

MATERIAM - MEXICO

# DIGITAL STRATEGY



**In the brave new digital world, Materiam is helping customers realise their designs.**

The young Mexico City-based company uses flexible manufacturing processes and digital technology to make it easier, faster, more convenient and affordable for clients to materialise their ideas – from prototypes to large-batch production.

Company founder and President, Alfonso Tames, explains: “We are a digital fabrication arm and help anyone from artists, small- to medium-businesses, and large OEMs materialise their projects. We take digital assets and using digitally-driven CNC fabrication processes convert them into material things in the most efficient manner possible.”

Customers upload their design files to Materiam’s web portal, match their needs to the company’s many services, which include CNC bending, cutting, and 5- and 7-axis machining, and Materiam does the rest.

#### **Precision processes**

Making advanced fabrication possible is LVD’s Lynx fiber laser coupled with a 300-ton *Easy-Form*® press brake and CADMAN® software.

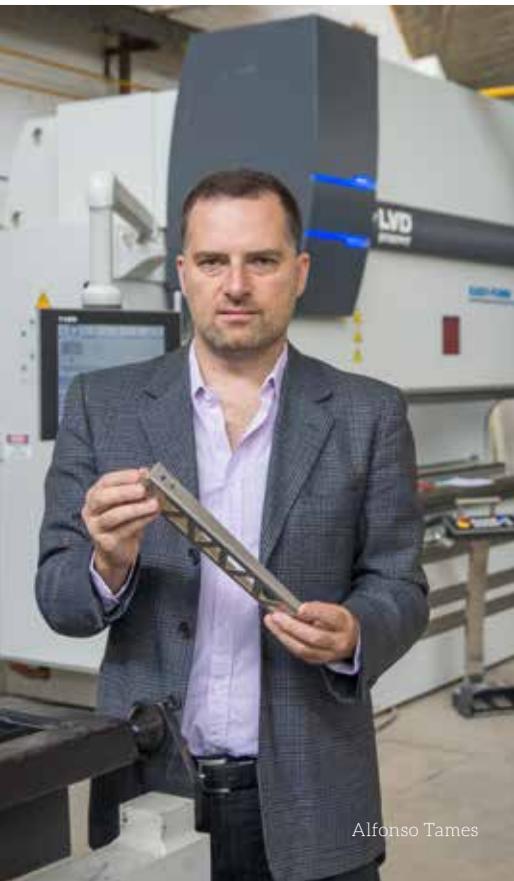
*The Easy-Form*® Laser real-time bend angle measurement system and CADMAN software eliminate long setups and trial-and-error bending.

The press brake uses LVD’s latest generation Touch controller which connects to the CADMAN database.

“We need a lot of flexibility to move from one job to the next. CADMAN helps us unfold a complex part and calculate all the material needed in the bending process and it generates a file so we can cut the part on our laser. That’s very important for us because when every print is different, you need software that can quickly unbend a part, send the cutting file to the machine and work it all out.”

Materiam purchased the press brake first and was so pleased with its level of technology, turned to LVD for its laser. The Lynx fiber laser makes easy work of the many prototypes Materiam handles.

“The laser excels at small batch production because of its flexibility and fiber laser speed, and the quality is great,” says Alfonso.



Alfonso Tames

“So, prototyping first in laser is a smart way to validate a design.

“Plus, as production cycles are getting shorter, designs are changing over more frequently. Our customers need to prototype and produce very fast. They are also doing customised production. Part of their designs are more customised to the needs of their clients and the laser’s flexible manufacturing fills that need.”

## “The Easy-Form press brake has got to be one of the best press brakes in the world.”

Because Lynx is easy to use, integrating laser cutting technology was simple. Materiam has a 20-person workforce experienced in operating and programming for CNC equipment. The company cuts stainless, brass, copper, silver and aluminium for all kinds of

applications: brass sculptures for a local artist to racks for the automotive industry.

“We love the Lynx and the components that LVD uses: the Siemens drive and controller and the Precitec cutting head. These components were a factor in our buying decision. The same controller is found on our machining center, so learning the machine was easy for us.”

### Universal advantage

With its LVD equipment, Alfonso wanted to create a workshop that can serve a broad base.

“We invested in more universal processes because more people are looking for these services,” he says. “In the sheet metal process, we are covered with the LVD solutions.”

For those who don’t have fabrication capabilities in house, can’t afford advanced fabrication processes, don’t have the space for fab machinery, don’t have the volume of work to justify the equipment, or just don’t want excess capability that impacts cash flow, Materiam is a game

changer. This is especially true for its Mexican customers.

“It’s difficult for a small shop in Mexico to access better technology, more advanced equipment,” adds Alfonso. “For people to have this ability, to have this facility to help them realise their project, is very important.”

And, digital assets can be stored for repeat jobs.

“If you’re an industrial designer and are making a table that needs to be laser cut and bent, you upload all the parts you need to build the table. Then, when a client places an order, you can log on to our platform and order the parts for the tables. Your projects are uploaded and ready to fabricate on demand.”

### Moving it forward

Materiam is part of a higher goal for Alfonso. The industrial engineer is driven to moving Mexico forward by creating opportunities.

“Our mission is to democratise innovation and productivity in Mexico by offering students, entrepreneurs and businesses advanced technologies for digital production,” he says. “We give them access to top-of-the-line, world-class resources so that the infrastructure is not an obstacle to the idea.”

At the intersection of virtual and physical, Materiam stands posed to help customers bridge the digital divide and bring their ideas to life.

