

- Magico LLC December 2013

- by [The Computer Audiophile](#) Published on 12-26-2013 09:43 AM

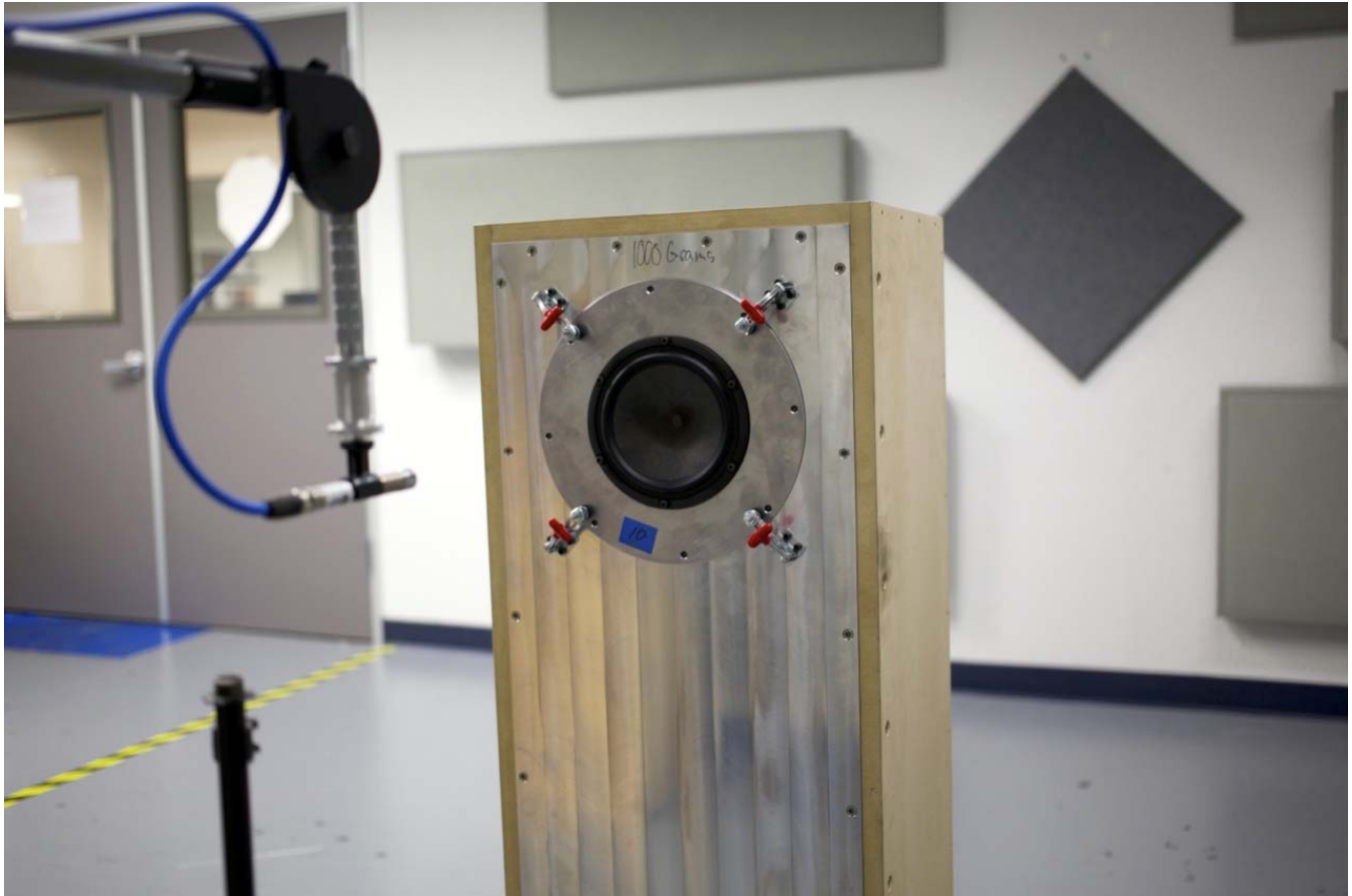


I've been following loudspeaker manufacturer Magico for nearly five years. I was first introduced to the company's founder Alon Wolf through mutual friends in California's bay area. Soon after meeting Alon I visited Magico's Berkeley factory where the company was designing its then flagship M5 loudspeaker. I spent quite awhile listening to the M5s during that visit. At that time the M5 was the best speaker I'd ever heard. In late December 2009 I re-visited Magico's Berkeley factory to listen to an unknown speaker that I was told was something special. The experience was a bit like déjà vu as I spent hours listening to the newly designed Q5 loudspeaker. This speaker was far above and beyond anything Magico had previously produced, but I left the factory proclaiming, "The Magico Q5 loudspeaker is the best loudspeaker I've ever heard anywhere. There isn't a single product on the market today that's capable of this level of performance." Much has changed since that last visit including a new flagship Q7 loudspeaker, the introduction of Magico's S Series, and a new home for the factory. Fast forward to December 2013. It was time to visit Magico once again.

The Company

A mid December trip to California is never a bad idea when one lives in Minnesota. Escaping the cold for business or pleasure is always fine with me. This trip was a quickie to say the least. I arrived at SFO airport at 12:00PM on a Tuesday and caught a flight home to MSP at 3:00 PM Wednesday. I drove straight from SFO to Magico's new Hayward, California factory. Magico not only builds some of the finest loudspeakers in the world, but the company is a success story. Like most speaker companies Magico started from meager beginnings and some

peculiar looking products. Fortunately the company has learned from its many different designs and has continued to push loudspeaker performance boundaries. Magico's Mini, Mini II, V2, V3, and M5 were all wood based products. Calling them just plain wood is quite an understatement. Magico's Baltic Birch designs were terrific looking and sounding. Its Baltic Birch based speakers received nearly every major accolade in the HiFi industry. As these products gained traction in the marketplace and positive reviews continued to add up, the company continued to grow. Reinvesting in the company enabled Magico to research and develop its flagship line of Q Series aluminum based loudspeakers. Moving to the Q Series required a herculean effort from all of Magico's employees. This was a sea change. First was the Q5, followed by the Q3, Q1 and the best speaker I've heard to date the Q7. The new Q Series was received very well in the high end marketplace. Soon Magico's factory was bursting at the seams as the company outgrew its Berkeley location. The success of the Q Series and Magico's new S Series enabled the company to move to a much larger facility where the CNC machines run nearly non-stop. Magico's success stems from both continual improvement of its processes and continually pushing loudspeaker performance boundaries.



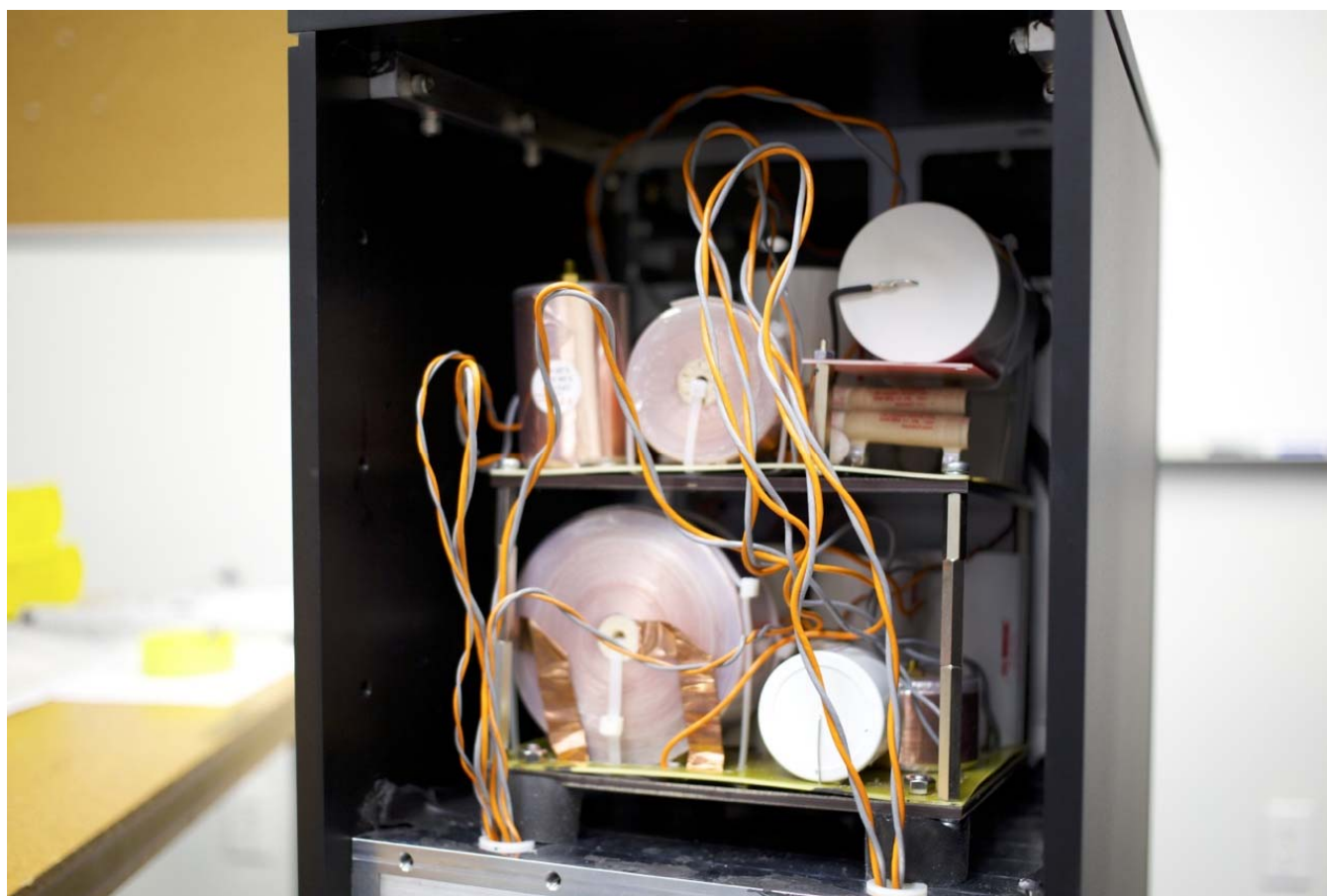
Magico's new factory in Hayward, California is certainly a sight to see. Rectangles, circles, blocks, and squares of thick aluminum enter the factory only to be transformed into beautiful pieces of the Magico loudspeaker puzzle. Other pieces are sourced from top manufacturers. During my visit Magico was in the process of building a handful of its Ultimate horn based loudspeaker systems with parts sourced from around the world. Sitting outside Alon's office was several hundred thousand dollars worth of Ultimate parts waiting for assembly and fine tuning. There's a reason this speaker system is \$600,000 per pair. The best parts and the best engineering aren't cheap.

One of the first stops for Magico's newly delivered aluminum is a CNC machine. The company has several of these machines masterfully creating parts with extremely low tolerances simultaneously. I'd never seen a CNC machine in person before this visit. Watching these machines carve through aluminum with ease is something to behold. After the aluminum takes on its new shape it's sent to another area in the factory for assembly into one of Magico's speakers.

Magico has the visible parts of its speaker enclosures finished before entering this factory location for assembly. For example, the Q Series is hard anodized black. This anodizing is a very expensive part of speaker production. However, Magico's anodizing is extremely tough. The external surface of the Q Series speakers will not scratch unless someone is really trying hard to scratch it with the right tool. Common household items such as car keys, compact discs, and coffee cups need not apply. These items can't scratch a Q. This anodizing once stood up to a forklift accident at the factory that crushed a driver enclosure inside a speaker but didn't leave permanent scratch on the outside of the speaker.

Magico's fairly new S Series of loudspeakers is based on extruded aluminum enclosures and a coloring processes that's less expensive than hard anodizing. This enables Magico to produce a series of speakers with a lower MSRP and to offer an array of colors not seen in the Q Series. The S1 and S3 loudspeaker enclosures consists of a single piece of extruded aluminum without seams. It's an impressive enclosure to say the least.

Magico not only engineers its enclosures to the highest levels, it engineers its drivers to the same way. In Alon Wolf's office are quite a few Magico drivers for various speakers. As a test Alon placed one of these drivers on his metal desk and asked me to pick it up off the desk. The strength of the driver's magnet really surprised me. Sure the driver was heavy, but I didn't expect it to stick to the desk like superglue because of its magnetism. In addition to very fine materials that go into fabricating these drivers Magico also tests each one with an advanced Klippel Production Analyzer QC system. Such a system isn't cheap but it's required for a manufacturer to detect electronic and mechanical anomalies or defects with extremely tight tolerances.



Strolling through the factory I saw Q5 and Q7 loudspeakers in various stages of assembly. No matter one's preference for loudspeaker sound or quality, it's impossible not to be impressed by Magico's crossovers. The size, weight, and individual components that make up the Q Series crossovers are truly awesome. Even the solid core copper wiring that runs throughout each Q Series speaker is impressive.

The Products

Magico's newest product released is the S3. This is the loudspeaker I listened to throughout my visit in the incredible Magico listening room. The 150 lbs. full range floor standing S3 starts at \$22,600. It features the world's largest monocoque enclosure at 16" in diameter with 1/2" aluminum walls. Similar to the S1 and S5 the S3 also features an acoustic suspension enclosure. Magico recently developed a polycarbonate sub-enclosure using advanced materials and a unique shape. This new sub-enclosure makes its debut in the S3. The S3 driver compliment is one MB30 Beryllium tweeter, one MB390 mid-woofer (same as S5), and two new Hybrid Nano-Tec/aluminum 8" woofers. The S3 will likely surprise many people with its midrange purity and deep bass response. This is definitely a loudspeaker with which I could live.

On static display at the new Magico factory was the new Q Series subwoofer called the QSub. Featuring an 18" woofer and sealed enclosure, this 570 lbs. behemoth is like no other subwoofer. A brief description from my 2013 CEDIA show report stated, "This subwoofer has 6,000W of power and two 18" woofers. The monstrous enclosure features two inch thick aluminum similar to the thinner Q series of loudspeakers. The QSub-18 retails for \$36,000." At the factory the QSubs weren't connected to anything so I will rely on my CEDIA experience for sound quality, "I listened to both movies and concert Blu-ray performances through the Magico / Constellation Audio system. No matter what audio was sent through this system the bass produced by the QSub-18s (two of them in the room) was like nothing I've ever heard. I've never heard bass so clear yet so deep. There was no annoying deep rumble during explosions while watching movies. Rather the bass was incredibly controlled while it shook my clothing with displaced air. Keep in mind that this sub, like all Magico products, features a sealed enclosure. While watching Chris Botti and Katharine McPhee perform I've Got You Under My Skin the QSub-18 subwoofers appropriately disappeared until needed. The experience of hearing a QSub was unlike anything I've heard and I highly recommend Computer Audiophile readers seek out an opportunity to hear this controlled monster."



The Listening Room

At the factory I visited Magico's new 20' x 33' x 13' listening room. The room is absolutely stunning. It's the room Magico's Alon Wolf has waited for for 50 years. Built as a room within a room, this listening room is similar to Magico loudspeakers in that it's sealed tightly. One must slightly slam the door in order to properly close it and seal the sound inside and out. Speaking of sealing sound, this listening room has an ambient noise floor near 20 dB. Listening to music in this room revealed details in well known tracks that I'd never heard. The first day at the factory we listened to Vitus 40 watt mono blocks, a Vitus preamp, Aurender W20, and dCS Vivaldi DAC. The second day we switched to Constellation Audio mono blocks and preamp, Matan Arazi's Audeeva Conbrio music server, and a Pacific Microsonics Model Two DAC. Both days I enjoyed what I heard tremendously. I can't say it's the best sound I've ever heard because the S3 loudspeaker isn't the Q7. If I were to hear a Q7 in that listening room I'm willing to bet I'd be jaded for years to come. The S3 is a very revealing speaker. It enabled us to switch electronics from amps and preamps to DACs and music servers and quickly identify sonic differences. Sure some people want a speaker with a little added cream and sugar, but that's not my style. I want my music reproduced as accurately as possible. Based on several hours of listening time spent with the new Magico S3 I think this loudspeaker will be tough to beat in its price range.



The Experience

My 2013 trip to the new Magico factory was well worth the less than luxurious airplane rides. The 27 hours I spent in California, much of which was spent at Magico, was productive. It's always nice to see how products are made and to talk to the people creating such products. Magico's CEO and Chief Designer Alon Wolf and I spent a several hours not only listening to music but also talking about the HiFi industry, product value, and technology. I like talking to Alon as he isn't afraid to voice an opinion. One subject that we discussed has stuck with me more than all the other items. That is product value. Along these lines Alon and I discussed industry product markups and the quality of parts manufacturers place in products. Everyone agrees manufacturers need to make money to

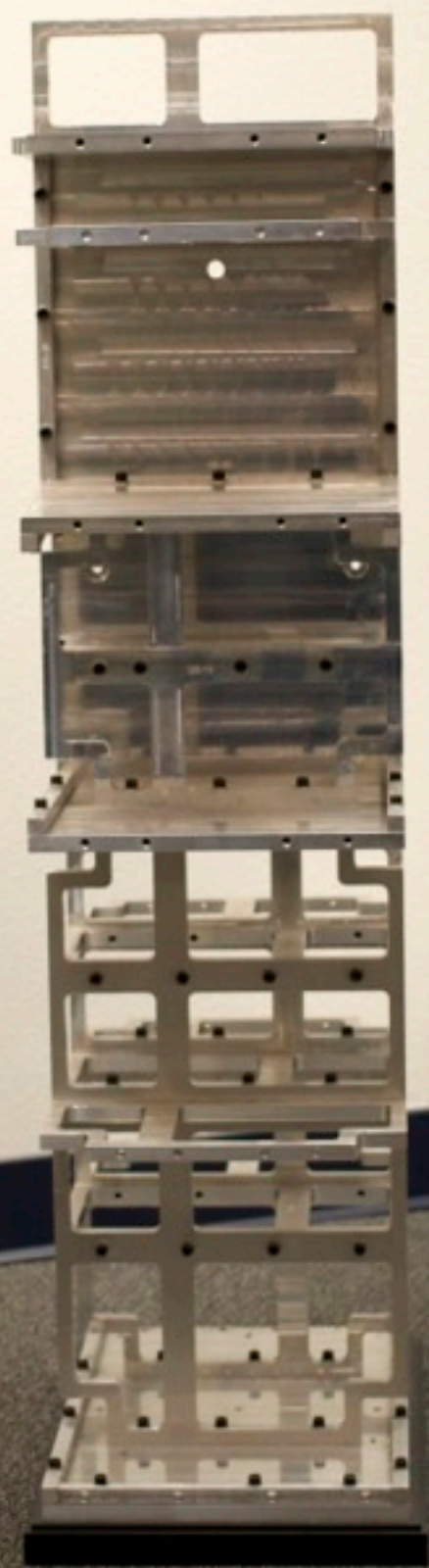
stay alive. Marking up one's product from the Bill of Materials cost to the MSRP is how businesses make money. However, when manufacturers use incredibly cheap parts and mark the price up ten times (or more) the BoM cost it frustrates both Alon and myself. Magico's markup isn't nearly as high as many of its competitors. This brings me back to value. Value is often inversely proportional to the difference in price between a manufacture's BoM cost and MSRP. When the markup is small the value is large. Regardless of the final retail price, if a product BoM is \$25,000 and it's sold in stores for \$100,000, I'd much rather purchase that product than one with a BoM of \$4,000 that's sold for \$40,000. All of this is a topic for another discussion, but it's relevant when considering one's next pair of loudspeakers. Based on my experience over the years with Magico the company offers true value in all of its products regardless of price.



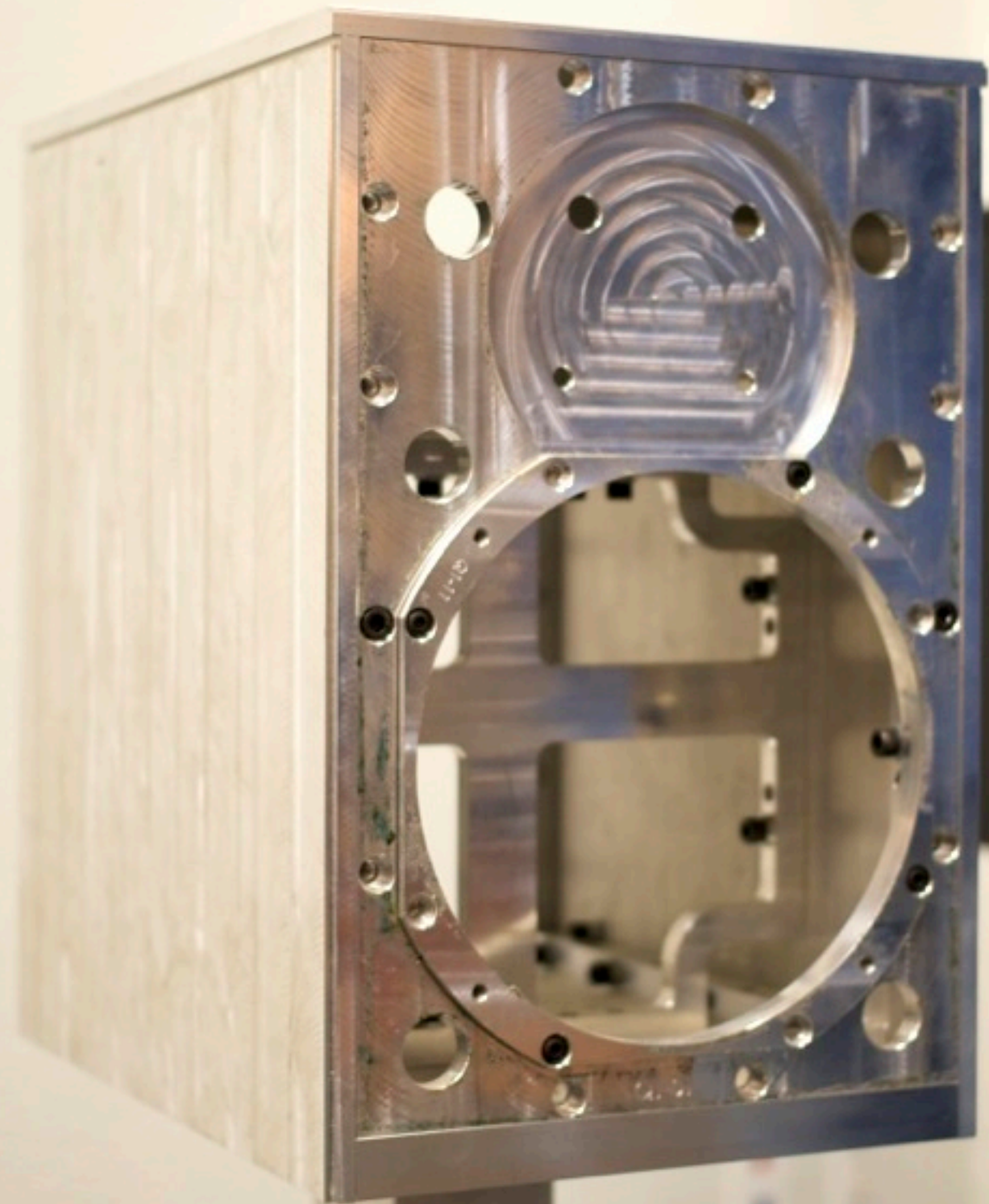
Visit Magico at <http://www.magico.net>



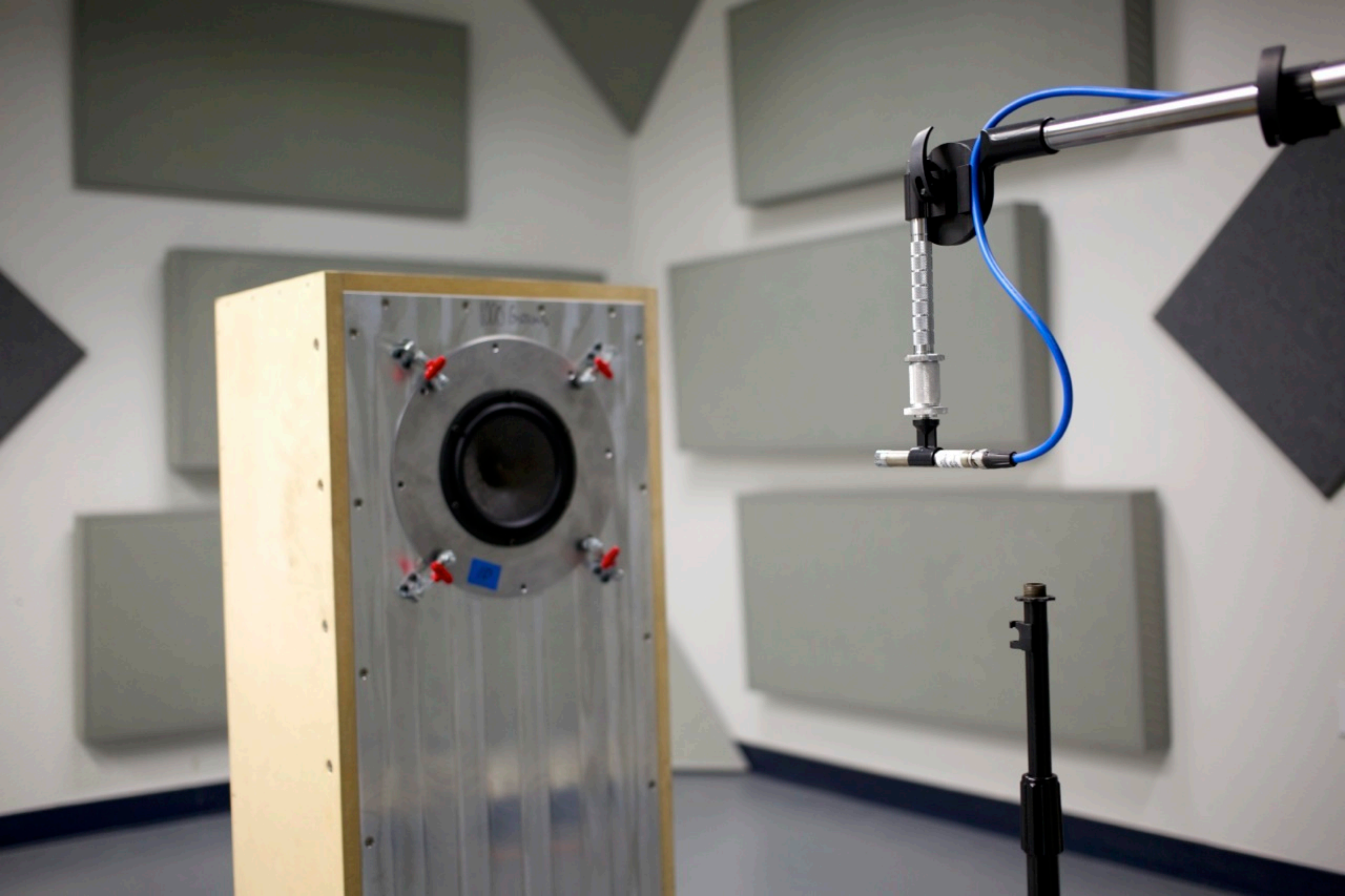


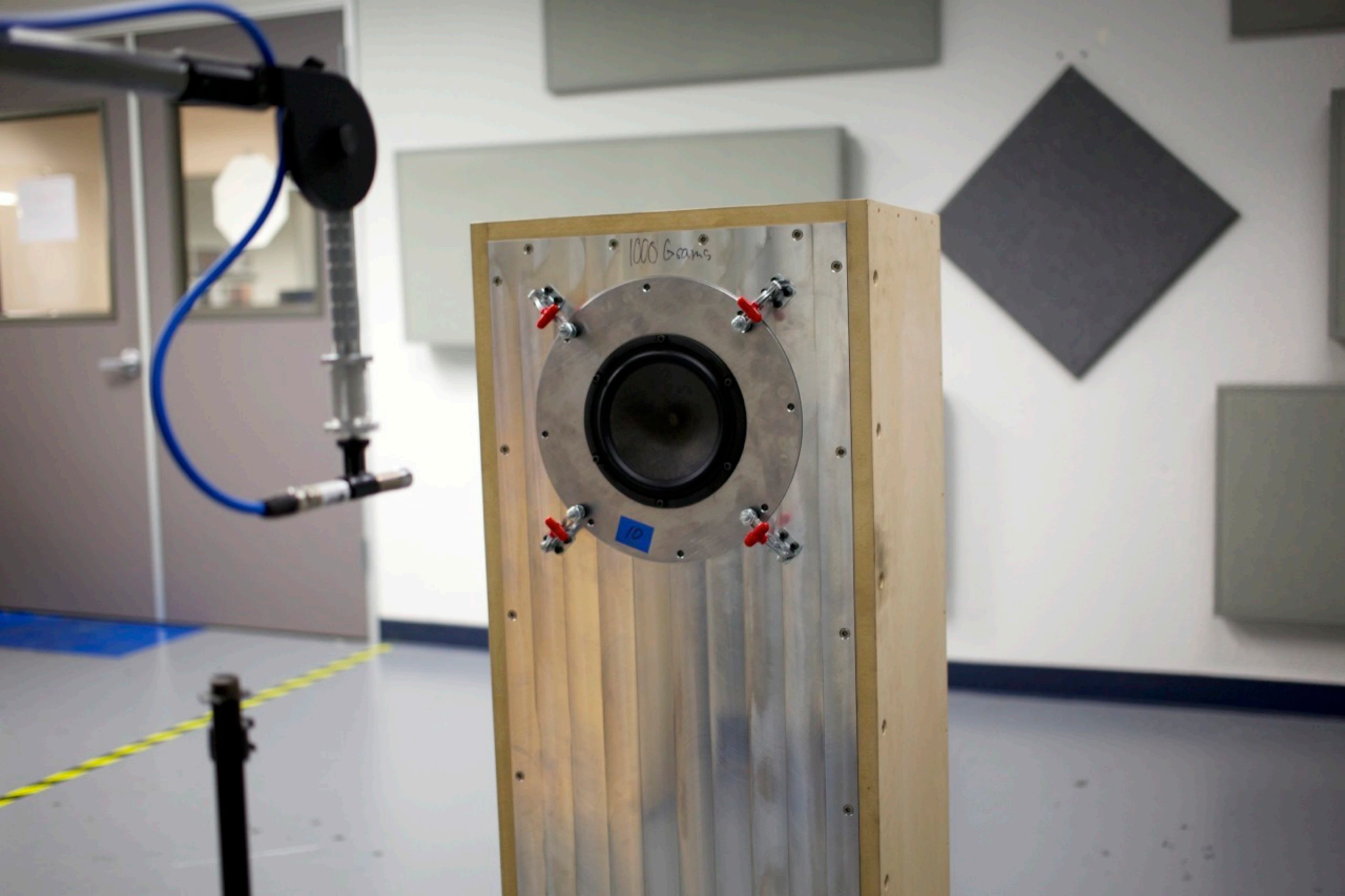


















S5

S5

S5

S5

S5

S5

3
-20
3/4"
SS 1/4-20 Flat
2152

1"
SS 1/4-20 Hex

1-1/8"
SS 1/4-20 Hex

1/2"
80 10-24 Torx

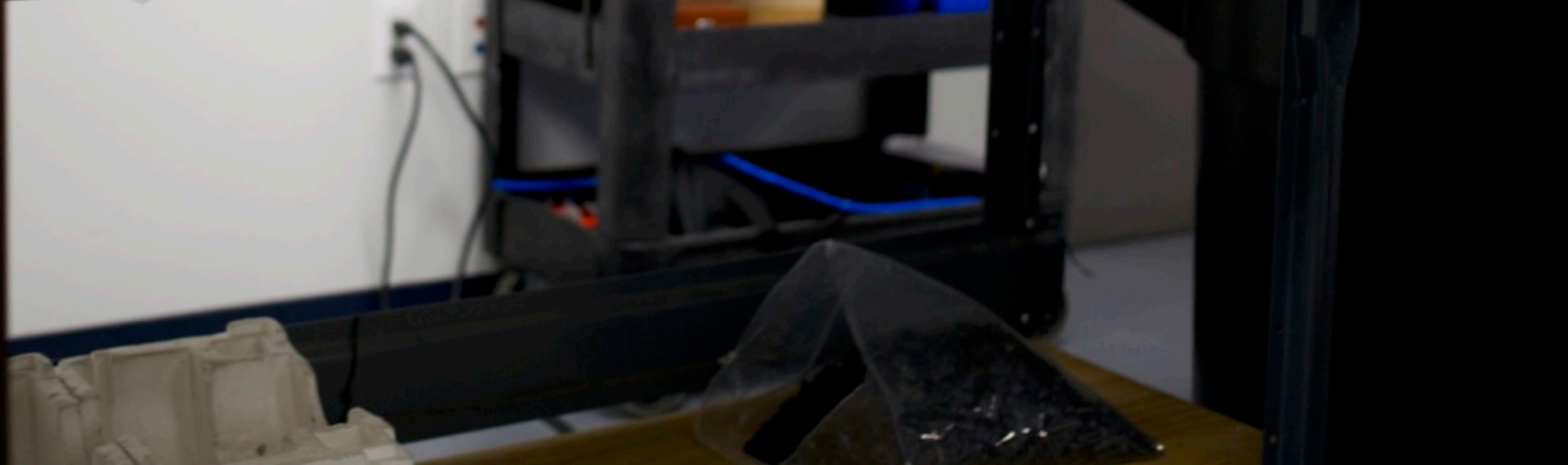
1/2" (F15)
8-32

3/4"





NOTICE
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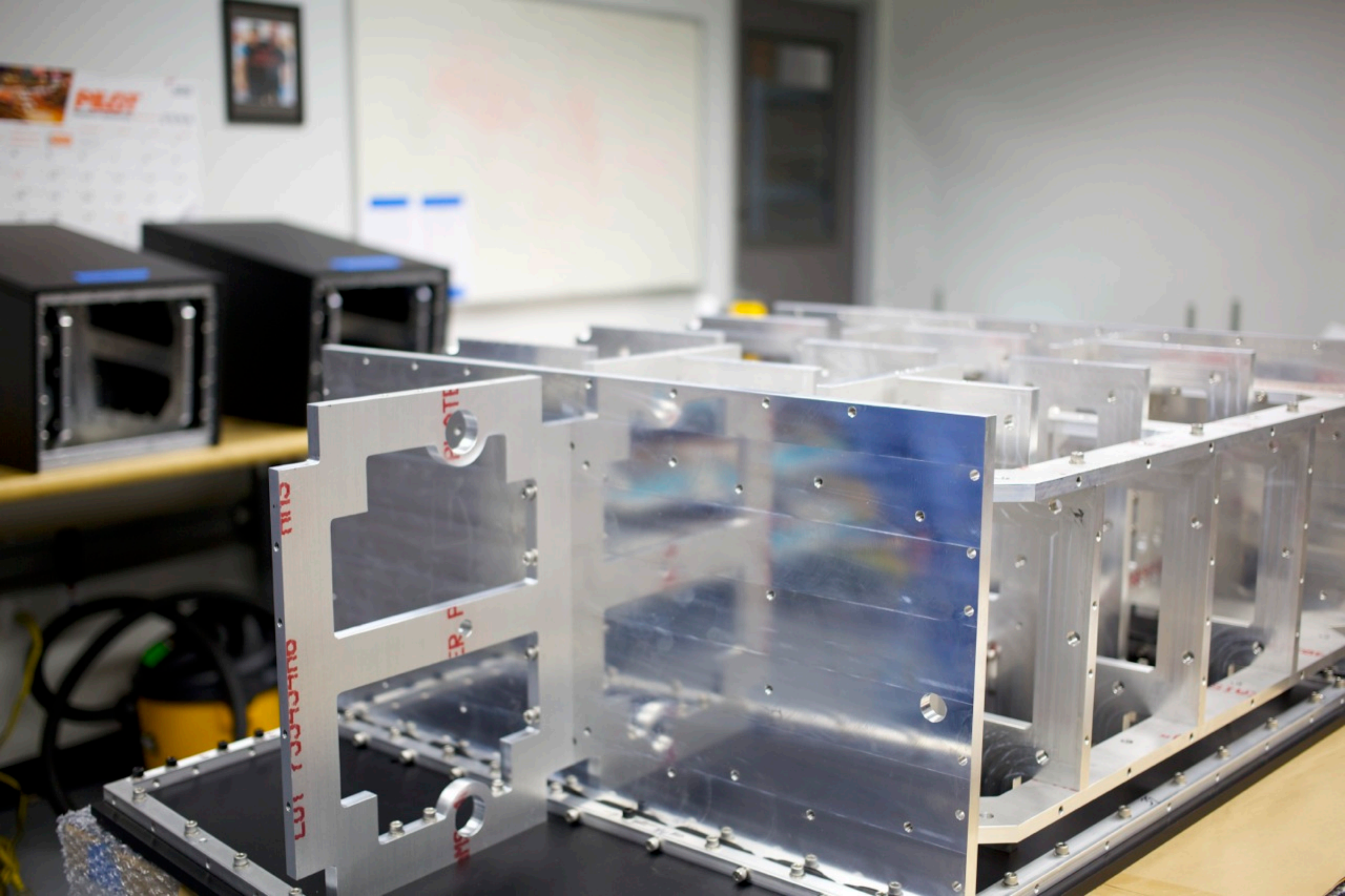


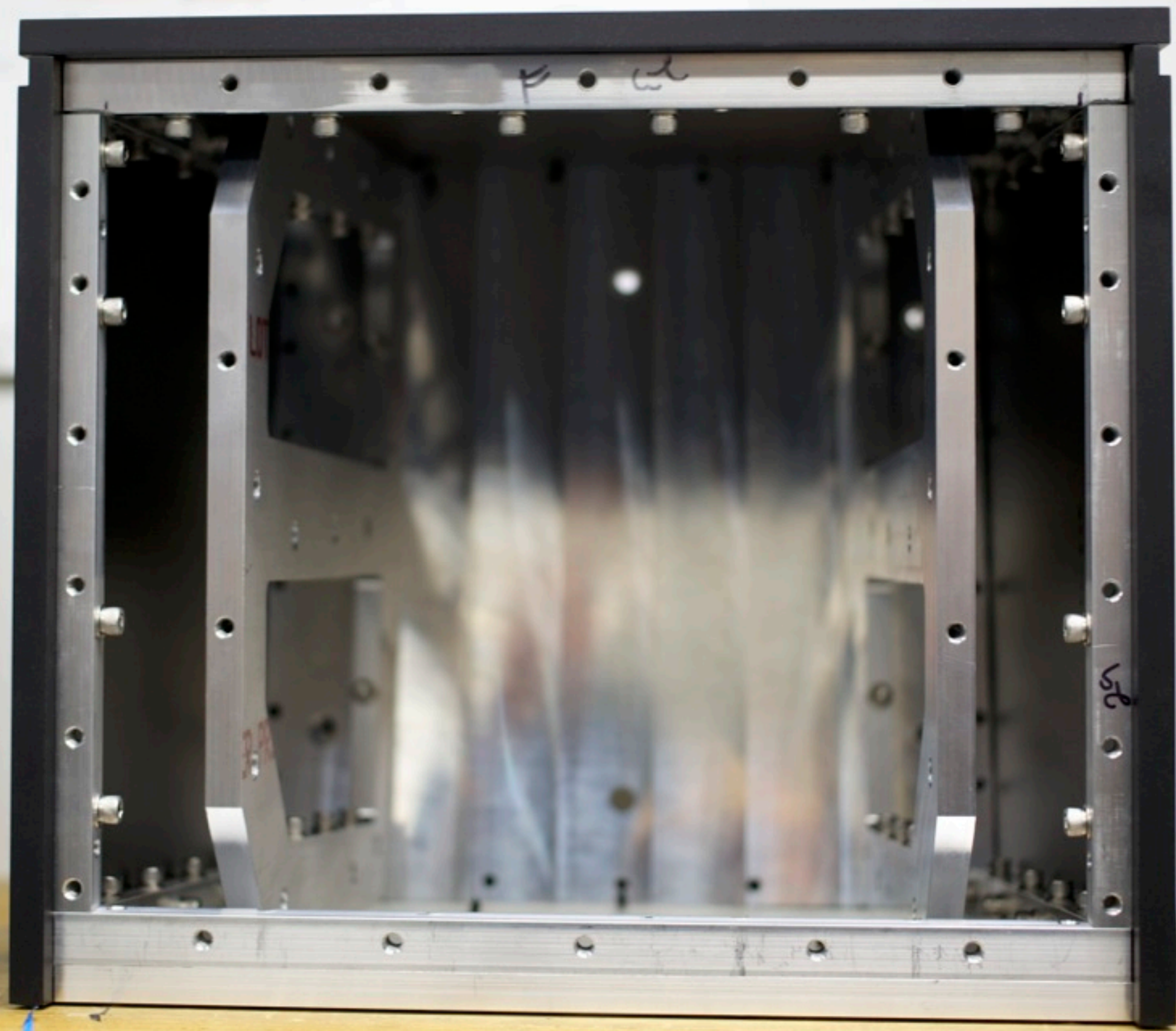




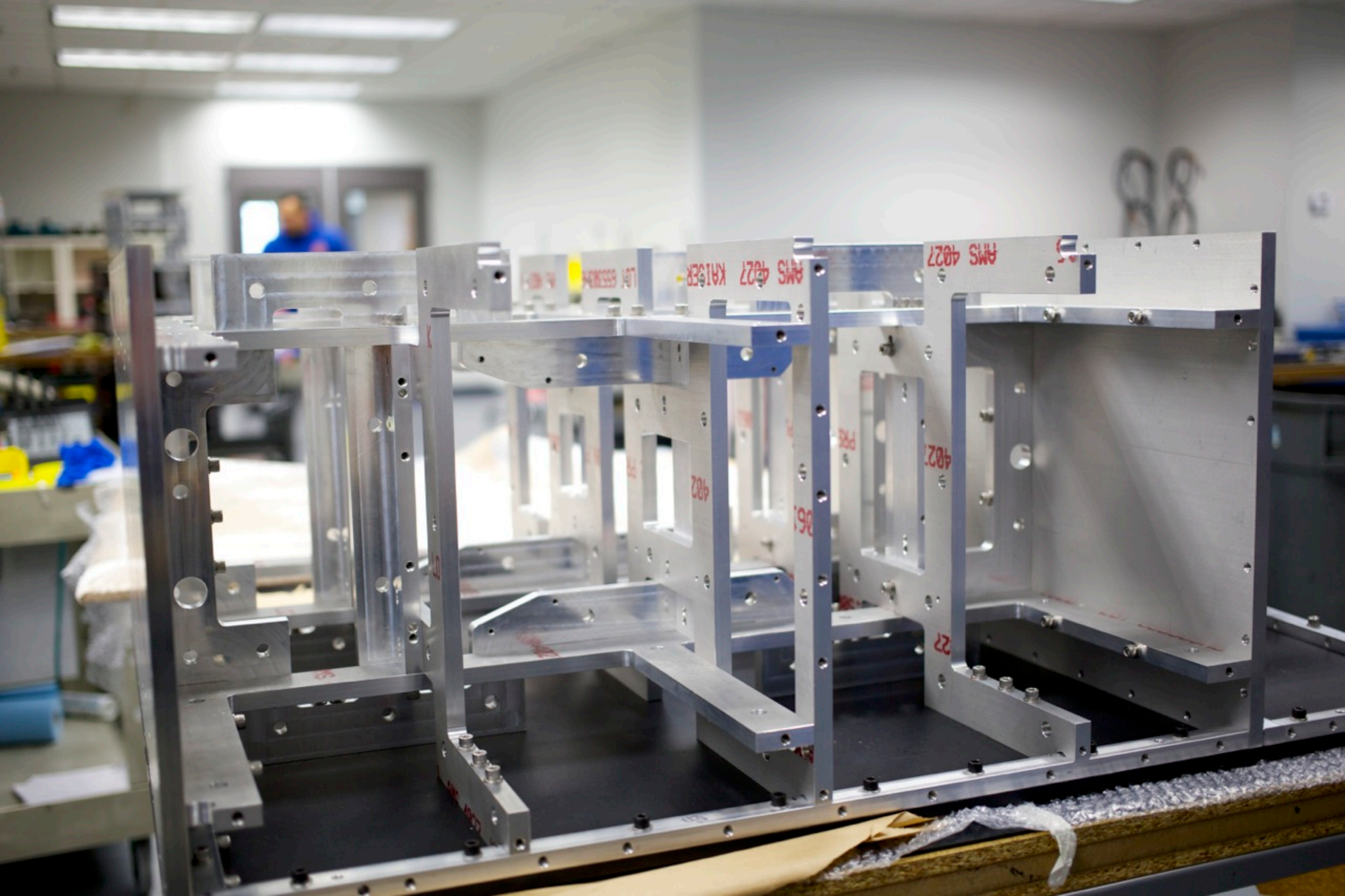








07





Q3-23
Internal strut

Q3-24
Internal strut

Q3-25
Internal strut

Q3-05
Internal panel

Q3-05
Internal panel

Q3-R1
Tension Rod

Q3-R1
Tension Rod

Q3-R2
Tension Rod

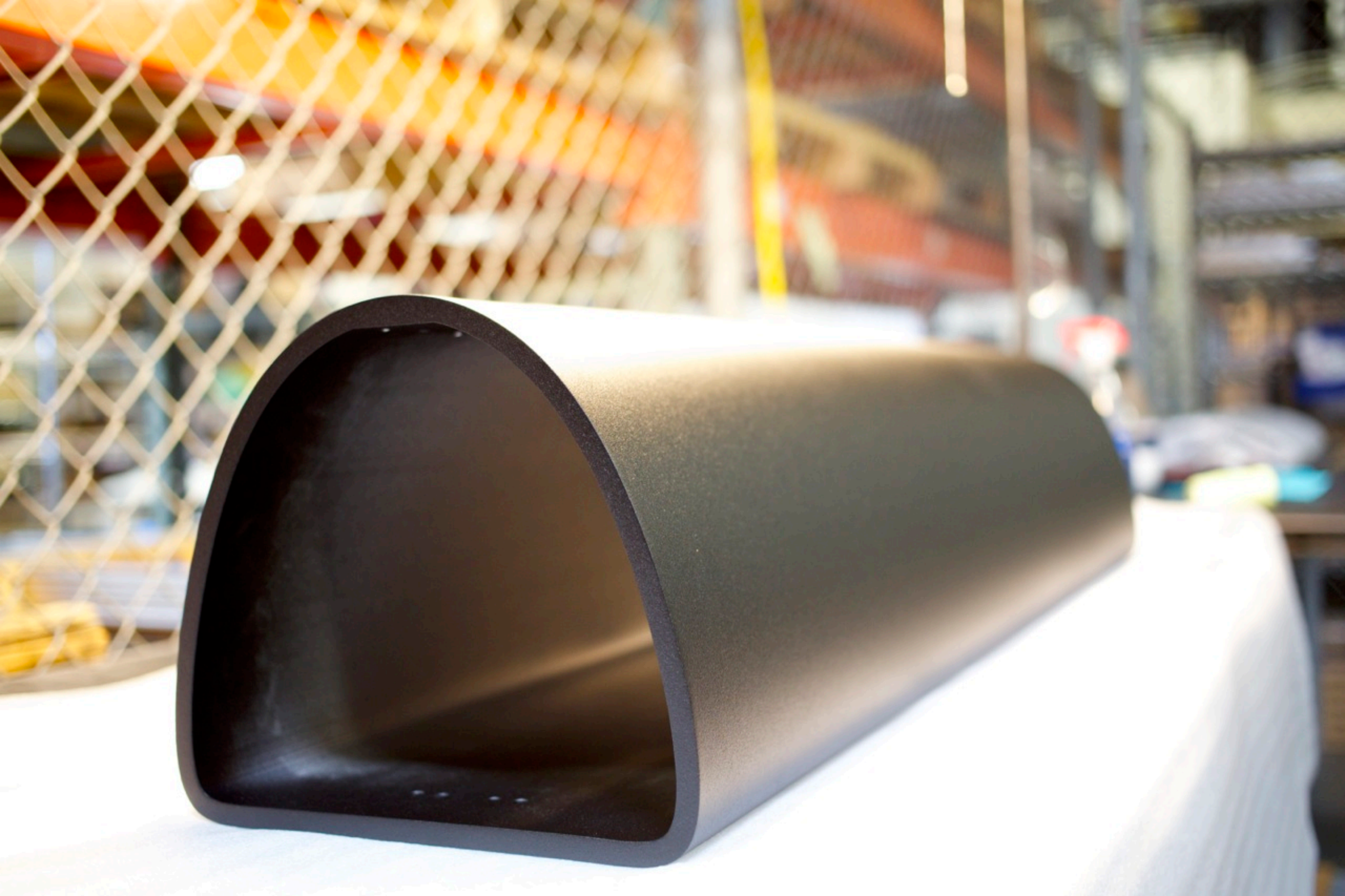
Q3-R3
Tension Rod

Q3-R4
Tension Rod

Q3-R5
Tension Rod









3000 LIT
2000

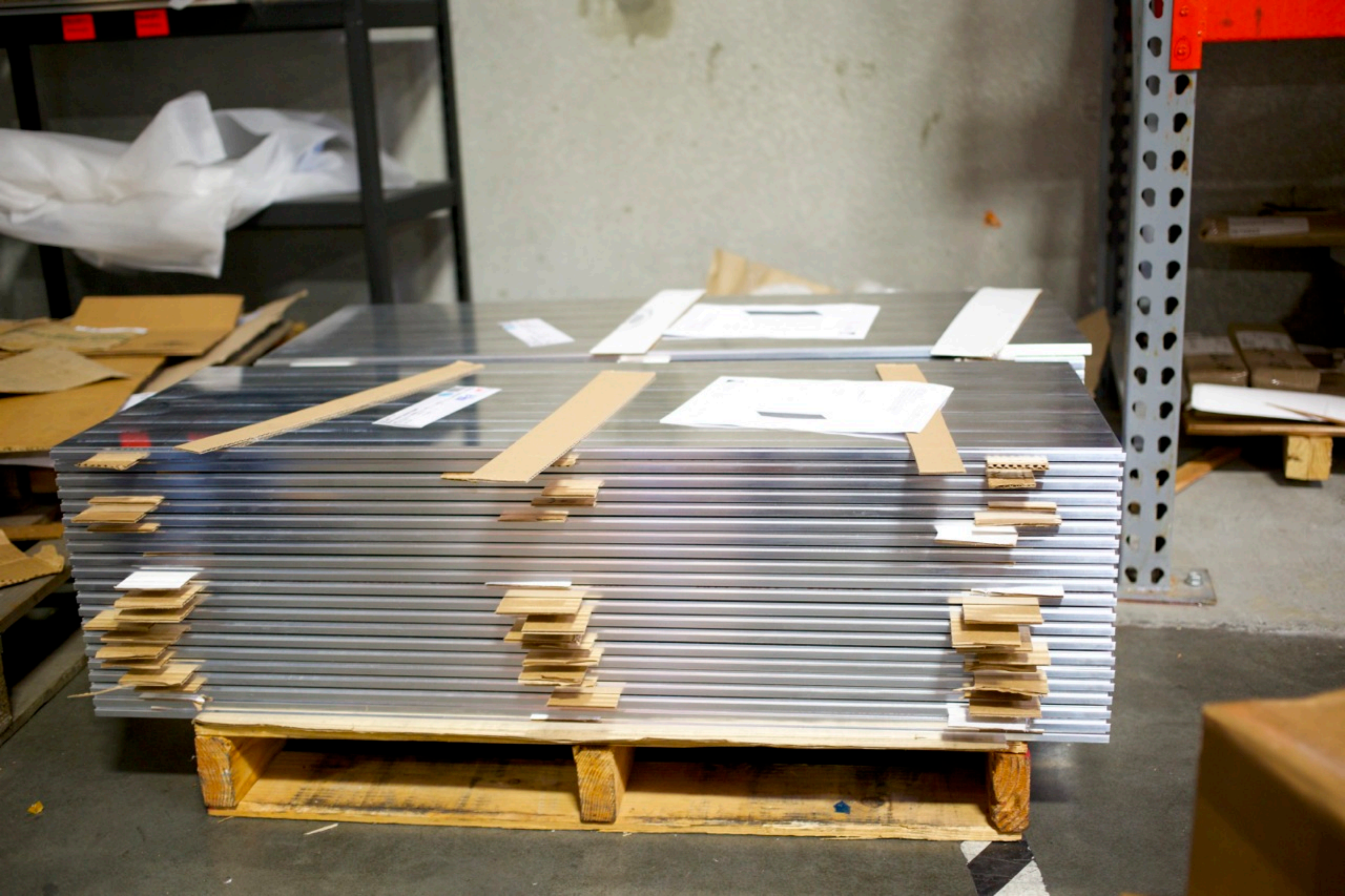
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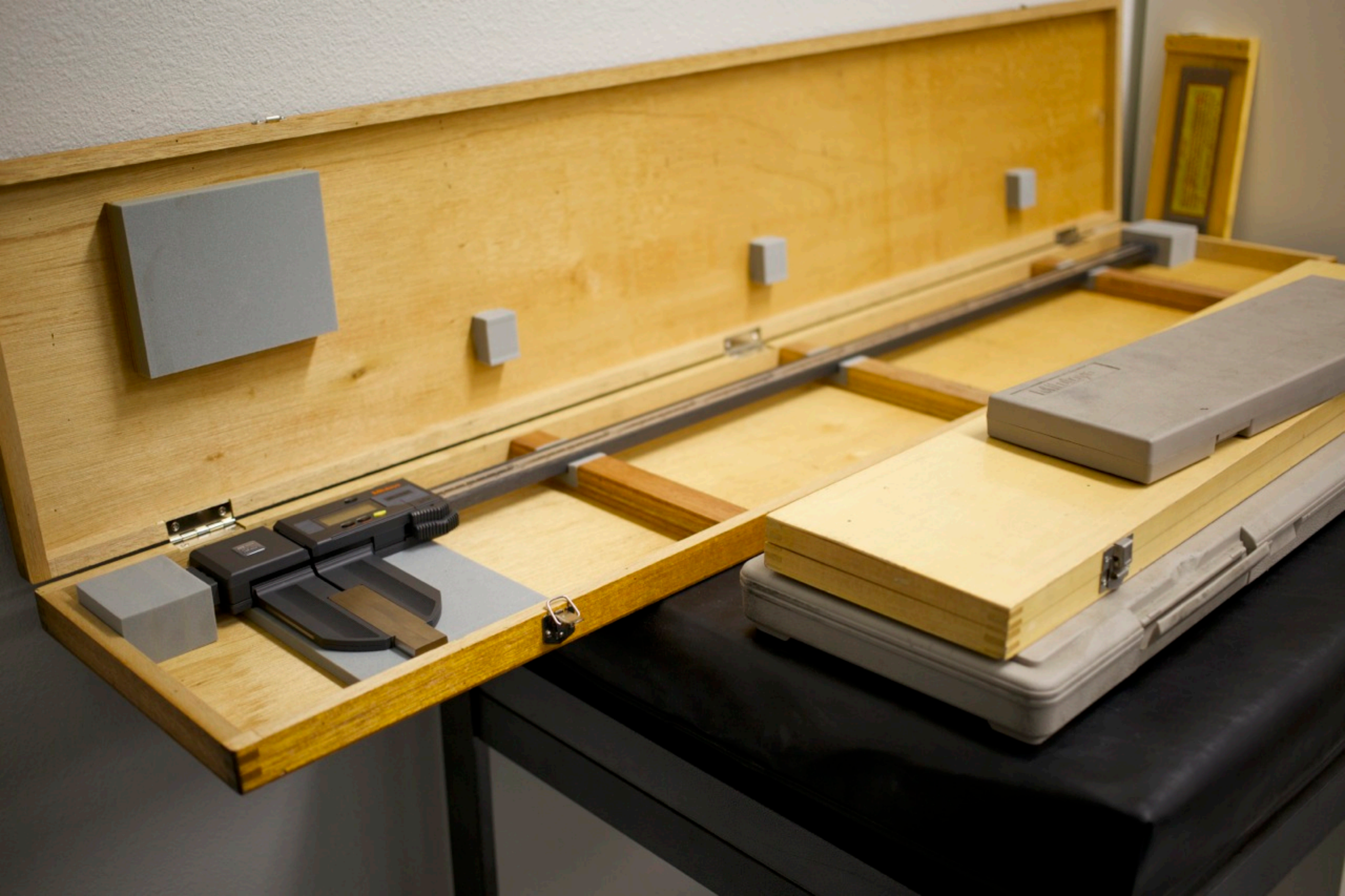
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4X Ø 0.201 THRU

Ø 6.916 THRU

DIMENSIONS ARE IN INCHES
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UNLESS NOTED OTHERWISE:
DIMENSIONS DECIMAL ± .005
ANGLES ± .5 DEG
HOLE DECIMAL ± .005
HOLE DRILLING

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CARRIER RING

Q1-11 Rev A

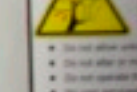
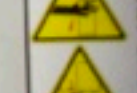
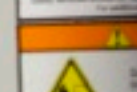


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WARNING



WARNING

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WARNING

This machine is a high speed cutting machine and should be operated with caution. To avoid the possibility of injury, read and understand the safety instructions before using the machine.

Do not touch the cutting tool or the workpiece while the machine is running. The cutting tool is very hot and can cause serious burns. Do not touch the workpiece while the machine is running. The workpiece is very hot and can cause serious burns. Do not touch the workpiece while the machine is running. The workpiece is very hot and can cause serious burns.

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Do not operate with the door open.
Always check work to be done. Flaps can be
closed with safety bars.
Never modify machine. Always electrically
disconnect machine before working.
Never using the machine in wet, damp or
corrosive areas.
Do not touch or clean the machine.
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SUPER VF

6

INLINE DIRECT DRIVE SPINDLE

HIGH SPEED TOOL CHANGER

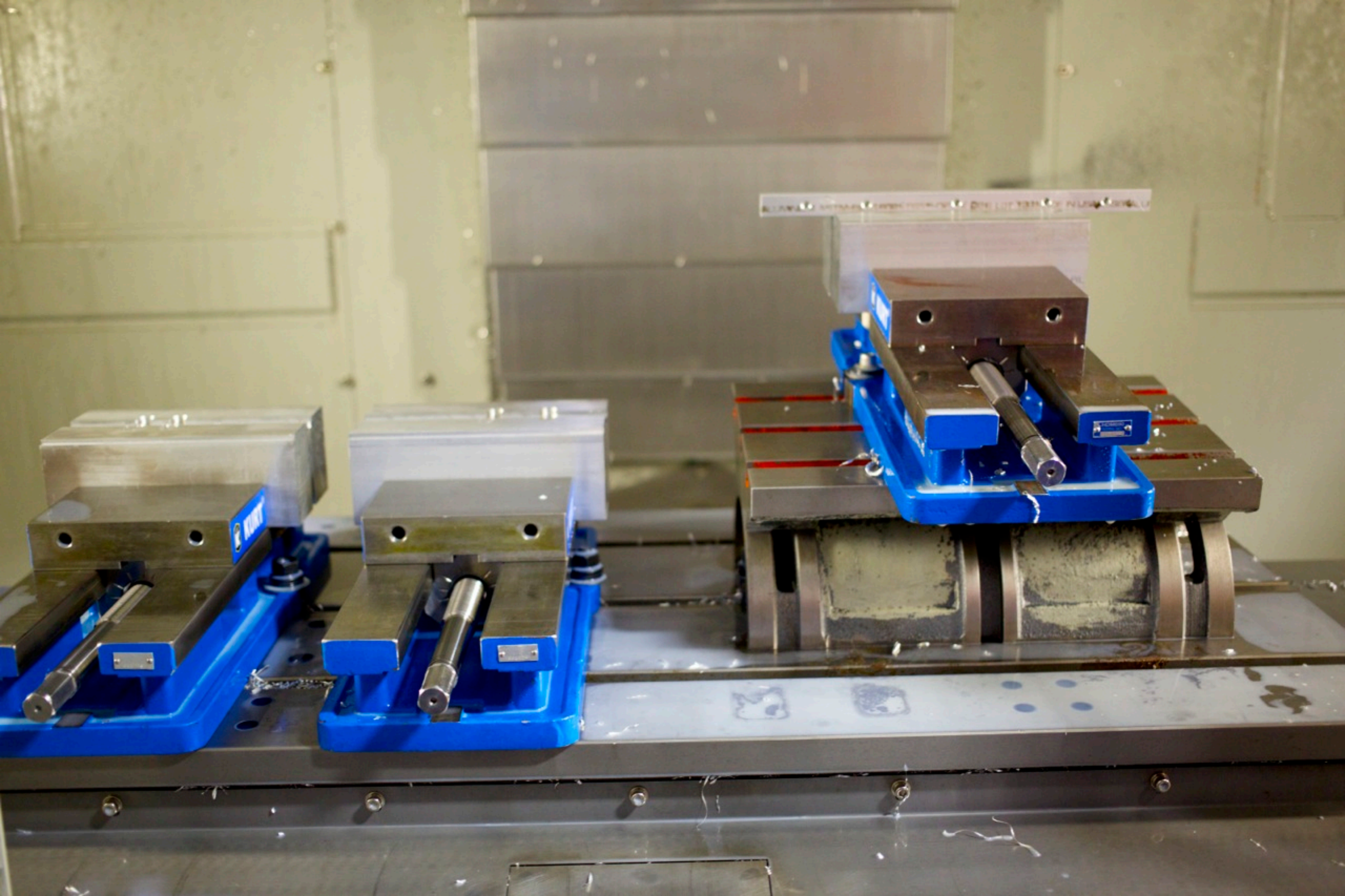
TSC THROUGH-SPINDLE COOLANT

HAAS

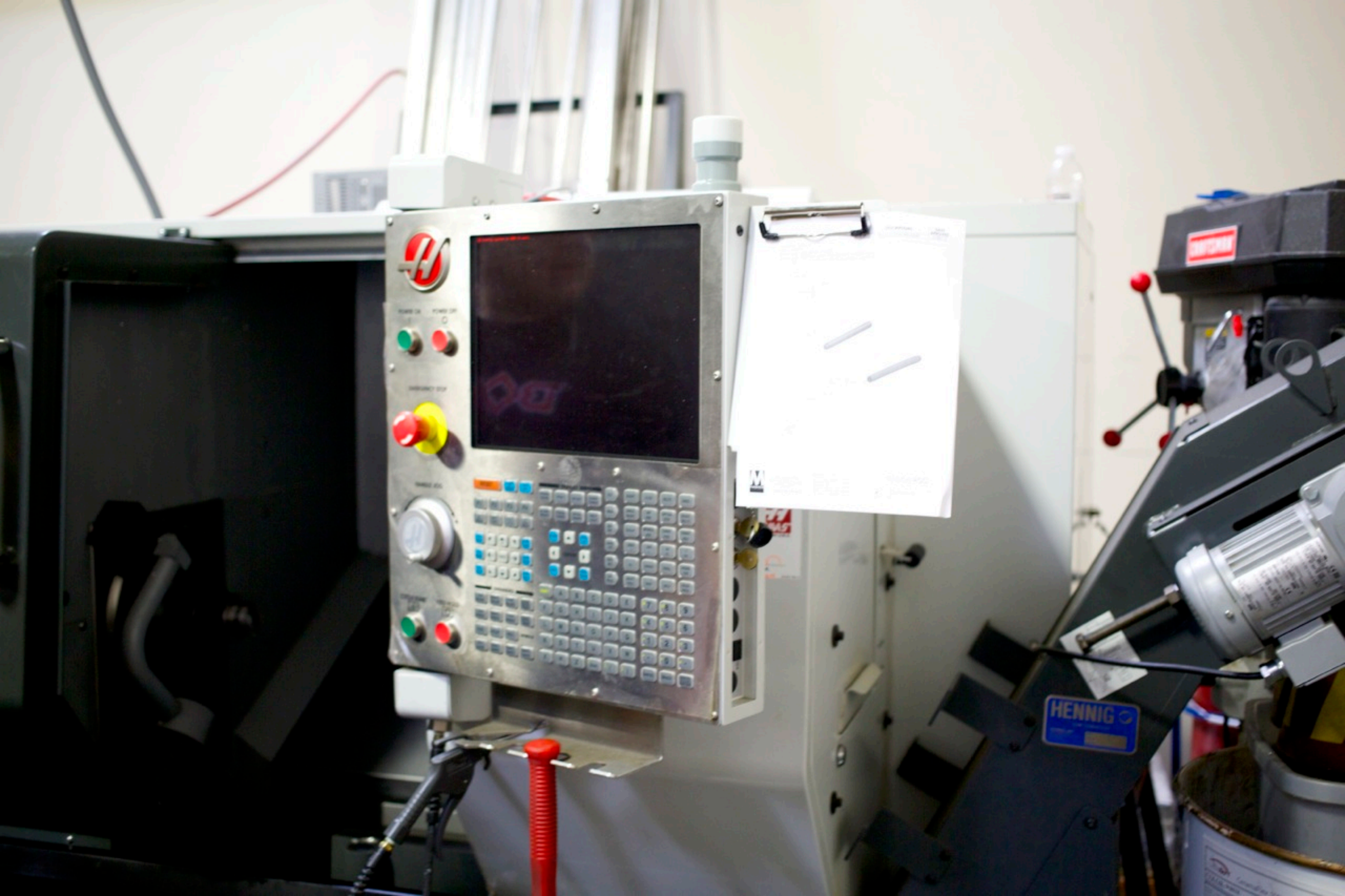
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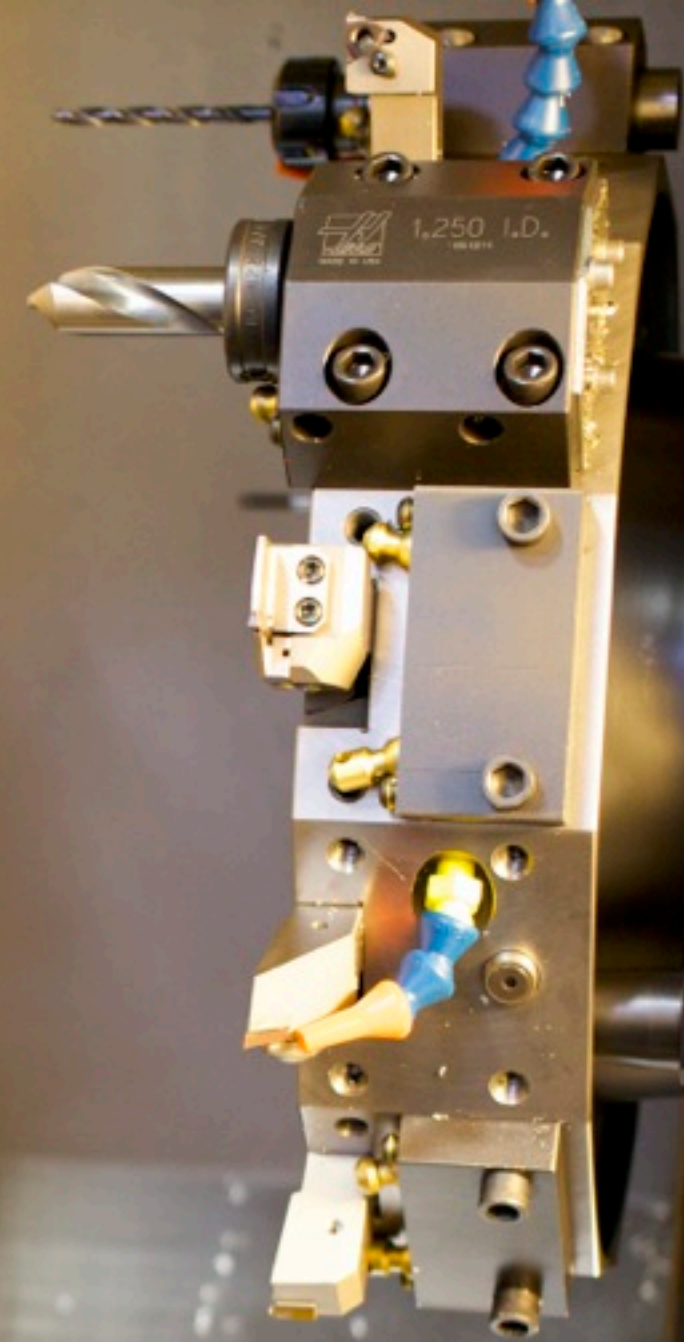
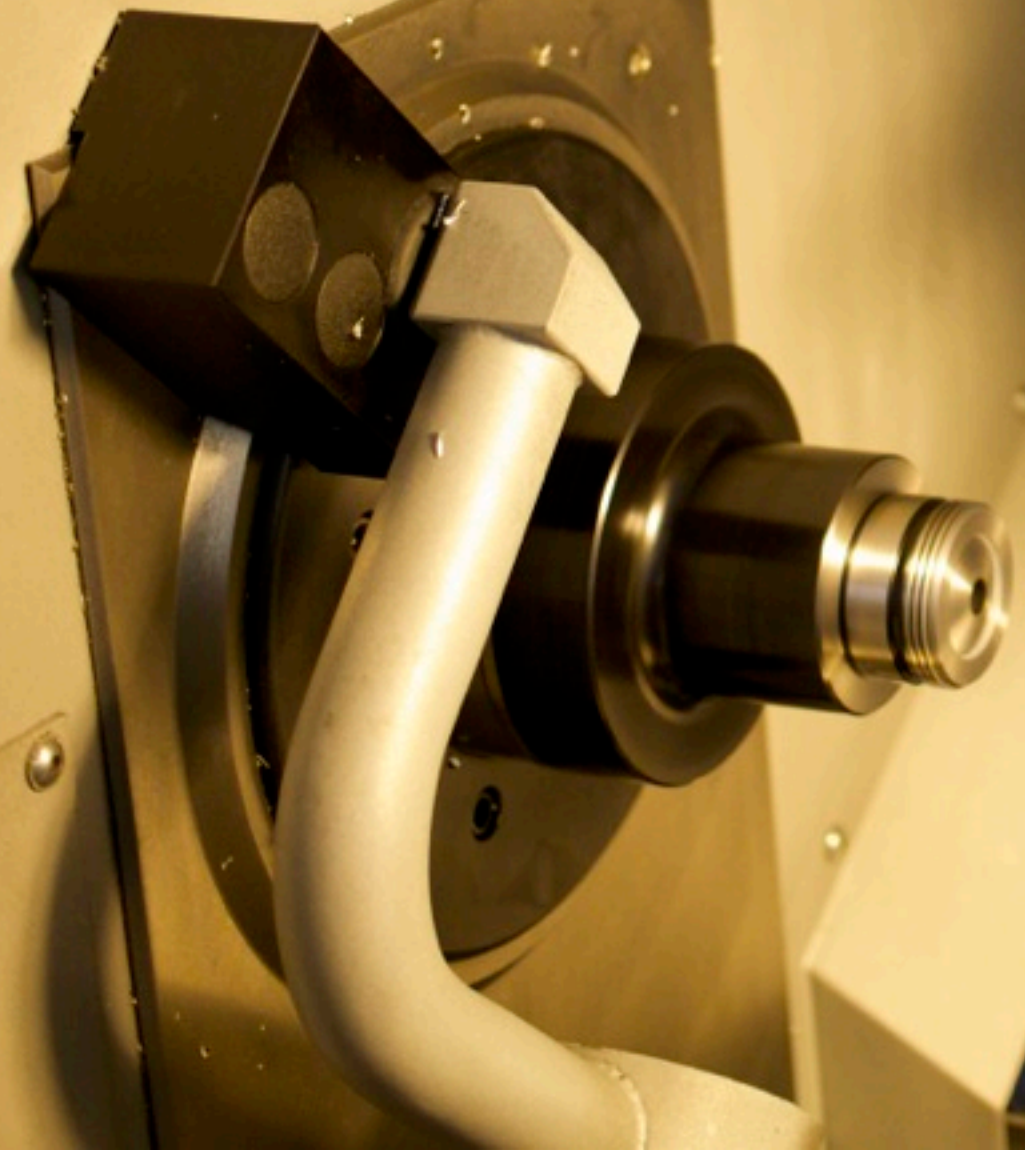
FIRE

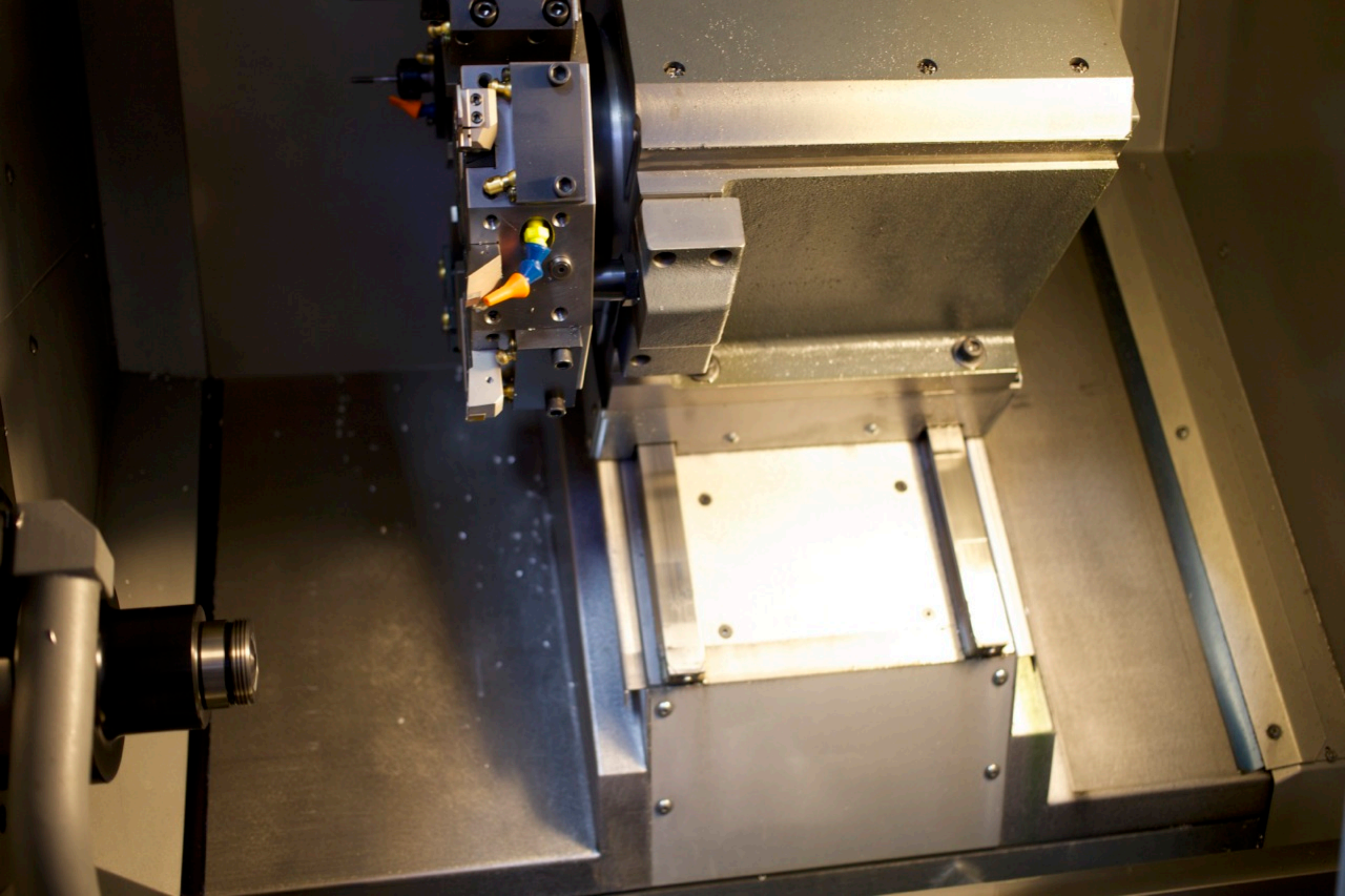




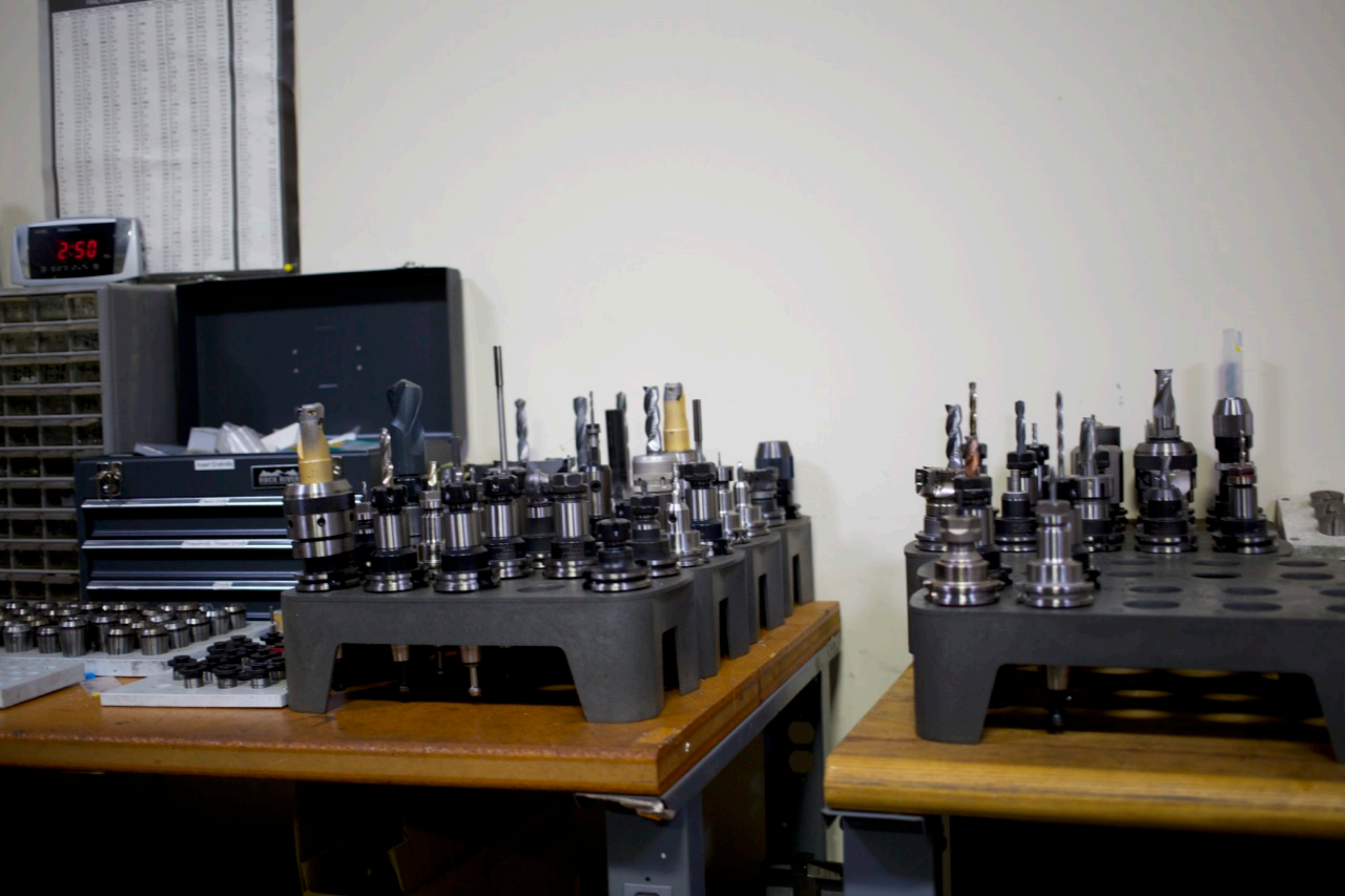












2:50

ROCK RIVER





Insert Endmills



Twist Drills

Threadmills, Thread Emills

Empty











