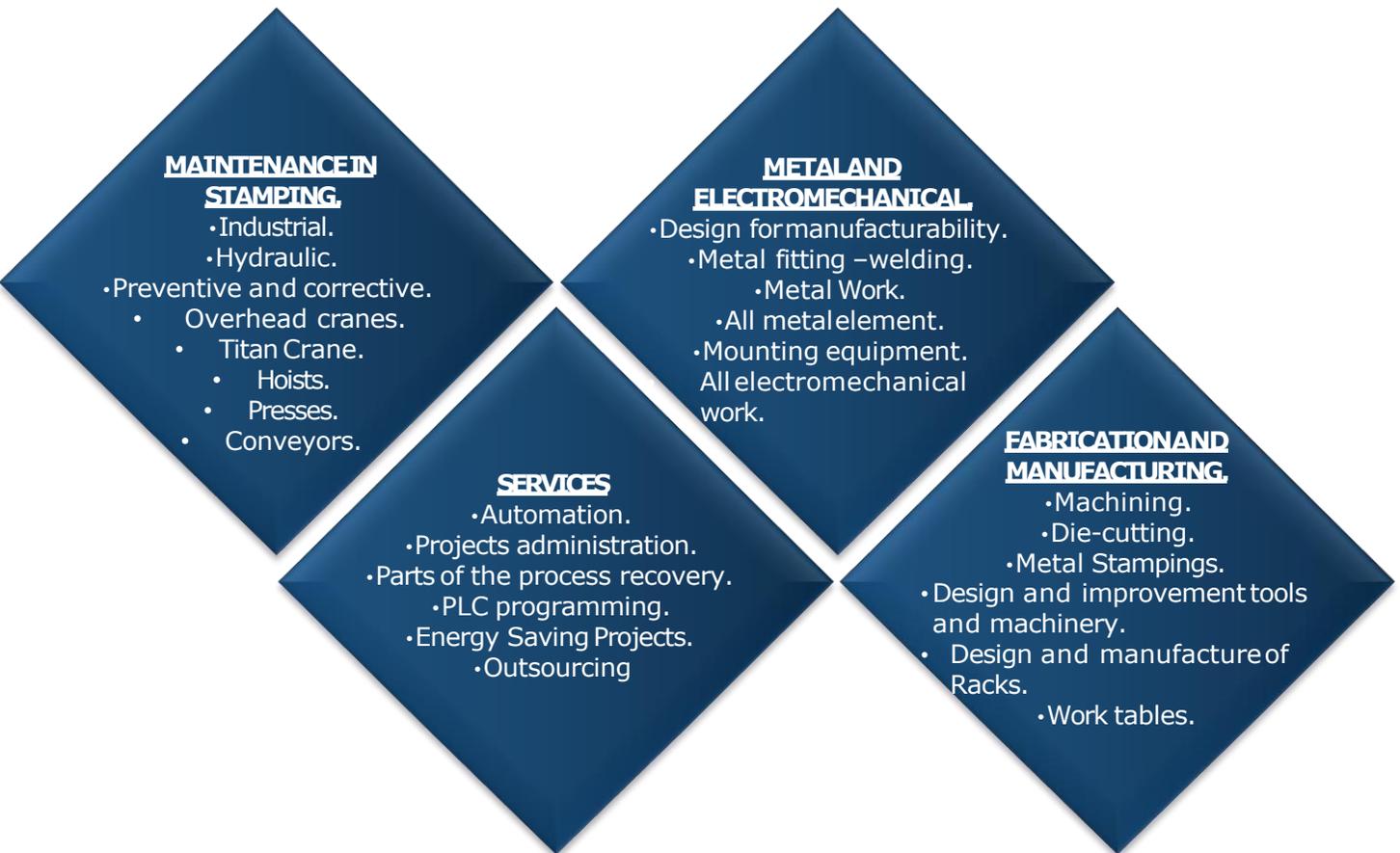
**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



ICY TECNICOS INDUSTRIALES S.A. DE C.V. has worked in a variety of industrial projects, which is shown below, summarized but not limiting the enterprise scope and services:



**CUSTOMER RELATIONSHIP MANAGEMENT**

- Confidentiality Agreement project.
- Development of workshop construction planes with CAD system.
- CAD design tools and CNC machines.
- Quality supplier certification of steel and parts.
- Strict compliance with material specifications, features, manuals, calibrations and other requirements of the elements and projects.

The products and services ICY offers are certified ISO-9001, CICB, LAPEM and Q1.



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



- Ensure compliance with the specifications and requirements agreed with the client.
- Optimize competitiveness in the market , always seeking customer satisfaction.
- Ensure preventive maintenance of machines , tools , equipment and infrastructure
- Ensure compliance with the rules and procedures of Industrial Safety and Occupational Health established by the company .
- Improve delivery times of products and / or services to exceed customer expectations .



**SHARED RESPONSIBILITY.**

Defined it as development of team activities where members understand the importance of the effects these have for each and for the provision of services.



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



“Contribute to the welfare and development of the industry , meeting the requirements of the areas of preventive and / or corrective Mechanical Systems , Hydraulic, Pneumatic , Control and Manufacturing Parts Metal through efficient organization, customer-oriented flexible to change; self-sufficient to continue to grow and improve the quality of life and development of our team”.

### VALUES

- **Honesty:** Assess the requirement requested by offering the best choice , best price and best solution.
- **Quality:** Meeting the expectations of our clients effectively.
- **Job :** Delivery, perseverance and willingness to face the challenges.
- **Responsibility:** Deliver on time and work required .
- **Confidence:** Acting with seriousness and professionalism
- **Respect:** Listening and accept differences.
- Customer satisfaction

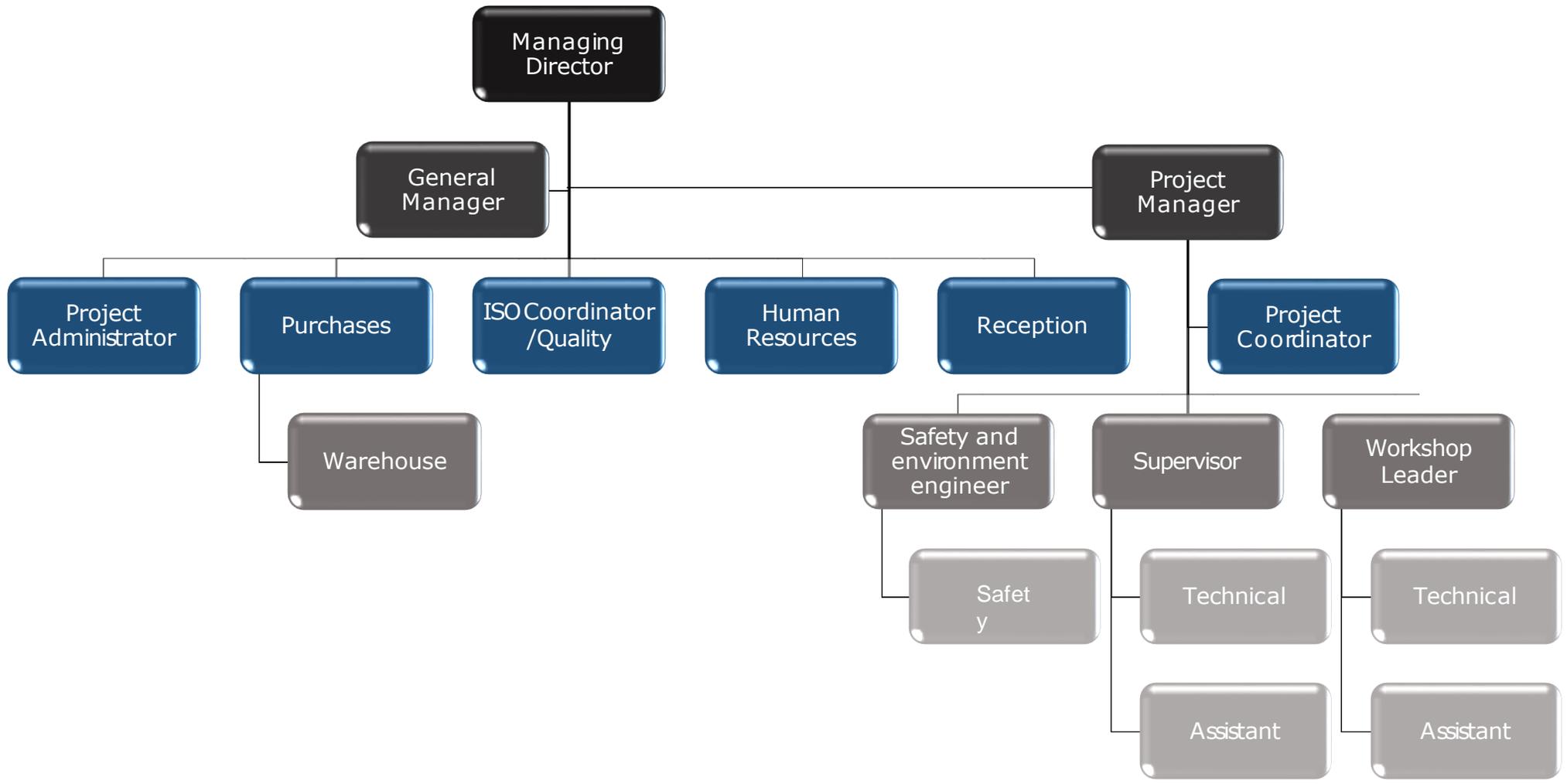


**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)





**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

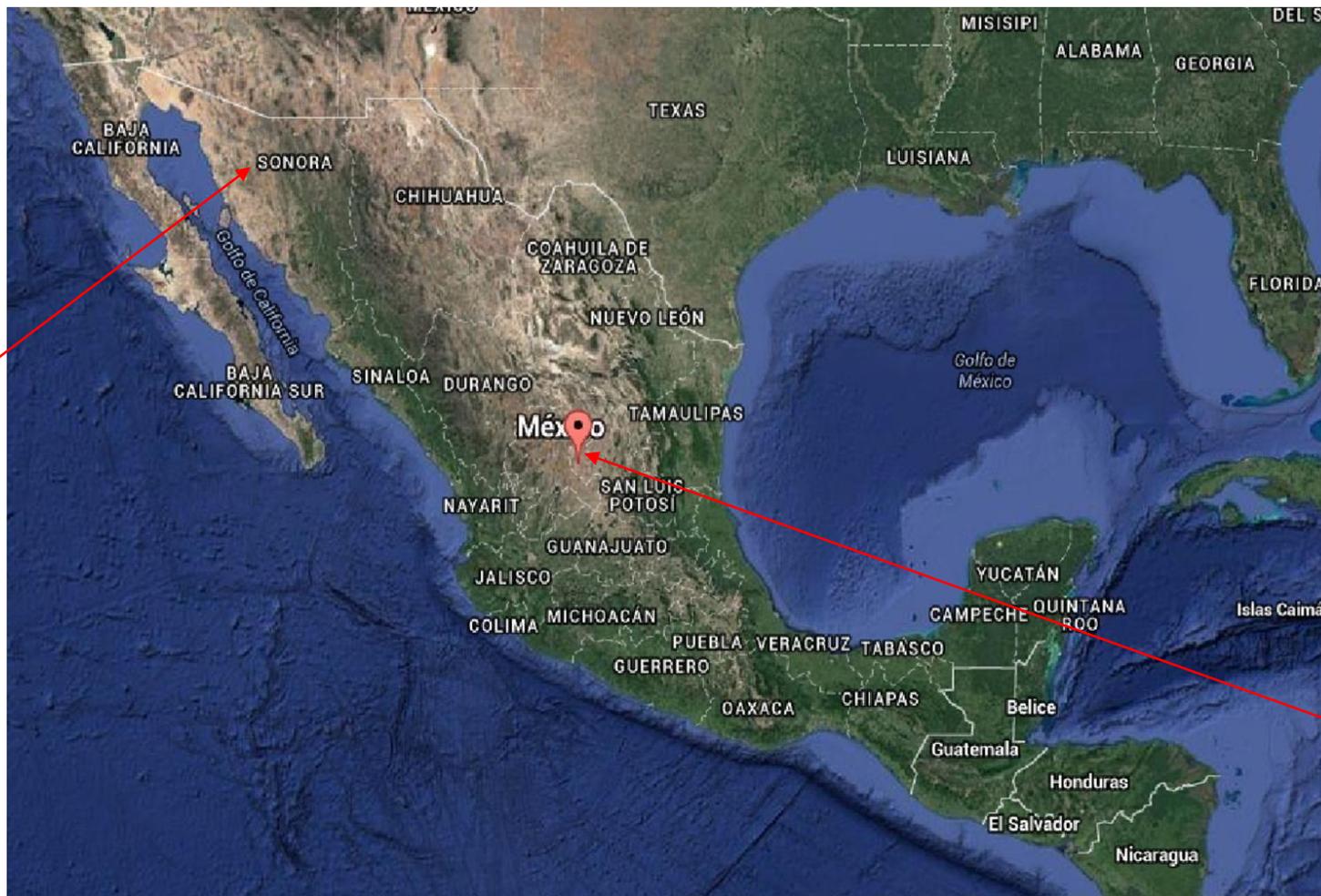
Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)





**CALLE DEL PLOMO #53  
PARQUE INDUSTRIAL,  
CP83299 HERMOSILLO,  
SONORA, MEX.**

**PLANT:** In Industrial Technical ICY it has **200 m<sup>2</sup>** office, **1200 m<sup>2</sup>** of roofed workshops and **5000 m<sup>2</sup>** of maneuvering and storage yards.



**OFFICE CUAUTITLAN:**  
Av. Universidad #55 El Infiernillo Cuautitlán,  
Estado de México  
Tel. (66)2300-1245



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)





**ALLIANCES AND SYNERGIES.**

In addition to direct customers, ICY has participated in many projects as a subcontractor or in the form and formality of joint participation agreement with other service providers.

**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)





**LATHE**



**26"X 120" LATHE**



**Band saw.**



**CNC Horizontal lathe.**



**Hydraulic ironworker machine 120 tons.**



**26"X 120" LATHE**



**11"X 23" LATHE**

**MACHINING.**

ICY has extensive experience in manufacturing and repairing fixtures and gages, knives, pins, dices for the metal industry, dies and grinding parts.

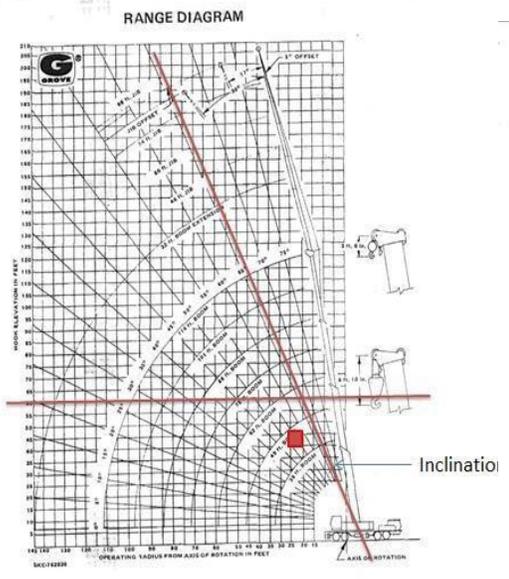
**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



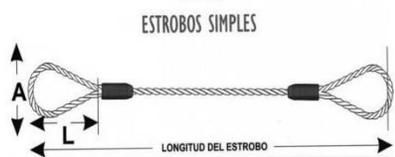
## Fordismantling of traveling crane #4inHSAP.



**TM875**  
80 TON CAPACITY  
36 ft. - 146 ft. BOOM  
(FULL POWER)  
80k and 120k CARRIER  
PCSA CLASS 12-365

**RATED LIFTING CAPACITIES IN POUNDS**  
ON OUTRIGGERS FULLY EXTENDED OVER SIDE & REAR (200' W/14' FT FRONT OUTRIGGER JACK)

Boom Length in Feet	115	125	135	145	155	165	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335	345	355	365	
115	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000



**ALMA DE ACERO IWRC**  
Capacidad de Carga (Tons)

Diámetro	Vertical	Doble	Balan	Tamaño de Ojo Simple		Tamaño de Ojo con Guardarails		Largo Mínimo del Anillo (Inch)
				A	L	A	L	
1/4"	1.0	1.5	2.0	2-1/2"	3"	1-1/8"	1-7/8"	0.53

**Grilletes Perno Roscado Crosby®**

**Lead Point Fatigue Point**

**GRILLETES PARA ANCLA**

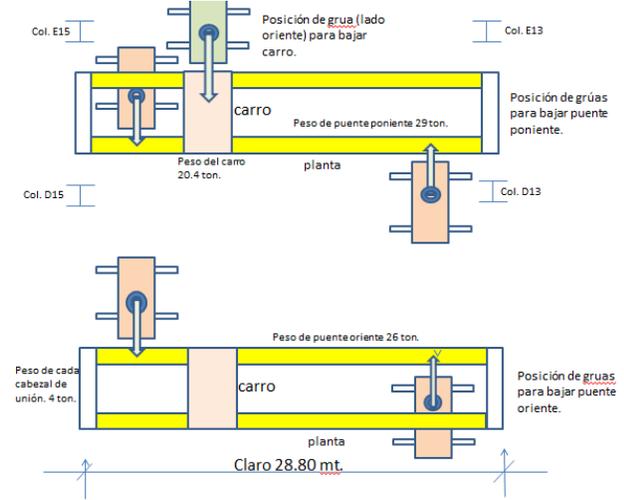
- Los grilletes en suspensión siempre cumplen con los requisitos
- Capacidad de carga indicada en cada grillete.
- Fabricados, templados y revestidos con pernos de aleación.
- Capacidad de 1/2 a 25 toneladas métricas.
- Siempre el perno Roy-Bed Flat® - la marca de calidad Crosby.
- Los grilletes en posición horizontal con verificación de grado de curvatura de carga y la verificación entre superficies al momento de levantar y bajar.
- Certificado por inspección en fábrica y de color naranja.
- Cera blanca de seguridad para trépano.

**GRILLETES PARA CADENA**

**G-209 9-20H**  
Longitud de cadena en pulgadas con el perno Roy-Bed Flat® Crosby®. Capacidad de carga en toneladas métricas en posición horizontal.

**G-210 9-21H**  
Los grilletes en posición horizontal cumplen con los requisitos de certificación de grado de curvatura de carga y la verificación entre superficies al momento de levantar y bajar.

**Tabla de especificaciones técnicas de Crosby®**



- **Location :** Plant Ford Hermosillo
- **Area:** T&D
- **Capacity:** 40/15 Ton.



**Of traveling crane #4**



- **Location :** Plant Ford Hermosillo
- **Area:** T&D
- **Capacity:** 40/15 Ton
- **Problem:** Wear on stamps and scratches on stem counterbalance.

- **Solution:** stem manufacturing with chrome steel bars SAE 1045 and seals change in cylinder head.
- **Saving:** avoid further damage to the equipment and spare parts are of the highest quality which will not require repair for a long time .



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## Of traveling crane #4



- **Location :** Plant Ford Hermosillo
- **Area:** T&D
- **Capacity:** 40/15 Ton.



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)

## Of traveling crane #4



- **Location :** Plant Ford Hermosillo
- **Area:** T&D
- **Capacity:** 40/15 Ton.

**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



Discharge, assembly and installation of crane 13031 60/20 Tons  
**Line5 Ford HSAP**



**Beam discharge**



**Trolley discharge**



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

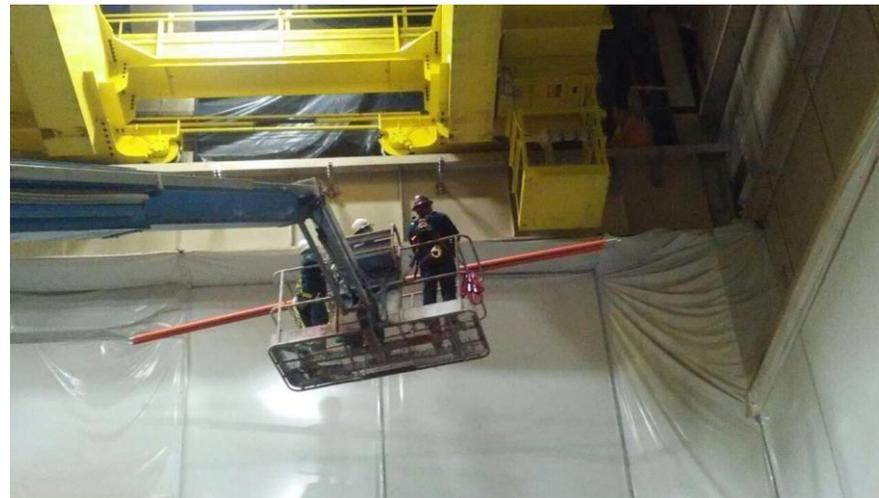
Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



Discharge, assembly and installation of crane 13031 60/20 Tons  
**Line5 FordHSAP**



- **Location :** Plant Ford Hermosillo
- **Area:** Line5
- **Capacity:** 60/20 Ton.



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



**Maintenance and service to cranes  
TRAVELINGCRANEMUNCK 30 tons.**

**Capacity type traveling bridge and crane demag 40/20tons.  
Bridgetype capacity .**



- **Location:** Planta Flex and Gate Hermosillo
- **Capacity:** 30 y 40/20ton
- **Problem :** none
- **Solution:** preventive service to avoid failures and scuffson equipment.
- **Savings:** damages were avoided to prevent further failures on the equipment.

- **Location :** Ford Hermosillo
- **Area:** Yard.
- **Equipment:** Crane Gantry with wheels container.
- **Capacity:** 60Ton
- **Problem:** Strange noises in charging cable and structure.
- **Solution:** Lubrication and screw adjustment of hardware due to the exposure of rain and sun.
- **Savings:** major damage was avoided to the equipment.

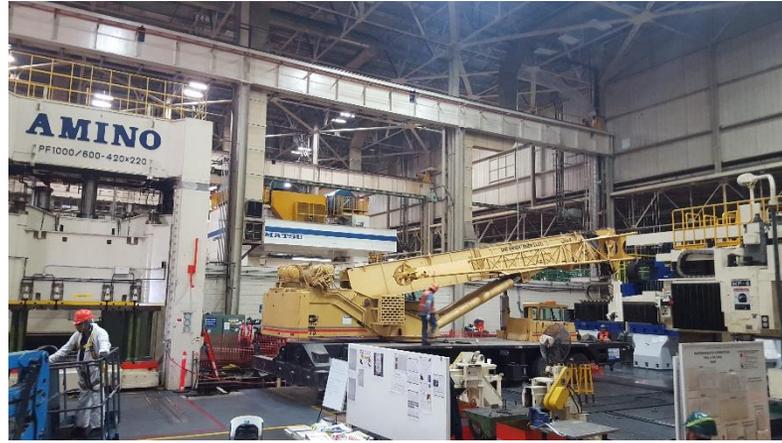
**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

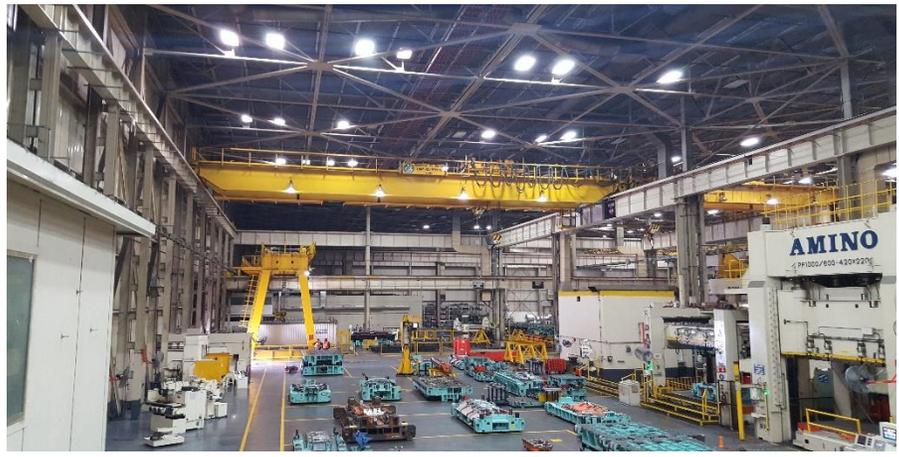
Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



### dismantling of the press



- **Location:** Ford Hsap
- **Area:** Mould
- **problem:** none
- **Solution:** dismantling of the press in the die area .



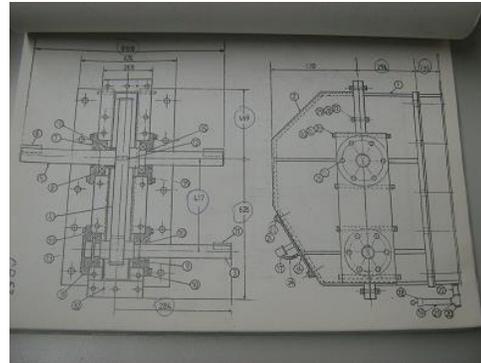
**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## Reducer replacement Crane # 4



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Need:** Changing reducer main hook for damages for use.
- **Solution:** Replace with a new
- **Savings:** better equipment performance and safe production.

### Repair of fat leakage in lower following wheel of crane bridge 3



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Need:** Drain fat retainer wheel damage and wheel bearings.
- **Solution:** replacement of damaged parts.
- **Savings:** better equipment performance and safe production

**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



### Adjustment of reductor in crane car 3



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Need :** reducer greater load capacity
- **Solution :** change by a larger reduction than it was manufactured.
- **Savings :** better equipment performance and safe production.

**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)

## Replacement of floating arrowcrane #5



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Need :** wear floating arrow by use
- **Solution :** Change couplings and machining arrow.
- **Savings :** better equipment performance and safe production.



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



### Bridge Wheel repair crane #10



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Need:** Bridge wheel repair.
- Check parallelism and rails conditions.
- Verify the technical possibility of manufacturing the intended product (trolley and bridge wheels).
- Replacement of screws.
- Leveling and adjustment of both crane bridges 10.



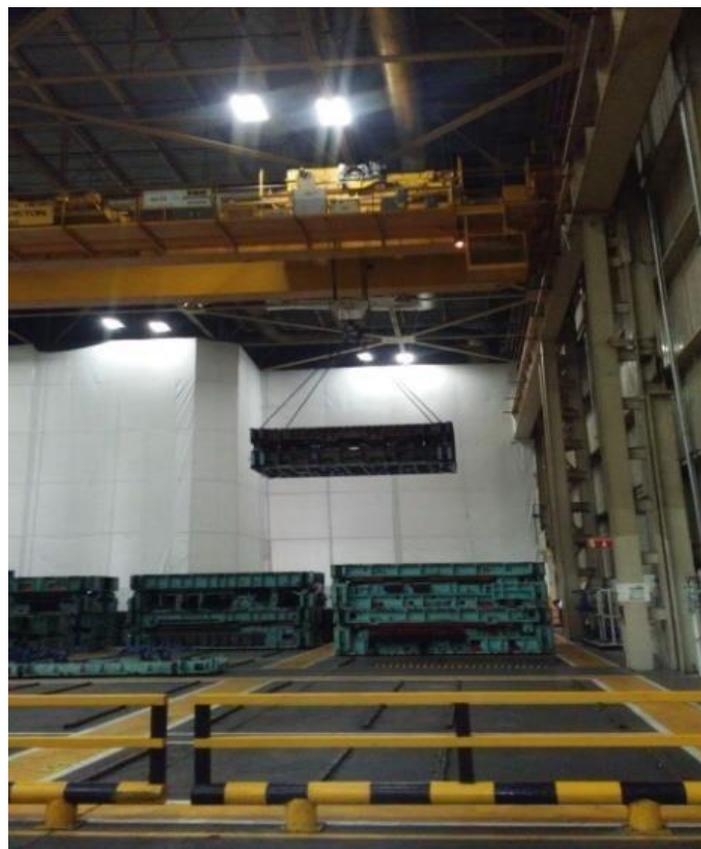
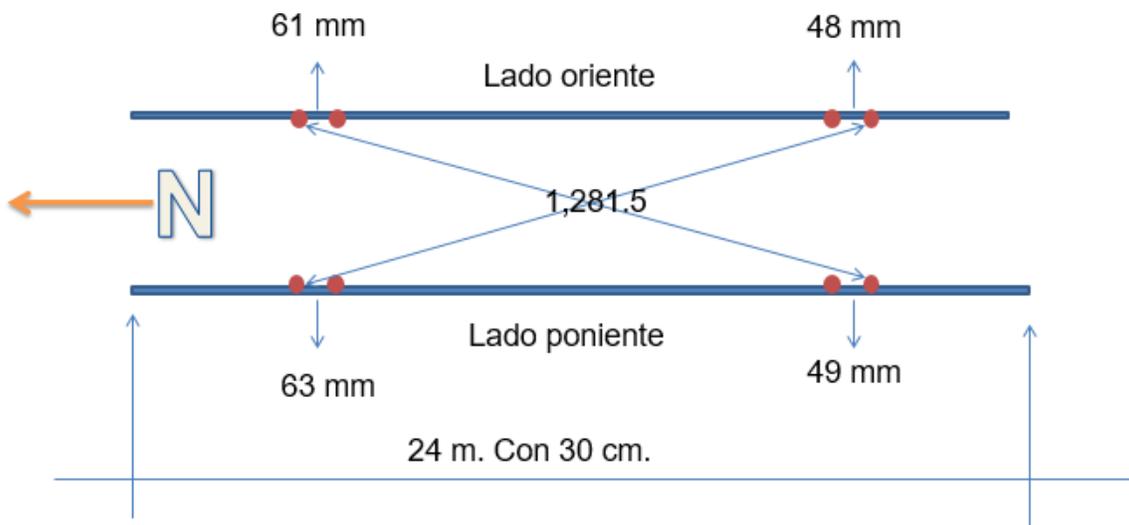
**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## Continuation Bridge Wheel repair crane #10



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping

- Measurement to crane bridges to perform quadrature
- & Load tests with a FORD technician

## Crane repair CMM Body Shop Ford CSAP



- **Location:** Plant Ford Cuautitlan
- **Area:** Body Shop

• SERVICE RAIL INSPECTIONS & PREVENTIVE MAINTENANCE

**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## Service Corrective Maintenance Ford HSAP



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Capacity:** 1600 x 1000Ton
- **Problem:** Cracks in welding inside of the press.
- **Solution:** Analysis and application of welding according to manufacturer Komatsu.

**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## Installation of new scrap transport equipment Ford HSAP



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Solution:** installation of new scrap transport equipment and dismantling old scrap transport, in the basement area



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)

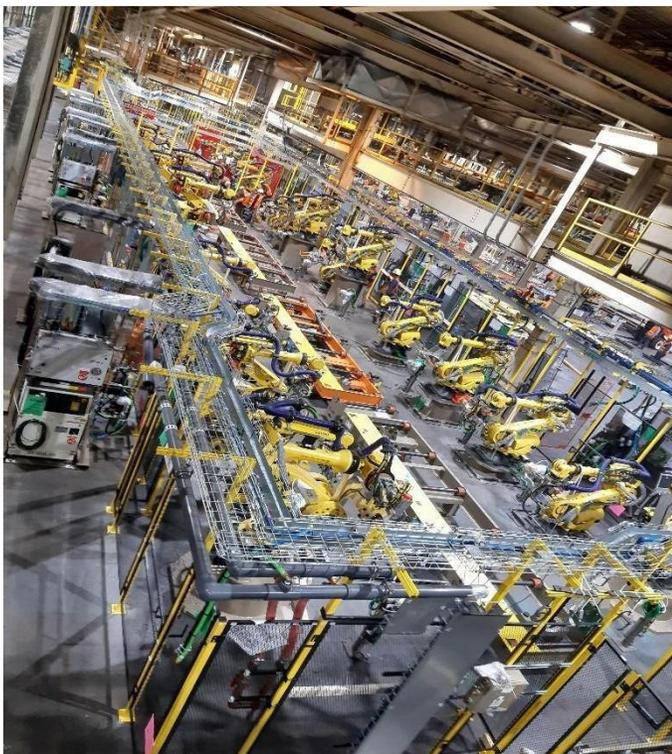


## Automation And Electrical WorkFordHSAP



- **Location:** Plant Ford Hermosillo
- **Area:** Bodyworkárea

## Installation new robotics equipment Ford HSAP



- **Location:** Plant Ford Hermosillo
- **Area:** Bodywork área
- **Solution:** works of installation the new robotics equipment in Area of bodyworks.

**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## Installation Snk machine in new área of mould Ford HSAP



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Solution:** dismantling and installation of SNK machine in new die area



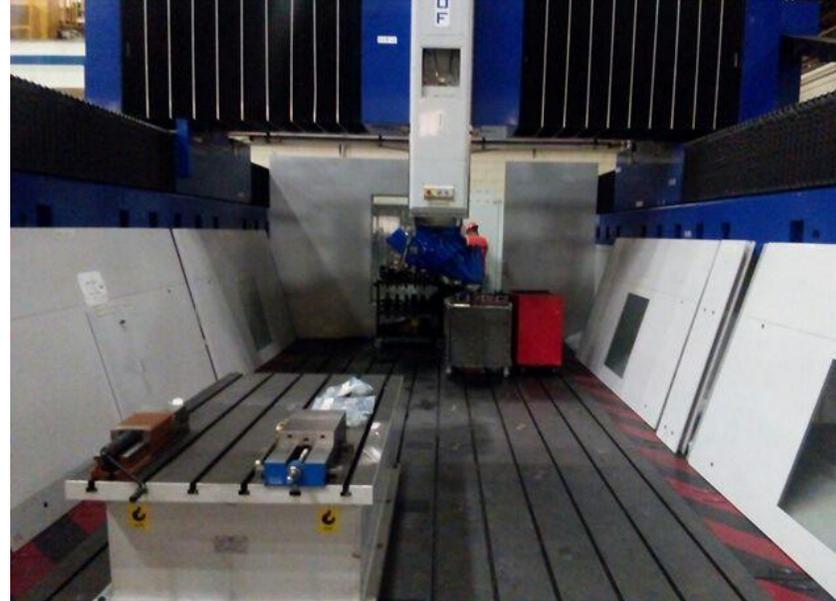
**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## Installation Mecof machine in new área of mould Ford HSAP



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Solution:** dismantling and installation of MECOF machine in new die area



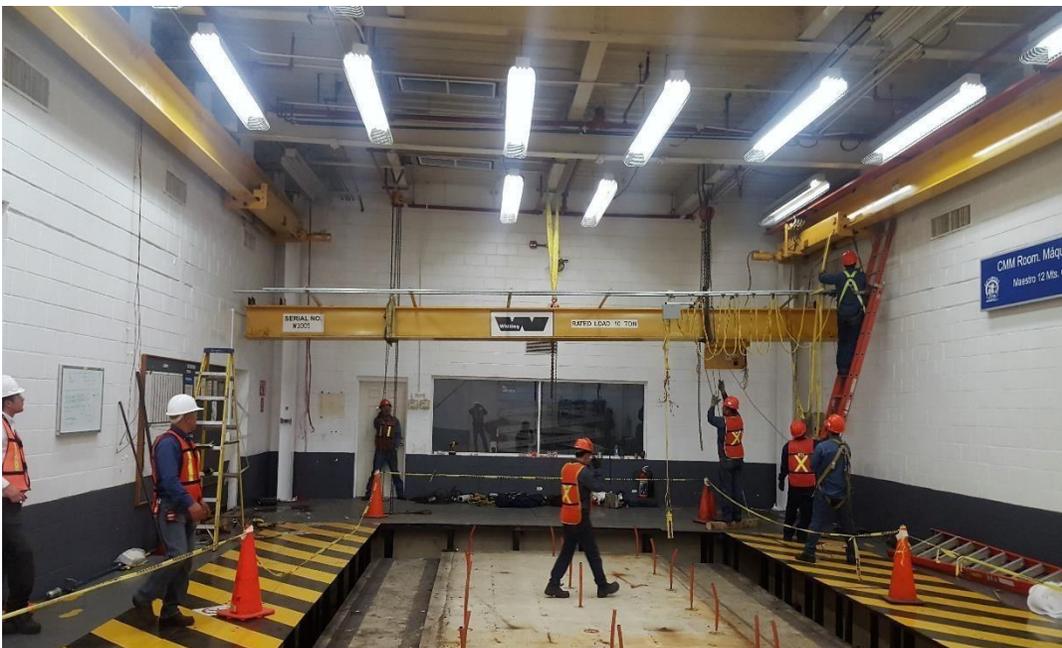
**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## Installation CMM machine in new área of mould Ford HSAP



- **Location:** Plant Ford Hermosillo
- **Area:** Stamping
- **Solution:** dismantling and installation of CMM machine in new die area

**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## cyclone and metal grinder installation Ford CSAP



- **Location:** Plant Ford CSAP
- **Area:** Stamping
- **Solution:** installation of cyclone and metal grinder in conjunction with the connection pipe



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)



## PREVENTIVE AND CORRECTIVE MAINTENANCE TO CRANES

**23 years of experience in preventive and corrective maintenance to all types of crane**  
**ICY support to the leading company in its field at the regional level .**

- ✓ **FORD MOTOR COMPANY**, Maintenance and service to cranes, presses and general equipment.
- ✓ **WHITING**. Assembly and installation of 3 cranes in FORD HSAP
- ✓ **MASTER LOCK CO. , Nogales Arizona, Automotive** , Manufacturing of eight parts for ball hitch mount
- ✓ **IACNA. Hermosillo Sonora, Automotive**, Replacement cable overhead cranes.
- ✓ **FLEX N GATE. Hermosillo Sonora, Automotive**, General maintenance overhead cranes. Torque, rail clean, motor review
- ✓ **FAURECIA EXHAUST MEXICANA**, General maintenance overhead crane, Services for Preventive and Corrective Maintenance to Mechanical, Pneumatics and Control, Systems, of the different areas.
- ✓ **CHAMBERLAIN, Nogales Sonora, General Industry**, General maintenance overhead cranes. Torque, rail clean, motor review.
- ✓ **WATERLOO.-Nogales Sonora** General maintenance overhead cranes. Torque, rail clean, motor review.
- ✓ **MARTINREA.-Hermosillo Sonora, Automotive**, Engineering changes at rear floorpanel.
- ✓ **TWB.-Project Lighting and Energy Saving**
- ✓ **CFE:-** Maintenance and service to Cranes mobile.



**ICY Técnicos Industriales S.A. de C.V.**

Calle del plomo No. 53 entre Yesos y Encinos Parque Industrial C.P. 83299 Hermosillo, Sonora, México

Tel. (662) 251-0433, email: [icy@icy.mx](mailto:icy@icy.mx)

