





done!



+ 77 years of combined experience in the **Mining Industry**









María Fernández

- MAM (a) Yale SOM
- + 15 years
 developing
 new markets

José Padilla

- MSc @ ITESM
- + 12 years designing processes

Hello. We're here because we

We re here because love **challenges**.

Severo Fernández

+ 50 years in Metal Machining Processes



Our experience

Complex Machining (6 axis lathe, 5 axis milling)

Gear Manufacturing

CNC Grinding

- GD&T
- Core Tools
- CMM Inspection
- Reverse Engineering
- Statistical Process Control
- Vertical Integration Processes (IMMEX experience, suppliers developed from all over the world).

OMG MORI

DMU 85 monoBLOCK



Micron Works

Let's get the job done!

2

Location

- 6 hrs. from the US border.
- 4 hrs. from Monterrey City
- 4 hrs from Querétaro City
- Next to 57 Federal Highway
- International Logistics Experience (IMMEX Program)

Our Numbers

- \$2.6 M USD CAPEX
- **\$1.36 M USD** 2022 revenue
- 17 employees
- **2,000 m²** (21,500 sq. ft.) brand new facilities



Highly skilled collaborators

- Over **18 years of** experience on Grinding and CNC processes.
- Applications and Quality Engineers
- Core tools knowledge
- CMM, CAD, CNC
- GD&T





Grinding Experts

8





VM-55

- 400 mm max ID
- 500 mm max OD
- 300 mm length
- 500 kg workpiece



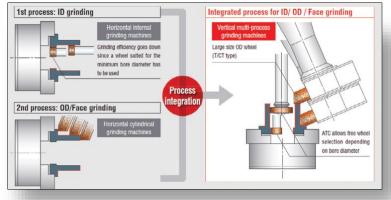
VM-85

- 800 mm max ID
- 800 mm max OD
- 500 mm length
- 700 kg workpiece



https://www.aerospacemanufacturinganddesign.com/article/g-advantages-of-cnc-vertical-grinding-machines/

https://www.aerospacemanufacturinganddesign.com/article/cylindrical-grinding-machine/



Our Grinding workforce



Multi-Process Grinding ID/OD/Face in one setup

Complex Machining

SB3F-9A

MORDAZA PISTON T20 ADIT-0853 0.T 31057

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(IROM PMO)

Tia





Puma V8300 M

- 40 Hp Heavy Duty Vertical turning center
- 830 mm turning diameter
- 780 mm Z axis
- 26 Hp Milling Capablity



DNM 6700

- High productivity VMC
- 1300mm x 670mm x 625mm (XYZ)
- Cat 40 Big Plus
- 12k RPM





SVM 4100

- Light, high speed cutting
- 770mm x 410mm x 510mm (XYZ)
- Cat 40 Big Plus
- 12k RPM

Our CNC workforce (Jan 2023)

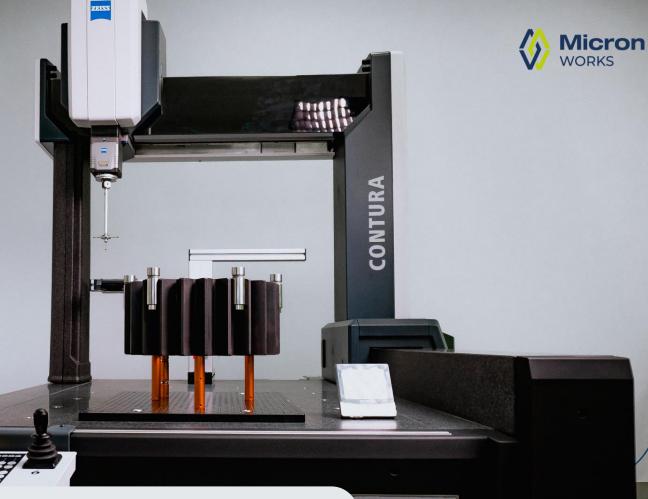
CMM Fully automated inspection

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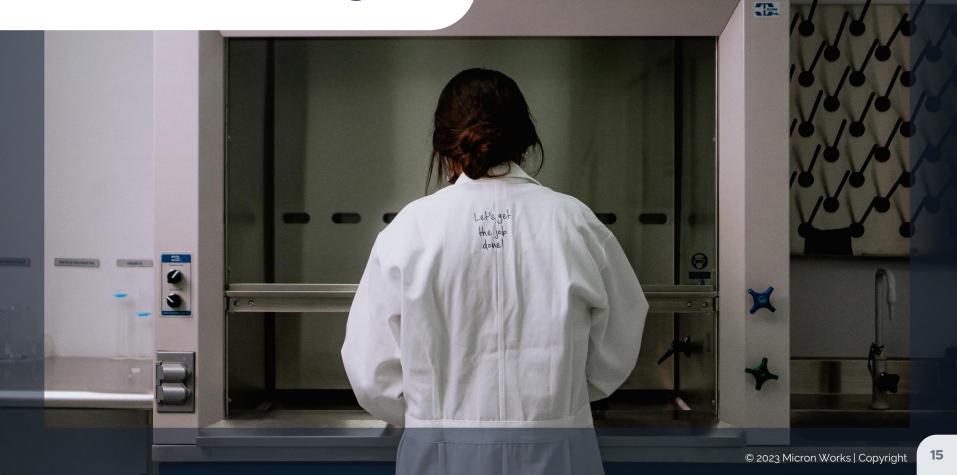
Specs

- 700 x 1,000 x 600 mm (XYZ)
- Highest precision
 stylus
- 1.2 µm repeatability range
- 730 kg. max. workpiece weight

Inspection



Nital Acid Etching



From the idea

- All of our fixtures are designed, machined, heat treated and ground by our engineering team.
- CAD (Solid Works) modeling of our fixtures.





To the fished product



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Our process is easy

Feasibility

We like to be sure that we can make what you need.

Quoting & Contract

Terms and conditions of the new commercial relationship.

Testing

Developing NC program and running trials at our facilities on similar material, with standard cutting tools. Getting a good estimate on C/T will be provided

Prototyping

+

Making a few parts on the real materials with standard cutting tools. Dimensional report will be provided.

PPAP

Running a Production Parts Approval Process on site with the actual machines and special tools. Dimensional and statistical report will be provided.

+ 6,100 ground gears



0.4 % NC parts

We care how we do things

3 JM straightness tolerance

Total success!

16 approved PN 's PPAP is our best friend



6 projects

Currently developing new solutions

100% on time delivery

We're always on a rush!

3 ISO Certifications

- ISO 9001:2015 Work in Process, Certification by August 2023
- ISO AS 9100 Starts February 2024



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THAN U FOR YOUR TIME

want to ...

We

BEGIN.

