

Over 32 years providing full plastics solutions



 POLISOL

 RESINAS
COLORES
COMPUESTOS

Why Do Business with Us?

Our Business Model

- “Yes Company”. We fulfill your needs
- Flexibility in the way we do business so we can “Make it Happen”
- Solution Supplier
- Long Term Partner
- USMCA/NAFTA Located
- Test Laboratory facilities
- Cost Effective
- No minimums
- Redundancy in our Manufacturing System

Engineering, Manufacturing, Supply Chain

- Full traceability from design from finished part
- Advanced Manufacturing
- New product development
- From Concept to finished product, from raw material to finished part
- No minimums
- Less than truck load
- 1 week time delivery to your door
- 3 hours away by plane
- ISO Certified

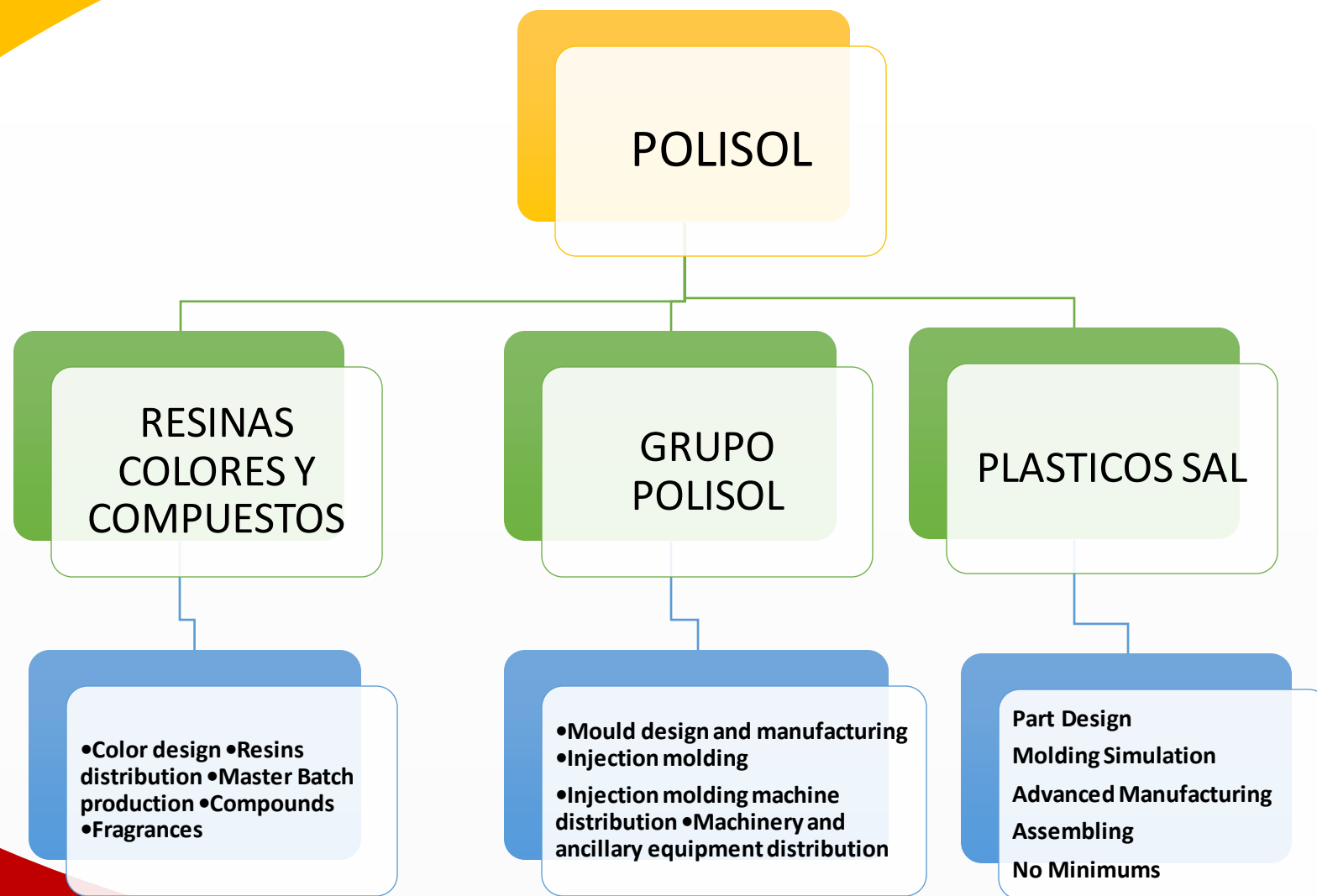


OUR PURPOSE

To be our customer's top of mind. To serve the plastic's industry through our impeccable service and total customer commitment.

“ORIENTED TO OUR CUSTOMER’S NEEDS”

One Stop Shop



200+ Associates in Toluca, México City, Querétaro, Monterrey & Guadalajara, ready to serve you



Distribution center at:

● Monterrey
● Guadalajara
● Querétaro
● México

Manufacturing base at:

▲ Toluca
▲ México City

HIGHLIGHTS

- 1990 Started as “One Stop Shop”: Resin, Mold & Machinery Distributor
- 1991 Added Color and Additives from Southwest Chemicals and Avecor
- 1993 Sold our Resin business& partnered with MA Hannna and founded MA Hanna de Mexico
- 2001 Geon merged with Hanna creating PolyOne
- 2002 Established Resinas Colores y Compuestos (RCC) , land adquisition
- 2003 DuPONT names RCC Mexican Distributor Engineering Resins
- 2004 Begin Mould Design and Production
- 2010 Initiate Toll Moulding Operation
- 2012 RCC Acquired DuPONT compounding assets in Mexico
- 2015 Aroma product line launched
- 2016 Liquid color sales
- 2017 Land, building and Injection & Extrusion Equipment expansion

OUR MISSION

To be a trusted partner for our customers providing them **high quality products and reliable service**, based on our **core values**:

- Speed
- Reliability
- Creativity
- Honesty
- Loyalty

OUR QUALITY POLICY

Provide quality products and services for the Plastic Industry, always seeking to meet our **customer's expectations** based on **ISO / IATF** quality management system, focused on **continuous improvement**.

OUR FOCUS

🌈 Safety

With over 650 days with no recordable accidents, we have reduced our Social Security Risk Factor Indicator thus saving money on fee reductions to the IMSS (Social Security Institute of Mexico)

🌈 Quality

Our Quality program is on track towards a 6 sigma standard. We have a run rate of – 60% quality issues 2018 vs 2017

🌈 Productivity

We have increased our productivity Year over Year based on our Continuous Improvement Programs: Quick Turnaround, Operational Continuity, Operational Discipline, Increase Productivity and Redundancy

🌈 Environmental

Scrap reduction and recycling plus our Waste Reduction initiatives have yielded important efficiency savings and lower impact to the Environment

OUR FOCUS

● **Socially Responsible Company**

Our Goal is to be recognized under the Program “ Best Place to Work” and to have a satisfied, educated and productive workforce.

● **CT-PAT**

We are in the process of implementing this program due to the request of some of our automotive customers.

● **Entrepreneurial Culture**

“Yes Company”. Whenever needed we have developed processes and invested in machinery to develop partnerships and new product lines. We can work through: strategic partnerships, NDA's, Contractual Agreements, etc

● **World Class**

GLOCAL: Global Culture and Best Practices with adaptation to Local Business Environment

ISO CERTIFIED

As a part of our pursuit for Continuous Improvement we plan for Future Certifications

We are ISO 9001:2015 and UL certified since 2018 and ISO IATF certification since 2019

ISO 9001:2015
2018

ISO
17025
2019

ISO IATF
2019

ISO 14001
by 2023

ISO 22000
by 2024



UL CERTIFIED

CERTIFICATE OF COMPLIANCE

Certificate Number 20180809-E502302
Report Reference E502302-20180803
Issue Date 2018-AUGUST-09


Issued to: PLASTICOS SAL S.A DE C.V
INDEPENDENCIA 103 COLONIA REFORMA
52120 SAN MATEO ATENCO
ESTADO DE MEXICO MEXICO

This is to certify that
representative samples of COMPONENT - FABRICATED PARTS
Assigned Designation E502302 covered under traceability
program

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 746D, Polymeric Materials - Fabricated Parts
Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog
number, model number or other product designation as specified under "Marking" for the particular
Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products
that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark:
 may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is
required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual
recognitions.

Recognized components are incomplete in certain constructional features or restricted in performance
capabilities and are intended for use as components of complete equipment submitted for investigation rather
than for direct separate installation in the field. The final acceptance of the component is dependent upon its
installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.



Bruce Mahreholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at <http://ul.com/customer-service>



AENOR Certificado IATF 16949



RA02-0008/2020
IATF: 0367026

AENOR certifica que la organización

RESINAS COLORES Y COMPUESTOS S.A. DE C.V.

dispone de un sistema de gestión de la calidad conforme con la Norma IATF 16949:2016

en el centro productivo de: AV. INDEPENDENCIA 105, COL. REFORMA - 52120 - SAN MATEO ATENCO (- México)

para las actividades siguientes: Manufactura de concentrados de color y compuestos.

Exclusiones: Diseño de productos.

Localizaciones distantes: Ver Anexo

Fecha de primera emisión: 2020-04-03
Fecha de expiración: 2023-04-02


Rafael GARCÍA MEIRO
Director General



AENOR INTERNATIONAL S.L.
Ginebra, 6 28004 Madrid, España
Tel. 91 432 60 00 - www.aenor.com



Resinas Colores y Compuestos

From color matching to final product in less than 1 week.

Any quantity, any resin.

SOLUTION PROVIDER TO YOUR NEEDS

- Master batch
- Compounds
- Precolored resins
- Liquid color
- Value added repelletizing
- Mold making
- Injection molding



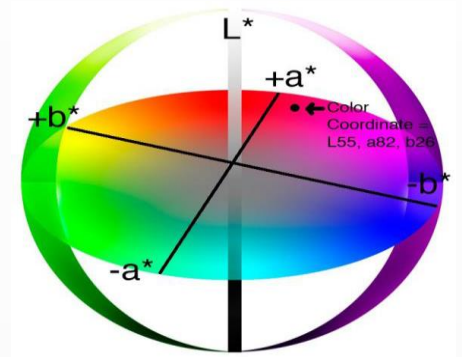
PRODUCT LINES:



- Color matching in all resins
- Master batch, all resins
- Precolored resin
- Salt and pepper
- Compounding, all resins
 - Glass beads
 - Glass fiber
 - Mica
 - Talc & Carbonates
 - Minerals
- Elastomers and TPO's
- Liquid color
- Plastic + aroma
- Repelletizing
- Value added performance postindustrial recycling

COLOR MANUFACTURING:

- Any color, any resin
- Special requirements
- Delivery in less than 2 weeks
- Special effects
- Pellets, powder or liquid.



CAPABILITIES

Manufacturing

- Single and twin extruders
- 30 mm to 85 mm
- Different size pellets
- We process all resins
- Filled and reinforced: mica, glass beads, minerals, FG
- Additives
- Liquid pigment technology and full delivery systems
- CONEG & FDA pigments. Plans of a full FDA production lines if business justifies the investment
- Investments based on strategic plan or new business justification

WORKING CAPITAL BENEFITS:

- Any batch sizes, avoiding inventory cost
- Delivery time in less than 2 weeks from development to finished product
- Working capital reduction
- We specialize in engineering thermoplastic resins:

ABS SAN PC Nylon Acetal PBT PET PMMA PVC

RESIN'S DISTRIBUTION:



CHIMEI
CHI MEI CORPORATION



MANUFACTURING



LARGE VOLUME COLORS AND REPELLETIZING:

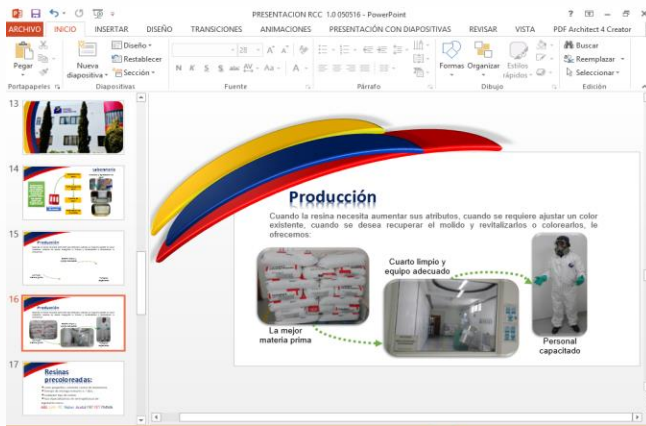
- Additive and color adition
- Value added reextrusion
- Grinding resins
- Mixing and special settings
- Standardization of pellet size
- Packaging material
- Redundancy



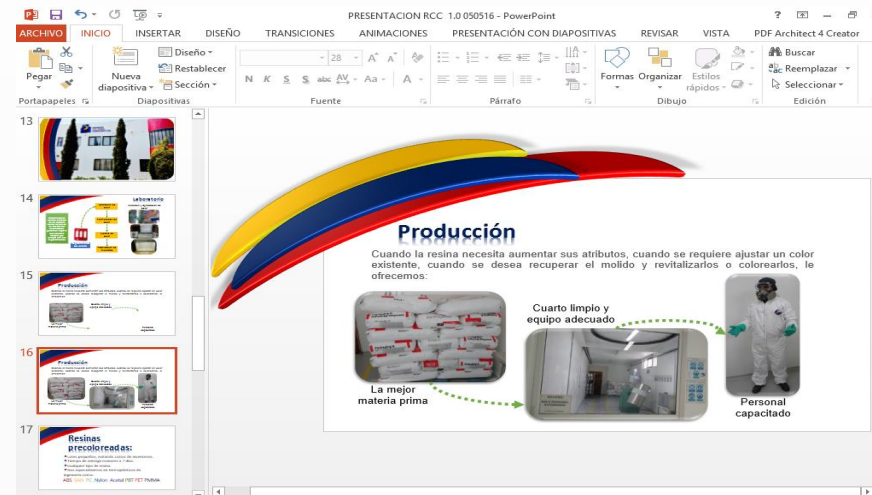
MANUFACTURING

When we need to modify the resin properties, adjust the existent color, repelletize resins with new or increased properties and color and provide quality certificates, we offer :

**Clean room and
necessary
equipments**



**Prime raw
materials**



**Qualified
personnel**

PRODUCT DEVELOPMENT

Development & COLOR MATCHING

Color measurement and
approval

We develop
Products &
Colors through a
system that
incorporates
your need, we
can obtain an
integral solution
that meets your
requirements

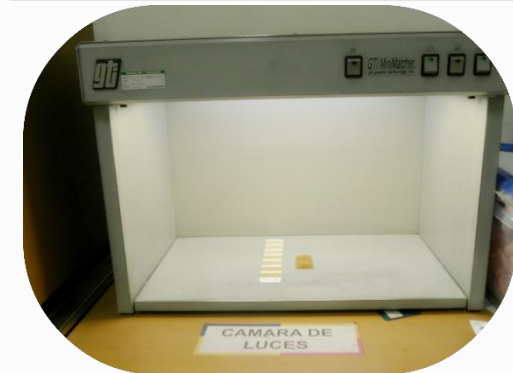
Customer's
request

Color Matching

Color
Formulation

Color
Adjustment

Color
Manufacturing



MAIN MARKETS

- ❖ 43% Automotive
- ❖ 41% Packaging
- ❖ 10% Appliances, Electrical & Electronic
- ❖ 6% Medical and others.

SOME OF OUR INTERNATIONAL CUSTOMERS



SOME OF OUR CUSTOMERS



ISO 17025 LAB APPROVED FOR PLASTIC TESTING



LABORATORY & R&D:



Color / Gloss



Extrusion

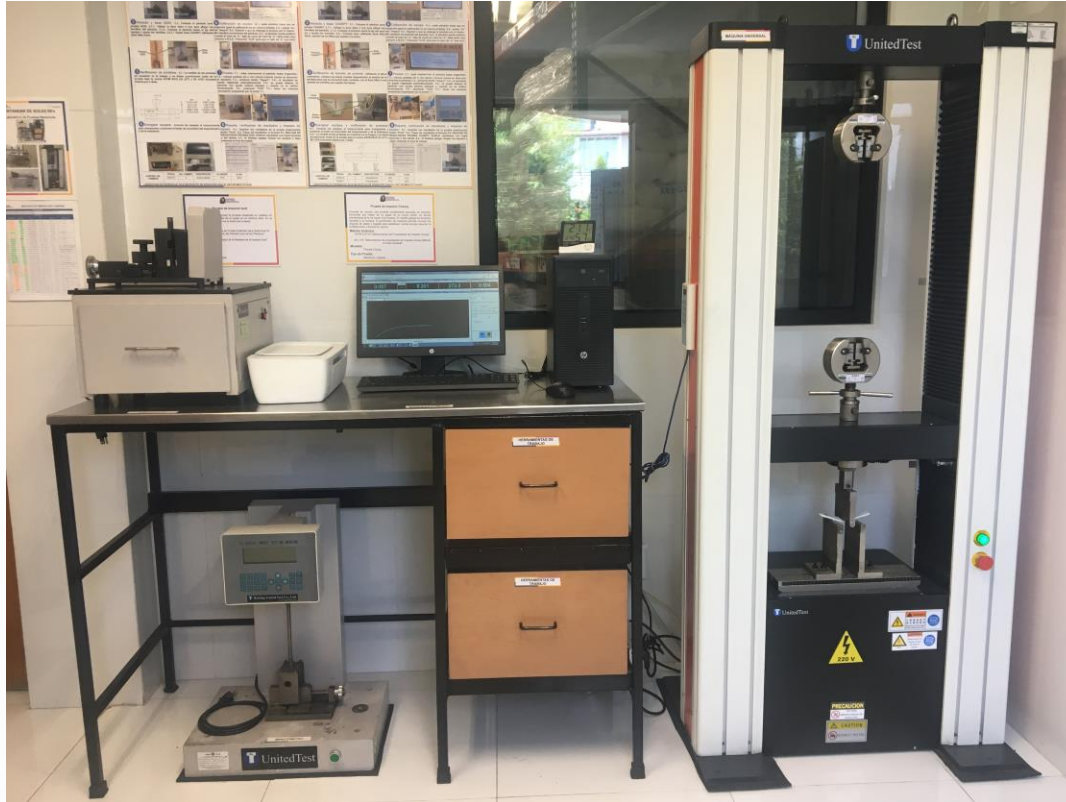


FDA, CONEG, ROHS

MECHANICAL PROPERTIES TESTING LABORATORY

Quality Certificates:

- ❖ Melt Flow
- ❖ Impact
- ❖ Flexion-Tension
- ❖ Others



LABORATORY TESTS

Melt Index Tests



Camera Lights



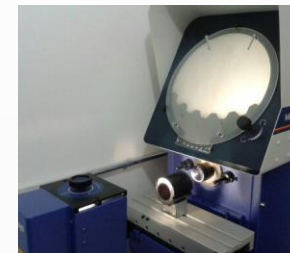
Ash Test



Impact Tests



Dimensional Tools



THERMAL PROPERTIES TESTING LABORATORY

Quality Certificates:

- ❖ HDT
- ❖ Vicat
- ❖ Ash content
- ❖ UL
- ❖ Others





Grupo Industrial Polisol Machinery - Molds

With over 32 years experience we are experts in Plastic transformation machinery.

We offer quick and reliable tech services and high quality equipment.

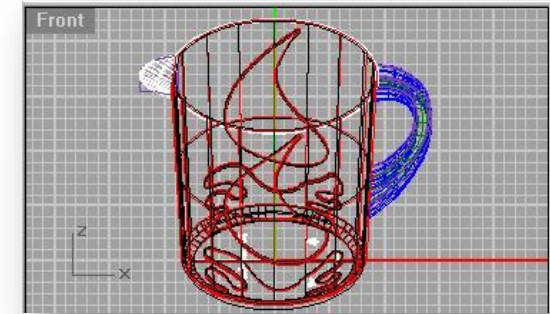
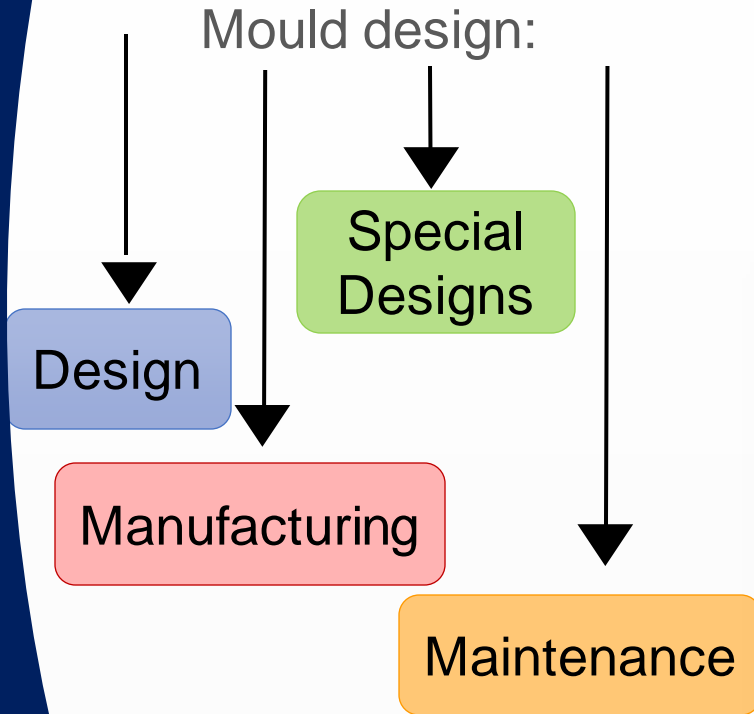
RCC y Polisol successfully transferred Production from China to Mexico: 38 aromas, each with a different color, based on our customer's requirements Cost Effectively

RCC y Polisol inyectan 12 aromas, cada uno con diferente color, basado en Pantone TPX.



MOULDS

Mould design:



SPECIAL WORK IN LATHES MACHINERY AND CNC MACHINING CENTER

Precision machinery needed to manufacture molds and software that reduces the time for mold design and machining and assembly of parts of the highest quality



CNC MACHINING CENTER

- ➔ Part design according to customer needs
- ➔ Qualified personnel in the area of manufacturing and design



MOLD DIVISION



MOLD
MULTICONNECTOR

CNC VM6



EDM

MOLD DIVISION



- Product design review
- Mold design
- Manufacturing
- Mold maintenance



Special work in lathes machinery and CNC machining center

- Precision machinery needed to manufacture molds and software that reduces the time for mold design and machining and assembly of parts of the highest quality



MOLD DIVISION



Our Equipment Mold División

- CNC vertical Center (2)
- CNC lathe. (1)
- Conventional lathes (3)
- EDM 50 A ° lathes (2)
- Conventional milling (3)
- flat surface grinding machines
- Grinding equipment
- Argon welder
- Metrology equipment



External Services:




- Laser welding
- Heat treatments
- Polishing and surface treatments

CNC Machining Center

- It processes up to 1600 kg Pieces
- Part design according to customer needs
- Works with high quality steel
- Qualified personnel in the area of manufacturing and design

NUMERICAL CONTROL MACHINERY



MACHINE	DIMENSIONS	TABLE	CAPACITY	YEAR	PICTURE
VM6	x=64", y=32", z=36"	64"X28"	1,814 KG	2018	
VF3	x=40", y=20", z=25"	48"X18"	1,588 KG	2011	
VM3	x=40", y=26", z=25"	54" x 24"	1,814 KG	2022	

EDM MACHINES

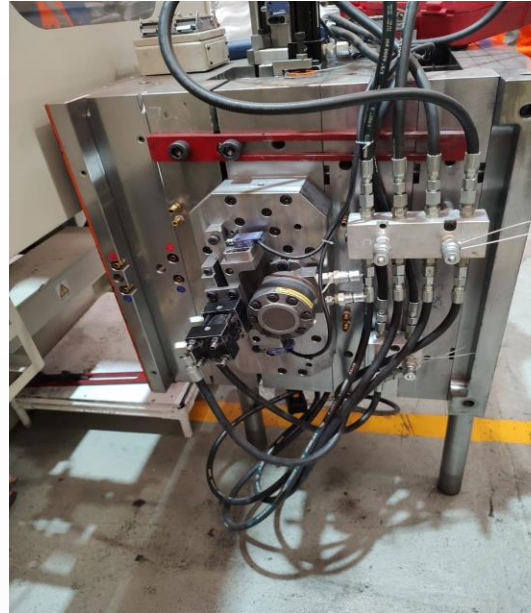
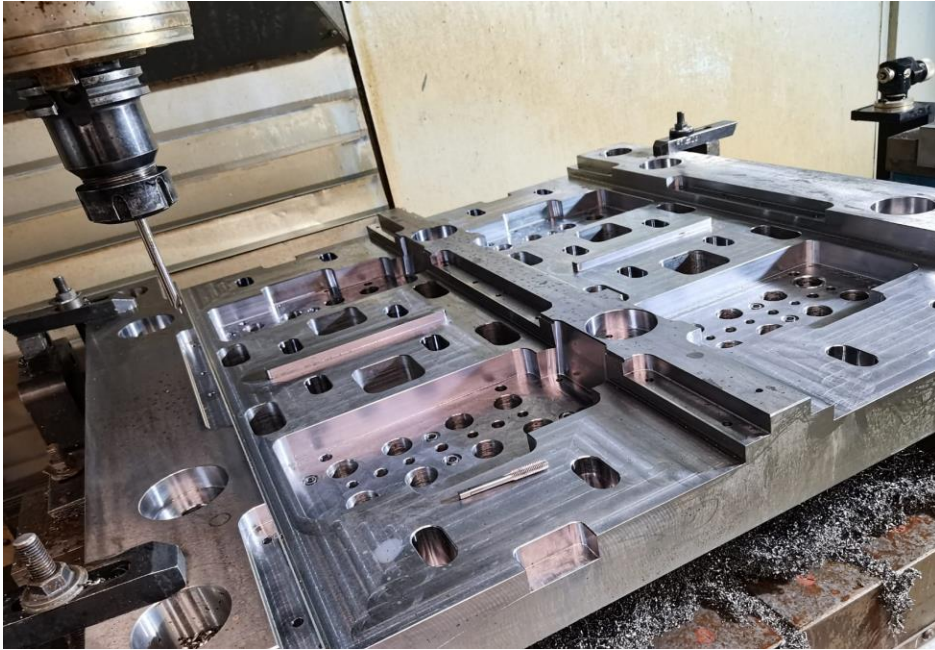
MACHINE	EROSION	CAPACITY	YEAR	REPRESENTATION
EDM CNC	EDM 50 A	x=400mm y=300mm z=450mm	2018	
EDM NC	EDM 50 A	x= 500mm y=200mm z=450mm	2001	

OTHER – POLISH, WELDING, MEASSURMENT

MACHINE	CARACTERISTICS	CAPACITY	YEAR	PICTURE
OPTICAL MEASSURMENTE	IMAGE DIMENSIONS	BASE 300 X 200 MM	2019	
MOTOTOOL	6.70 OZ WEIGHT POLISHINMG SURFACES	23,000 RPM	2020	
TIG WELDING	TIG WELDING	DIAMETERS FROM 1.6 TO 4.0 MM (1/16" A 5/32)	2020	

INTEGRATION

- Customer reduced post molding operations adding screws and side actions



MOLD

Part: MULTICONECTOR
Material: PP 5215 BI NEGRO
Cavities: 4
Dimensions: 546X696X596
Hot Runner: Mold Master

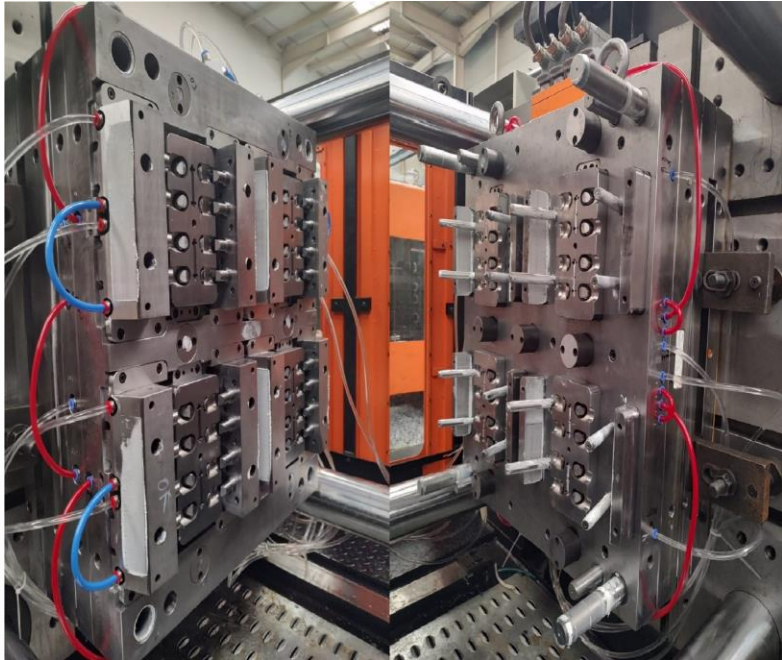
Unscrew hydraulic system.



PRODUCTIVITY



- Increase Productivity from 16 to 32 cavities



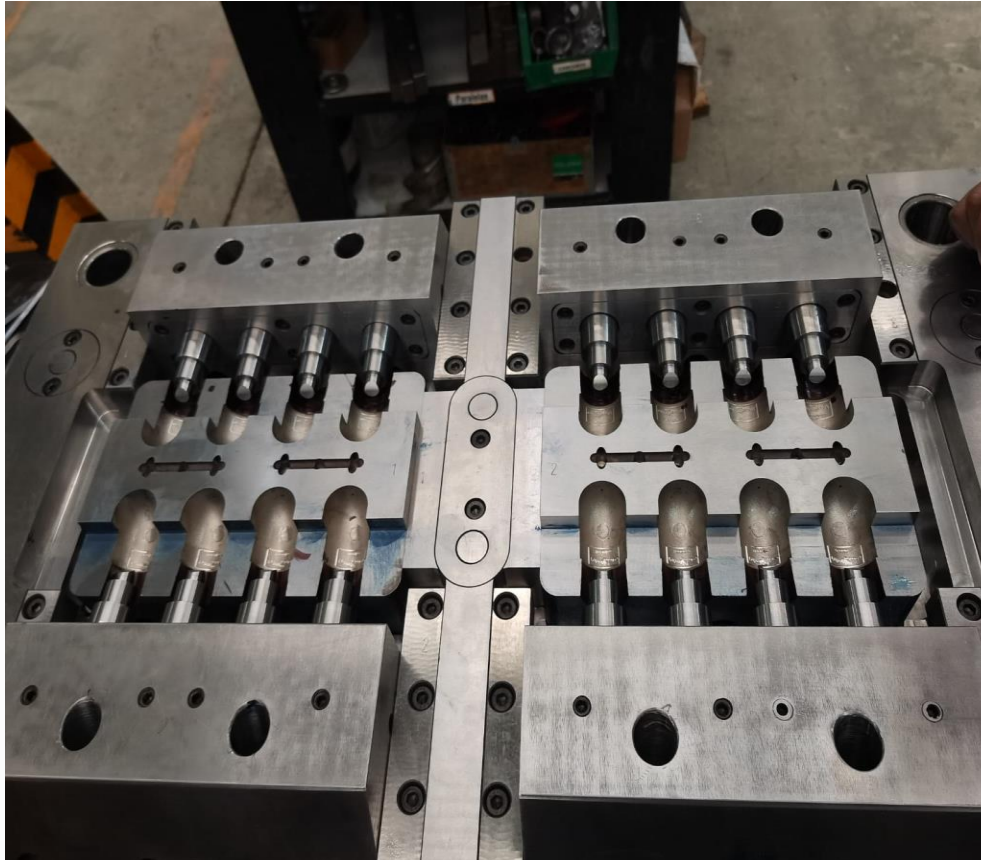
MOLD

Name: TEE 20 32 CAV
Material: PPR-80
Cavities: 32
Dimensions: 996X796X796
Hot runner: HASCO

TECNOLOGY



- Teflon on fix side to easy demoulding.



MOLD

Name: 90 DEG ELBOW WITH METALLIC INSERTS

Material: PPR-80

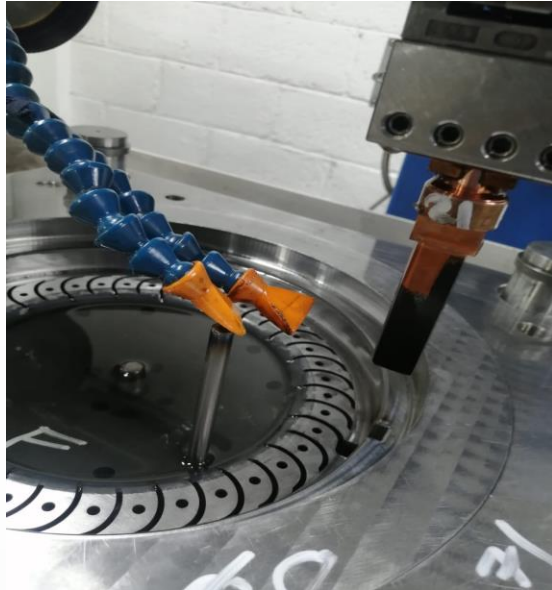
Cavities: 16

Dimensions: 596X796X646

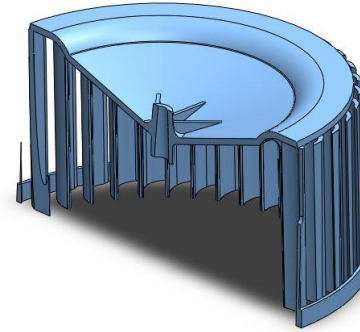
Hot Runner: HASCO

MOLD REDESIGN

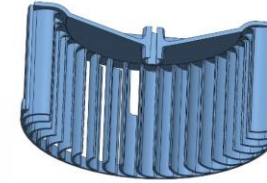
- Cost savings changing design



BEFORE



AFTER



MOLD:

Name: FAN

Material: NYLON 6

Cavities: 1

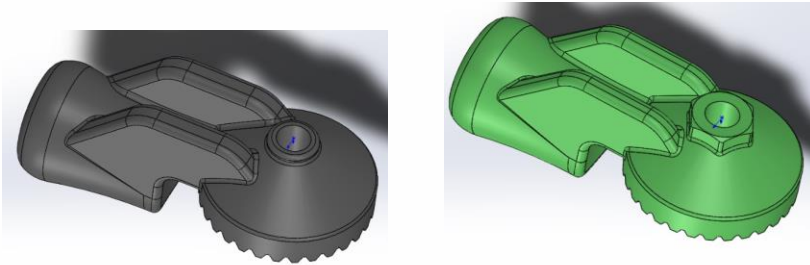
Dimensions: 496X496X496

Runner: COLD 4 POINTS

CENTRAL

METAL TO PLASTICS

Engineering change



Prototype mold



Name: CREMALLERA

Material: POM

Cavities: 4

Dimensions: 156X196X246

Runner: Cold



Warehouse

Mould Shop



Injection Molding Shop



INJECTION MOULDING MACHINE DISTRIBUTION:



- ➔ Machinery clamp forces from 50 to 3,200 tons
- ➔ Two planted machine
- ➔ Hydraulic machinery.
- ➔ Hybrid machinery.
- ➔ Dual color machinery.
- ➔ Energy savings machinery.
- ➔ Machinery for fast cycles



Tech services in less than 24 hours

**More than 500 machinery installed all over the country from 90 to
2,500 Tons**

WHO ARE WE?



- One of the **largest** producers of injection moulding machines in the world, established since 1958, **listed** in Hong Kong in 1991
- Annual production exceeds **15,000** machines, sold worldwide



STRATEGIC COOPERATION PARTNER OF MITSUBISHI

- Signed **strategic agreement** with Mitsubishi Heavy Industries Plastic Technology (MHI-PT) in 2011:
 - Co-development of the new “**MMX**” line of large-tonnage two-platen machines
 - OEM manufacturing of the “MMX” product line for MHI-PT in Shenzhen, China
 - **Licensed** to manufacture own “Ultramaster” product line under Chen Hsong brand
- **Upgraded** fabrication and machining facilities to meet “MMX” standards, under MHI-PT supervision
- Retired senior engineers from MHI-PT serve as consultants in wide range of **technical improvement programs**, e.g. hydraulics, machine design, motion control

1600-MMX on Display, ChinaPlas 2012



Advanced Two-Platen Designs

- Smallest footprint, largest stroke and platen size
- High speed, high precision, high reliability
- Superior mold protection
- Servo-driven, high energy efficiency
- Hallmark of Japanese technical capabilities

**700 –
6,500 ton**

Chen Hsong
SUPERMASTER TP-series



Example: Citroën Parts



6,500-ton – Largest Made in Asia

- Clamping force of **6,500** tons, designed by expert team led by Japanese engineer, shipped in 2013
- Customer in **Israel**, machine runs 24x7, making ultra-large produce containers for European market



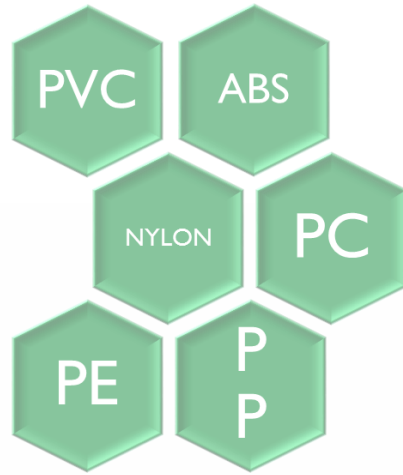
SUCCESSFUL ALLIANCE

For more than 25 years & have been working together in Mexico, offering

- Tech Service
- Spare Parts
- Technical advice on materials & processes, mold making, well ... integral plastic solutions.



RCC is part of GI Polisol and the one in charge of Developing Raw Material Solutions for the Market.



Plásticos Sal Injection molding





TOLL INJECTION MOULDING:

- From Concept to Finish Part
- Full Traceability
- ISO 9001:2015 & UL Certified, working on IATF
- Assembly
- Flexible Supply Chain / USMCA Located
- We Participate in product development
- We Speak your Language



Certification ISO 9001



Certification UL

CERTIFICATE OF COMPLIANCE

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Bruce Maheshwari, Director North American Certification Program
UL LLC

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FACILITIES



Injection Machines:

- One Vertical Injection 85 tons
- One Vertical 160 Tons, two color

All machines built-in raw material drier, thermo regulator, thermo controllers, cooling system.

FACILITIES



All machines built-in raw material drier, thermo regulator, thermo controllers, cooling system.

Two 10 tons Chillers.

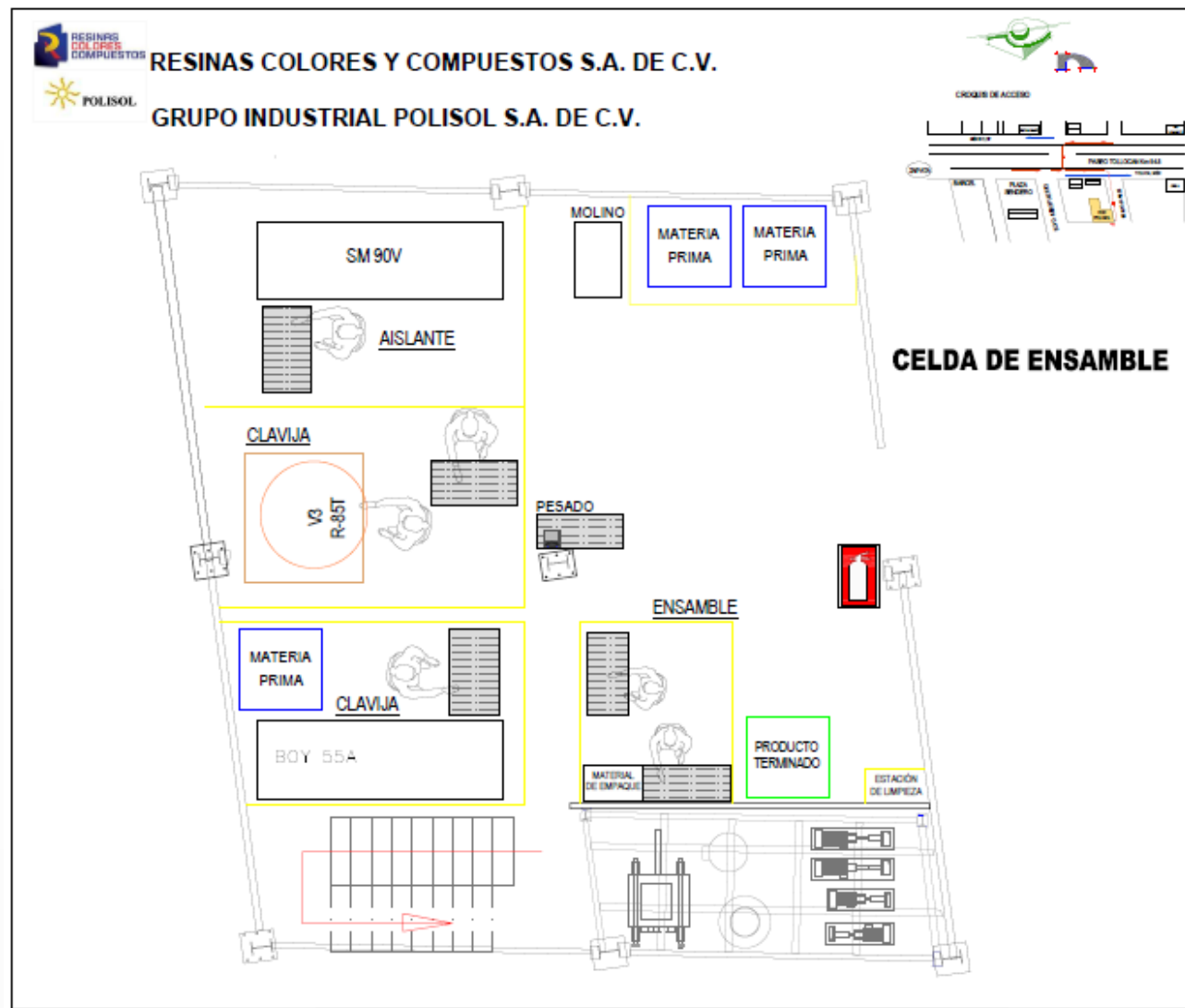
Building: 800 m² under construction 600m² more
Injection machines, with hot air dryers, hooper loaders, etc.

- ❖ Two 30 tons
- ❖ Two 55 tons
- ❖ One 80 tons
- ❖ Two 90 tons
- ❖ Two 150 tons
- ❖ One 178 tons
- ❖ One 210 tons
- ❖ One 228 tons
- ❖ Two 250 tons
- ❖ One 350 tons
- ❖ One 450 tons
- ❖ One 650 tons
- ❖ One 700 tons
- ❖ One 1,650 tons
- ❖ One 2,500 tons

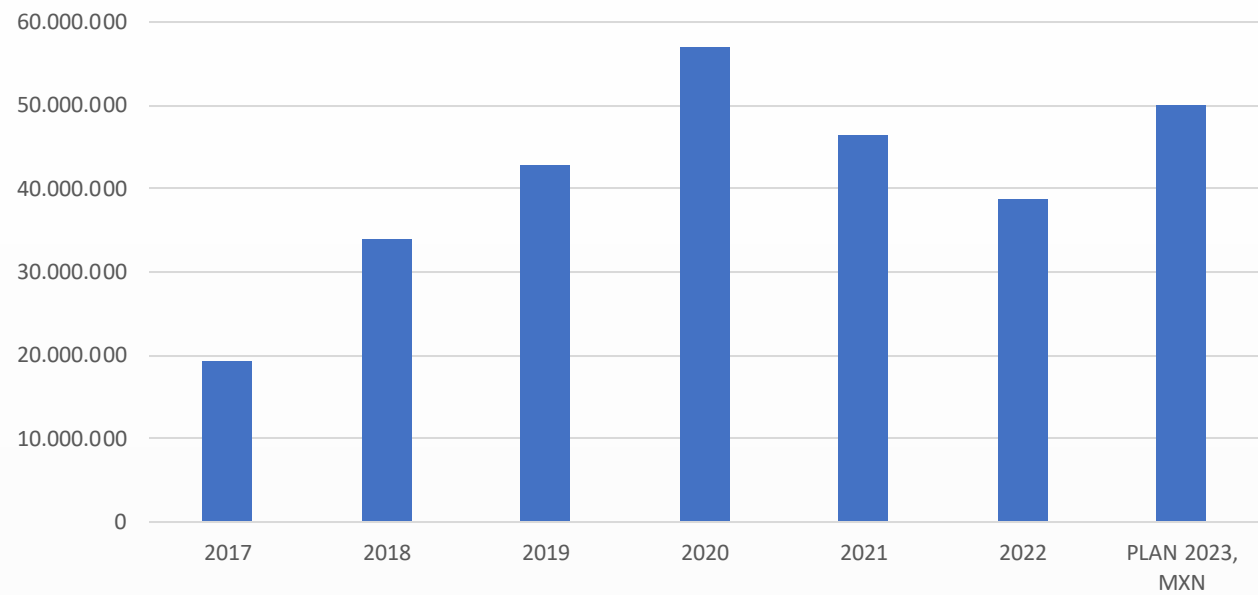
LAYOUT



PLASTICOS SAL



ANNUAL SALES



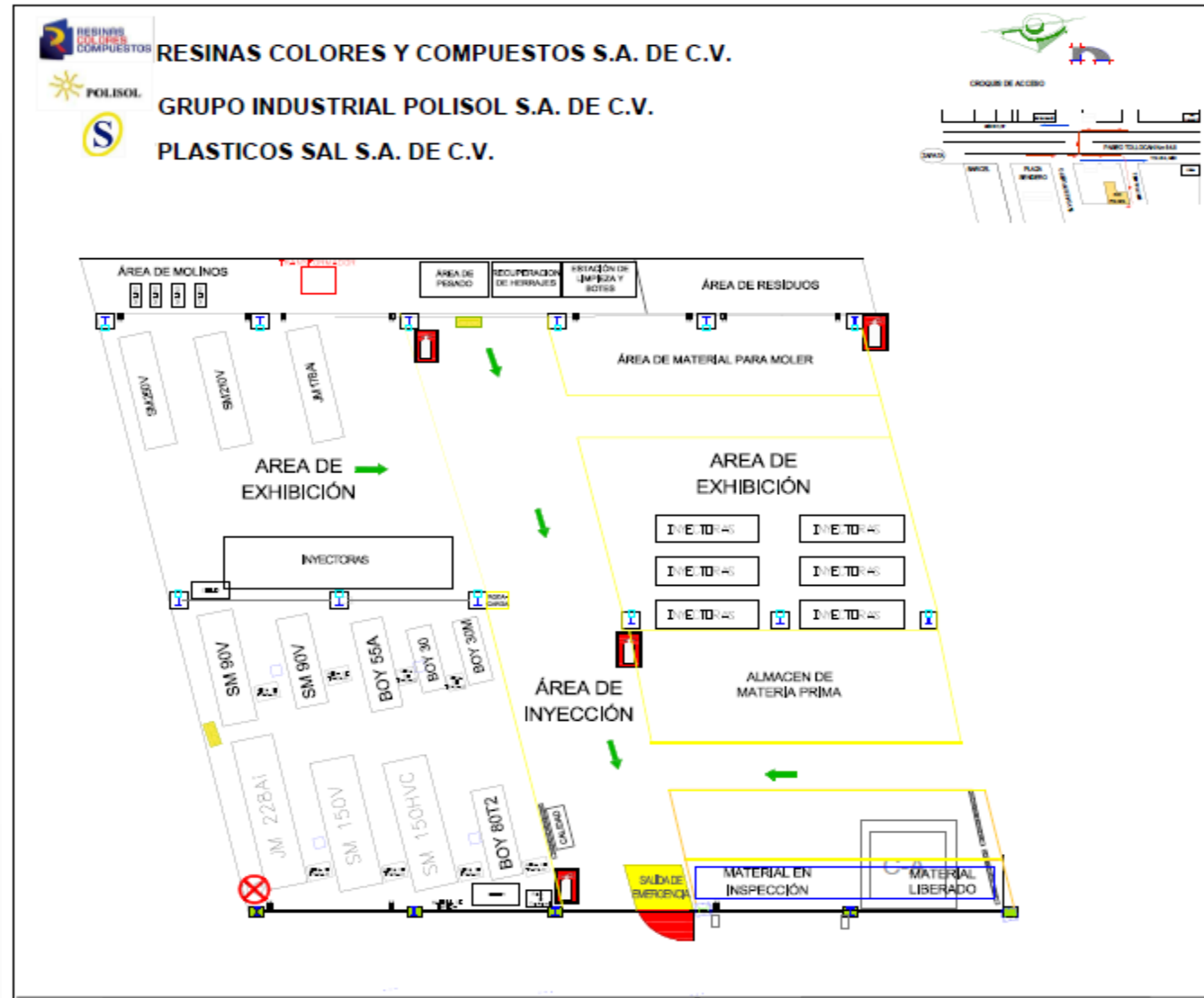


EXPANSION 2022

- Large machines from 650 to 2,500
- Robots
- 10 Ton crane

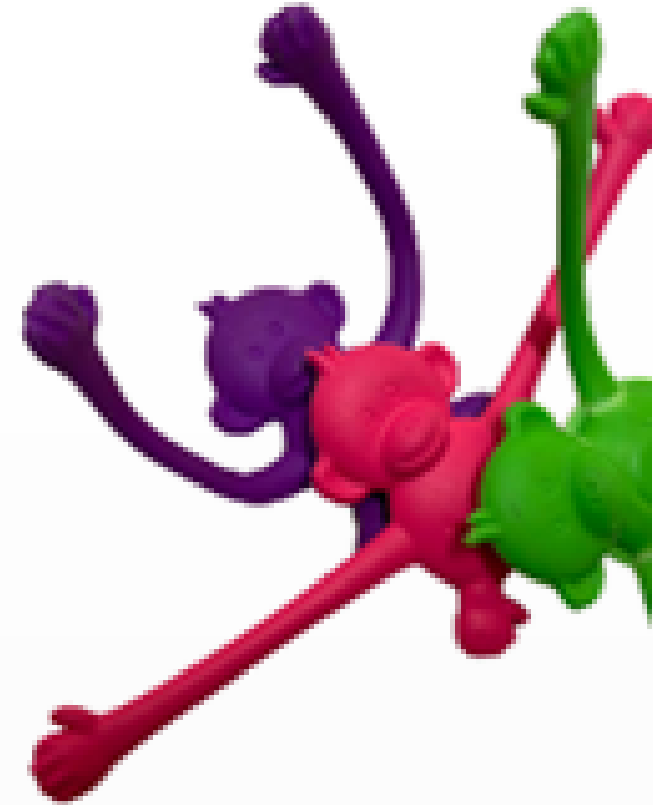


LAYOUT



ASSEMBLY LINE

- Assembly cell
- Mechatronic
- Gage automatic



Customer





ADVANTAGES

- Open capacity to acquire new business
- Pre – Assy process availability as required by customer
- Floor space for possible expansion as required
- Open to Join ventures opportunities
- Tooling development & manufacturing support
- Experience process engineers



- ❖ Material
- ❖ Machines
- ❖ Molds
- ❖ Assembling

FULL SOLUTIONS FOR PLASTICS

