

HOT CHIPS

April, 2015

Editors: Letty Delgado & Ron Lawson

Training Schedule ~ 2015

Apr 14-16 End User Training

May 19-21 Technical Training

(MMUS employees only)

Sep 22-24 End User Training

Oct 13-15 Distributor Training



Pinistripes—Bowling



Special points of interest:

- Training info
- Exhibition schedule
- Notes on product launches, promotions, C007A
- Oil and Gas
- Technical Center
- Driving Etiquette tips

Regional Exhibitions Schedule

Apr 21-23 PMTS—Columbus, Oh

May 12-14 EASTEC—West Springfield, MA

Jun 17-18 Amerimold show—Rosemont, IL

Page 2 HOT CHIPS

Hello Everyone,

Happy Fiscal Year 2015!

I would like to thank everyone for their contributions to the goals we reached in 2014. Sales records month after month and significant increases in sales of all product groups were great to see. We look forward to another year of successful Sales and Marketing activities. If there is anything we can do to help you sell more products, please let us know.

As I mentioned in December, these products were on the way and we recently launched:

- WSX (full product launch)
- New P10 grade and P20 expansion Turning grades MC6015 and MC6025
- Expansions of MVX (larger sizes)
- Expansions of iMX (assortment)
- New BC8110 (Finish grade for hard turning)

Still on the way we are looking forward to these products coming soon.

- New BC8120 (upgrade to BC8020)
- Micro MVS
- GY Capto
- · Coolant Thru Boring Bars

Regarding promotions for 2015:

- Extended the Pro-Turn promo to Dec. 31st and announced as Nationwide Promo for 2015
- WSX445 will be added to the Milling Cutter Upgrade on May 1st
- · iMX promotion May 1st thru July 31st (buy 5 heads and receive holder free)

New Catalog:

 We are working closely with Japan to get the next General Catalog information. This is behind schedule but we are working hard to get the data for printing. We expect to be able to ship the C007A Catalog out in July.

We are getting close to the end of training for the first half of 2015. If you have any customers interested in visiting the Technical Center, please let us know. We will be happy to make our Tech Center available to your needs. Months of June July and August have available time, so please contact Marc Kinnemann for scheduling.

With our aggressive growth plans as a company, we will continue to increase the Marketing staff. We currently have open positions in the Chicago Marketing office. Positions within Product Marketing, Engineering and the Technical Center are open. If you have any recommendations for hire please ask the candidates to send a resume to mpace@mmus.com

From the Marketing Department... we wish you all continued success in 2015!

Sincerely,

Mike Pace Director of Marketing Mitsubishi Materials USA Corp. Page 4 HOT CHIPS

Oil and Gas

Even though the oil and gas industry has seen some contraction recently, our sales staff continue to find new opportunities for growth. In the Marketing Department we are striving to provide our sales people with new and/or expanded products to assist them to do just that. Below are a few of the items that have been worked on and opportunities that will continue to be worked on, to help or sales people provide for the needs of our customers.

MVX (large diameter)

The large diameter MVX expansion from 1 ½" to 2 ½" has just been launched. This expansion has been long anticipated by our sales staff in the oil and gas sector. We anticipate that these drills will open doors to further opportunities that were previously closed to our sales staff.

MVX (tap sizes)

We are presently working to add several tap sizes to the MVX line-up. These sizes include several of the most popular tap hole sizes in the industry, .531", .656" and .765".

Threading

We recently had several oil and gas application threading inserts in our booth at Houstex in late February. Testing of our expanding offerings in oil and gas application thread forms has started and it is expected that more testing opportunities will be available in the coming weeks.

Ejector Drill Inserts

Research is on-going into the needs of our customers for ejector drill inserts. Working closely with MMC, geometries, customer requirements and cost analyses are being reviewed and the development of these inserts will continue to move forward in the coming months.

As we move forward in Fiscal 2015, we look forward to working closely with our sales staff to provide new items for testing and to find even more products to develop for our valued customers.

Thanks for all your support!

Lance Hughes

Page 5 HOT CHIPS

Technical Center news

This season in addition to End User and Distributor sales person training the Technical Center conducted a tool capability study for an auto maker. The customer's concern was our GY system's ability to provide chip control in their proprietary, alloy steel, material. In this case John and I worked side by side with Gary Kronenberger and a representative from the customer's Integrator.

The customer supplied bar stock, Gary brought in the necessary tools and off we went grooving and documenting.

The trial consisted of a simple feed to depth and rapid retract cycle with 2mm, 2.45mm and 3.18mm wide inserts in a 1" square holder with a short blade module. All the inserts were grade VP20RT in GS, GU, MS, MM & GM chip breakers. After each trial we gathered the chips, noted the breaker, feed and speed info through a picture.

Gary produced the final report. Here's the "Money" page clearly documenting chip control.



This breaker was actually tested at mutliple feeds & speeds running several grooves each. A couple of things that jumped out while testing (1) the insert ran very freely and sounded great, (2) The chips were extremely consistent regardless of cutting conditions, & (3) we were able to control the chip and get very good results. This chipbreaker we recommend and feel confidently will break chips in this application.

In the end we demonstrated the GY inserts can provide a variety of chip formations by varying chip breaker, SFM and IPR.

Should you find the opportunity to increase insert sales through a trial of one of our products get the ball started by calling me to discuss the matter.

Let's clear up a mystery.

In the Small Tools section of Catalog C006A we find GTAH, GTBH and GTCH, small shank, grooving tools. Often the question arises "Which inserts fit in which holders?" Here's the scoop.

First of all, realize all the inserts on pages D022, D023, D024 and D025 are made from the same size blanks. They are a 1/8" thick, 3/8" IC triangle with provision for a flat head retention screw. Inserts and holders on pages D022 and D023 are made to inch dimensions, those on pages D024 and D025 to metric dimensions. So, ALL the inserts on the 4 pages will fit in any of the holders found on pages D022 and D024.

Regarding the holders, there are some differences. First there are short, 3.150", holders and long length, 4.724" holders. Only the GTBH, long length, holders are stocked in Fountain Valley. The second difference is found in the suggested groove width capability. The "A" holders are intended for use when machining groove widths from .012" to .118", the "B" holders from .057" to .118" and the "C" holders from .098" to .118". The third difference between the holders is the F2, maximum cutting depth, dimension. It is possible to combine an insert capable of grooving .118" deep in a holder with a F2 of only .079"! In this case the holder will limit the insert's ability to produce a groove to full depth. This situation is highlighted with asterisk #1 on the pages.

Getting back to the inserts, there are GTAT---U, GTBT---U and GTCT---U which are the utility inserts with a groove width tolerance of +.002/-.000". The GTAT---E, GTBT---E and GTCT---E inserts carry a precision tolerance of +/- .001". Both of these two groups of inserts are available in Right and Left hand inserts. The GTAT---VT and GTBT---VT inserts (There are no GTCT---VT inserts) are designed with additional side relief which permits grooving and traversing. The VT's are available only in a Right hand configuration.

So, there you have it. Find an insert which suits the customer's needs and the GTBH holder with the shank to fit the machine and begin grooving!

Thank you,

Marc Kinnemann

Manager Technical Center & Training

Driving Etiquette Tips

Etiquette can be a confusing thing. And that's especially true when it comes to driving etiquette. The horn is there for a reason, but no one wants to be that person who beeps at every little thing.

The Situation	Honk?	What Lizzie Says
Someone is about to hit you.	Yes	"You can always beep if you feel you and your car are in danger."
You're waiting to go straight and the car in front of you is turning left. If he would move up a little bit, you would be able to go around him.	No	"They might assume you are honking to get them to turn. Try inching forward and moving to the right before honking."
The driver next to you is texting.	No	"It's not your job to police the road."
The light's been green for several seconds and the car in front of you hasn't moved.	Yes	"Just give one quick beep."
A driver on the other side of the road has her high beams on.	No	"Flash your lights instead."
The driver in front of you fails to use their turn signal, leading you to slam on your brakes when they make an unexpected turn.	Yes	"It's OK to beep as long as you're not leaning on the horn."
The driver in front of you stops in the middle of the road to let someone out.	Maybe	"If the person gets out quickly, don't beep. It they're taking their sweet time, then it's okay to give a quick beep so long as the person isn't disabled or injured."
You see your friend walking down the street and want to beep "hi."	Yes	"It's okay to give one or two quick beeps to get their attention."
Someone throws litter out his car window.	No	"Again, you can't police the whole world. You might say something like, 'Hey, I think you dropped something' or give them a dirty look."
You have kids in your car and the driver next to you is playing explicit music.	No	"Kids are going to run into this eventually, so it's best to be the parent in this situation and talk about appropriate language with them."
You notice a child one car over who does not have a seat belt on.	Yes	"Give a small honk and say something like, 'Hey, I think your child unbuckled his seatbelt.'"

Hope you enjoyed our newsletter.

From our Chicago office—Marketing Services, Product Services, Technical/Training Center, Engineering and Business Development.