A New Look at Picture Framing Saws

By Jim Burke

There are many cutting choices available for frame shops that need reliability and accuracy

t's probably been a while since you gave thought to cutting mouldings beyond your daily routine, but maybe that saw or chopper you're using is not as accurate as you'd like or it's over the hill or it's not reliable. The framing saw market has changed in the last few years. There's no more Phaedra on the low end, and no more Pistorius on the high end. But there are still many choices for frame shops that need a saw that provides the reliability and accuracy needed for custom picture framing.

Let's start with the basics. You can buy just a measuring system for miter chop saws that you purchase separately, or you can buy a system with the miter chop saw calibrated for 45 degrees and mounted to the measuring arms. There are special rotating single miter saws on stands, and some even have a dust collector underneath.

There is the proverbial sliding table saw with accurate angles and measuring, and there are the double miter saws of all sizes and price ranges from manual foot operation to full pneumatic actuation. Which one is best for you?

The answer should be determined by your overall needs and your pocketbook. If price is less important than performance, it will depend on your wants and not your needs. Whatever the level of cutting you do, it's important to start with the premise that accuracy should count for something when cutting picture frame moulding. After all, if the corners don't come together properly, you'll waste a lot of time puttying the gaps or sanding the cut ends to get better 45-degree miters.

There are several manual and motor-powered sanders on the market to choose from. Most of them are in the \$350 to \$500 range. If you buy a saw that isn't accurate, be prepared to buy a sander and spend time sanding every frame or spend time puttying the slightly gapped corners.

This may sound like an exaggeration, but it's the truth.



Inmes IM300P has 300mm blades that operate simultaneously with air actuation as well as built-in dust collection.

For a very low-volume framer, this system works fine. A radial arm saw with measuring arms at 45 degrees on each side create pretty good corners but not so perfect that they always go together properly. A sander takes care of that problem for a few frames. Most rotating miter chop saws that you can buy at a hardware store can be pretty good, too, but most are only accurate to within half a degree. That's pretty good for a carpenter on the job, but it's not good enough for a cabinetmaker or a picture framer. To cut a very good, symmetrical corner, you need to be within seconds of a degree, not minutes. Corners need to be almost perfect 45-degree angles, so the cut side (the hypotenuse) matches the length on each opposing side. Moulding also needs to be cut so the vertical cut is a precise 90-degree perpendicular to the bottom of the moulding; otherwise a gap is created either on the face or the bottom of the corner. And the blade has to be up to the task. Cutting picture frame moulding accurately without disrupting the surface

finish and creating an even cut is one of the most difficult cuts to make with a circular saw blade.

Entry level: Measuring Systems and Single Miter Saws (Price Range: Under \$2,000)

- 1. Miter Master chop saw measuring fences from Quality Saw let you match your miter saw to the fence. The model M-100
 Universal is a standalone measuring bench. You pick the saw and the blade you want to use. With built in clamps and gauges (blade and saw sold separately).
 Assembled length is 11'.
- 2. Miter Master chop saw model M62 is a complete system with a 10" calibrated miter chop saw integrated with the measuring

table. The 45-degree adjustable stops have been added to the saw for more accuracy than the factory stops. Multi-Matic clamps hold down the moulding for hands free cutting, and the cut path has been moved forward of the blade center for safer cutting.



Miter Master M62 is a complete 10" single miter saw with clamps and measuring table.

The moulding faces the saw blade for cleaner cuts similar to double miter saws and uses a simple straight ruler for measuring. The M62 includes a 10" carbide blade for cutting wood and

- aluminum moulding. Infeed support is 48" with a 60" measuring scale to the right and an adjustable stop for fitting allowance if wanted.
- 3. Miter Master chop saw model M52 is a double miter chop saw system with two 10" chop saws on a common measuring table for faster cutting. Because you don't swing the saws from side to side, they remain fixed at 45-degree angles on each side. Model M52 is complete, with the saws and 10" blades.
- 4. Clearmount chop saw measuring fences let you match your saw to the fence. Model SW6 is 66" long, allowing for measuring up to 41" on one side. The fence is a single extrusion that mounts on the top of the saw, not two separate arms that mount on brack-







ets. The Model SW7 is 88" overall and positions in the center of the saw, allowing 41" measuring on each side of the arms. Both of these systems measure the moulding with the rabbet facing out towards the user. This allows wider mouldings to be cut.

- 5. Clearmount Model SW7-1 measuring scale is the same size as the SW7 except that it doesn't mount in the middle but rather to one side of the saw, which allows for measuring up to 64" on one side of the fence. All measuring systems from Clearmount come with two adjustable clamps and a quickrelease measuring stop built in. Depending on the profile and saw size (10" or 12" blade), you can cut up to 4" wide and up to 3.25" tall. (Blade and saw are sold separately for SW6, SW7, or SW7-1) All the measuring systems require that you buy the saw and blade as extras.
- **6. Clearmount** Model SW11 is a complete saw system that has an overall measuring scale of 134". Scales allow measuring up to 64" on each side of the saw. All clamps and production stop are built-in. The complete saw comes with measurement stop, clamps, and 10" blade.
- 7. Clearmount Model SW11-2 is a

double saw system that has the scale set for measuring 64" to the right. The left side is a plain carrying table. You cut the first 45degree miter on the left saw and slide the moulding to the stop and make the second 45-degree cut with the right saw. This system is complete with two saws and 10" blades.

Medium level: Single Miter Saws (Price Range: \$2,000 to \$5,000)

1. Frame Square saws have been around for more than 35 years, and their reputation precedes them. Available in 10" or 12" blades, they cut metal or wood up to and including 6" wide x 3-5/8" high and have an extremely accurate 45-degree cut because the saw is calibrated at the factory and no adjustment is available. (What is adjustable could be out of adjustment half the time.) With safety clamps and blade shield, the Frame Square is very safe and accurate. Since it is a single miter saw, two cuts are required to make a finished rail.



Frame Square 4200 is a mid-level single miter saw with pre-set miter angles, blade shield, and safety clamps.



©2013 Active Sales Co, Inc

An overhead sliding measurement scale is included to pre-cut the frame rail to size, so swinging a full stick of moulding isn't necessary. These saws have a 48" measuring arm standard, but extensions can increase that size to 60" and beyond.

2. Fletcher-AMP has a new single miter saw with a table and a cabinet that also includes a dust collector inside. The model T150M is a heavy-duty chop saw with a rotating table that comes with infeed and outfeed support, measurement scale, double production flip stops, and a blade for wood. The 12" (305mm) blade has a 30mm bore and can cut up to 4" high x 4" wide. There are manual clamps in the front that operate from the top and the front of the moulding.



The motor is 115V and spins at 3450 rpm, which is standard for picture framing saws, unlike store-bought chop saws that spin at 5000+ rpm.

3. Inmes-USA offers several single miter saws with swinging blade assemblies and cabinet bases. The Model IM-30 MP is a swinging indexed miter saw complete with measuring arms, pneumatic holding clamps, and 300mm (12")

blade. A dust collector is built into the base. They are available in 110 or 220V single phase. The IM-30 Plus is essentially the same saw but with a lubricator built in for cutting aluminum. The price is increased slightly for that feature. Both saws are available complete with base, infeed and outfeed supports, measuring stops, and an internal dust collec-

4. CTD offer single miter saws Model M25R and M25RHC that can be used for framing. They use a single blade that rotates with indexes for various common angles built in. You build the saw to the specifications you want. A base and supports are available to complete the package as well as blades to suit your needs.





www.Inmes-USA.com • 732-503-1072

inmes-usa@hotmail.com

Higher Level: Double Miter Saws (Price Range: **Over \$5,000)**

- 1. Inmes-USA offers several double miter saws for cutting wood and aluminum. The conventional swing arm models are the IM-250 with 250mm (10") blades with 30mm bore, which is operated by foot lever in front. They can cut up to 2-9/16" wide x 2-3/8" high mouldings and are completely enclosed for safety and noise. The IM-300P has 300mm blades that operate simultaneously with air actuation and can cut up to 3-3/16" wide x 3-3/16" high. A fully enclosed cabinet is standard, with a dust collector optional. The IM-300PL also has 300mm blades but has a dual air foot pedal actuator that allows for cutting one blade at a time for wider cuts and zero scrap on wider mouldings. Pressing both pedals at once allows for simultaneous action as well. A dust collector option is also available that puts the housing inside the cabinet with filters outside for easy access.
- **2. CTD** offers a 12" single-double miter saw that is similar in operation to the double miter chop saws mentioned earlier, except it uses the

heavy duty single miter head from the M25R saw. The Model D20R comes mounted to a sturdy base, and each arm is actuated separately by the operator to first cut the left side angle then slid to the right to



CTD D45AX is a pneumatic double miter saw with optional clamps, 12" or 14" blades, and a separate version for cutting wide mouldings.

the measuring stop to cut it to size by the right saw unit. It can cut up to 5-3/4" wide x 3" high. A mechanical hand clamp is included to hold the wood while cutting.

3. CTD also has several conventional double miter saws with air actuation, all with the D45AX model number. These are available as a 12" or 14" saws for cutting mouldings 4" tall x 2-3/8" or 2-1/2" wide

An Entry Level Alternative: Foot-Operated Choppers

Though they can't cut aluminum, choppers can cut nice 45-degree corners on most wood mouldings. Foot- operated choppers have been around for a long time, providing clean cuts without needing dust collection or pneumatics.

There are two main models to choose from on today's market. Cassese makes the Model CS55 and Morso has several models but the F model is the foot-operated one. These machines can cut up to 4" wide x 6-3/8" tall, depending on the overall shape of the profile. The harder the wood, the more bites they require to completely cut through a moulding. A sliding cutter assembly allows you to nibble into a shape until it's cut correctly.



© 2013 Active Sales Co, Inc

respectively. There is also a 14" Hi-Top version for cutting wider mouldings. These are all pneumatically operated with a single foot pedal, and clamps are optional for holding down mouldings while cutting.

Higher Level: Wide Double Miter Saws (Price Range: Over \$5,000)

In addition to the conventional swing arm or drop-style double miter saws, there are sliding blade miter saws that can cut much wider mouldings due to their style of blade movement. The models listed below are from various manufacturers.

- 1. CTD model Mitre Max DMC70 is a crosscut saw with the capability to cut 8" wide x 4" high. The standard saw is hand operated from the front, with horizontal clamps to hold the profile. Available in 220V single or three-phase.
- 2. Fletcher-AMP Model T200 is a manually operated sliding blade saw with capabilities to cut 8-1/4" wide x 4" tall. Available in 220V single phase and uses 350mm (14") blades.
- **3. Brevetti** saws come in two sizes. The Prisma CE has 275mm (10.8") blades with 32mm bore that cross-



Brevetti Prisma CE double miter saw comes with 10.8" (275mm) blades.

- cut up to 4-3/4" wide x 2-3/4" tall. The larger Prisma Maxi also has 275mm blades but cuts up to 7" wide x 3-1/4" tall. Both are available with 220V single-phase motors and have a measuring scale of 43" and 78" respectively.
- 4. Cassese offers two crosscut saws, but they have the blades above the moulding, not below, as the other saws do. The Model CS960 is a manually operated saw with a 59" scale and capabilities to cut mouldings up to 6-3/8" wide x 4-3/8" tall. The Model CS969 is the pneumatic version of the CS960, with air actuation of the saw blades. Pneumatic horizontal and vertical clamps hold the moulding while cutting. Available in 220V single-phase. These saws are totally enclosed for quiet operation and for complete exhausting of sawdust through external dust collector systems.



Cassese CS969 is a pneumatic double miter saw that is enclosed for quiet operation and has built-in exhaust ducts for dust collection.

- There are even exhaust ducts built into the saw heads. The blades can be actuated individually or in tandem.
- 5. Inmes-USA offers a wide saw in the Model IM-350. It pivots the arms at the bottom of the cabinet so it appears to operate like the other crosscut saws but doesn't slide. Using 350mm (14") blades, it can cut up to 8-1/4" wide x 4" tall mouldings. Available for 220V single-phase power. It has a

Cutting Capacities

Product / Model	Width x Height
Brevetti Prisma CE	4-3/4" x 2-3/4"
Brevetti Prisma Maxi	7" x 3-1/4"
Cassese Models CS960 & CS969	6-3/8" x 4-3/8"
Clearmount SW6 - SW11-2 w/10" blade	4" x 3"
Clearmount SW6-SW7-1 with 12" blade	4" x 3-1/4"
CTD Model M25R & D20R	5-3/4" x 3"
CTD Model D45AX	4" x 2-1/2"
CTD Model DMC70	8" x 4"
Fletcher-AMP Model T150M	4" x 4"
Fletcher-AMP Model T200M	8-1/4" x 4"
Frame Square Model 1000 (10")	5" x 3-7/16"
Frame Square Model 4200 (12")	6" x 4-7/16"
Inmes-USA Model IM-30MP & IM-30Plus	4-1/8" x 3-1/8"
Inmes-USA Model IM-250	2-9/16" x 2-3/8"
Inmes-USA Model IM-300P & IM-300PL	3-3/16" x 3-3/16"
Inmes-USA Model IM-350	8-1/4" x 4"
Miter Master M100 Universal Table w/12" saw	5-1/4" x 5"
Miter Master M52, M62, with 10" saw	3-1/2" x 3-1/4"
Universal Framing Products DY101 & DY103	7" x 4"
Foot ChoppersCassese CS55 & Morso F	4" x 6-3/8"

fully enclosed cabinet with a dust collector option.

6. Universal Framing Products has two double miter saws. The DY101 cuts up to 7" wide x 4" tall profiles and has a 10' measuring arm and pneumatic vertical clamps to hold the moulding. It features simultaneous action with the two blades via an air foot pedal. The Model DY103 has dual activation of the two blades to cut with almost zero waste. It can also cut up to 7" wide x 4" tall profiles and has a 103" measuring arm. Both saws come with dust collection as standard equipment.

As you can see, there are any number of selections to choose from. There are saws for every size shop and every pocketbook. ■

Brevetti www.factorynew.com Cassese www.activesalesco.com Clearmount www.clearmountcorp.com CTD www.ctdsaw.com Fletcher-AMP www.fletcher-amp.com Frame Square www.frame-square.com Inmes-USA www.inmes-usa.com Miter Master www2.qualitysaw.com Universal www.universalframing.com Morso www.tech-mark.com



Universal DY103 has dual activation of two blades to cut with almost zero waste as well as built in dust collection.



Jim Burke owns Machines Etc., a sales and consulting companv based in New Bedford, MA. He started in the picture framing industry with

Arguati Moulding in Cleveland as general manager. For the past 25 years he has sold and serviced all types of machinery for cutting and joining frames and cutting mats. He has also sold web control machinery to paper mills, tire cord manufacturing, textiles, plastic film extrusion, and paper converting companies throughout the Midwest.





FITTING

OMER 53

This European made high quality tab tool is suitable for use in both small shops and large manufacturing facilities alike.

Selected features:

- Air powered drives fully into hard or soft moulding
- Uses Tabmaster® Flextabs for changeable art and Hardtabs for permanent fitting
- · Lightweight and easy to maneuver
- Available in single shot or repeating valve models
- Weighs only 1.3 lbs

Active Sales Co has specialized in tools, equipment and fasteners since 1949. Our facility is factory authorized, with factory-trained staff available to support every product we sell.

Learn More: www.activesalesco.com (800) 937-2255

©2013 Active Sales Co, In