



NORDIC ULTRATUNE UPDATE

News & Notes from NORDIC ULTRATUNE

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News and Notes

October!

On the first week of October, big deliveries of new skis arrived on the same day. With no delay, picking skis for patiently waiting customers begins. And with that, the ski season seems to be in full swing at Nordic Ultratune.

Grinding has been ramping up since September 1st, and with the added workload of testing and selecting new skis, the shop has become animated and full of energy. It's a great time of year to be hanging around in a dedicated cross country ski shop.

Meanwhile...

In the past few years, the Ultratune newsletters have consistently had articles on training and physiology written by Margaret, my wife. But this year Margaret has taken on a big project, starting cardiac and pulmonary rehab programs at Okanogan-Douglas Community Hospital, and is fully occupied with that. Her energy is being well used there, and I'm also sure that we'll get more articles from Margaret, though they might not appear this season. We discuss sports physiology and training while roller-skiing, and over dinner at night, but her writing time is getting redirected right now.

...and the Ski Season Approaches!

I had my 48th birthday last month, and I'm feeling a few pounds over "optimum". It's given me another reason for getting out to roller-ski, and prepare myself for the coming snow. Here in the Methow Valley there's already snow on the high

peaks near the spires in the North Cascades. Within a month we'll be on rock skis in the alpine meadows and on the service roads in the mountains.

I'm looking forward to the coming snow, and I'm ready to click on some fast skis!

-Mark Waechter

Schedule

During fall and winter, Ultratune is open Thurs, Fri, Sat, Sun, Mon, 11-5. Stop in and say hello! Most days I'm in the shop earlier, but those hours are a sure thing. Usually Tuesday and Wednesday of every week are reserved for ski testing (when the snow arrives) and a little time off.



*New skis on the rack waiting for a grind...
...that's enough to put a smile on your face!*

Fall Training by Brian Gregg

Brian Gregg grew up in the Methow Valley and skis for the CXC Elite Team. He is an NCAA All-American and qualified for his first World Cup last winter in Canmore, AB. Check out his website www.xcSkiLife.com to follow his adventures throughout the year.



All summer I look forward to the day when I wake up and can see my breath. Today I open my eyes and know that that day has arrived. My window is wide open, just as it is all summer long and when the wind blows I pull the covers over my head. I hate getting out of bed when it is cold out. This dislike doesn't go well with my desire to breathe cold air as I sleep. After double checking my morning heart rate in hopes of delaying the day, I finally decide to make my move. I toss my sheepskin aside and step into the first day of fall.



Fall roller skiing near Lake Placid, New York

I dig through the stack of warm clothes and find a pair of pants and a long sleeved shirt. There is a certain excitement in wearing 'new' clothes or at least ones that you haven't touched in six months. For me the joy is mostly in avoiding having to put on one of my few pairs of shorts, which have inevitably gone far too long without a wash.

The workout starts and as I breathe in the cold air I know that winter is coming and I find myself running faster. The blood begins to flow the morning chill disappears. Soon I begin to get warm and by ten minutes I am sweating bullets. I

start to strip. Once again I haven't learned my lesson in preparing for the first sub 40 degree day of the year.

My CXC teammates and I are enjoying the good life, living out of the Olympic Training Center in Lake Placid, NY for a two week training camp. We are enjoying the company of several other regional teams, NENSA, SVSEF, USA Biathlon, and the US National XC Team. The training center features: high quality mattresses, ice baths, saunas, athletic trainers, a top-notch strength facility and most importantly a full service dining hall. It might be impossible to find a stick of butter but there are few things that make me happier when I am done training than an assortment of delicious food.

Training at the 1980 Olympic site is fantastic with plenty of quiet country roads to roller ski and trails to run. Fall is the time to work on hills and we have developed several favorite workouts/locations. My favorite is a climb out of Keene which is legitimately V1 and too steep to ski down and Coach Fish has to drive us down. It is a rough workout on the OTC van's brakes and tranny. The workout is one of our first hard workouts of the year where the plan is to go all out. This year the workout was 7 x 4 min and by the end I can taste the lactate in my mouth. Fall is a time for hard intervals.

Sunday is over distance training day. Early in the year this might mean just be a two hour run, but by fall it is a 4-5 hour adventure with the potential to be epic. I keep the effort of the OD relaxed knowing that the cumulative time will add the necessary stress. Working out with my friends this takes some effort as we all try to keep the pace quick with minimal effort. Throughout the workout my mind plays out the races of last year and the races to come this year.

Back at the van I pull on my dry clothes and eat the huge snack that I grabbed from the cafeteria. After eating all of my food I focus on drinking water until we get back to the OTC and lunch. With Mondays off, Sunday afternoon is my Friday night and lunch becomes an event. Sunday is also my Coca-Cola day and after slowly eating my fill I sit back and sip a tall glass.

The first week of fall is complete and after a nice stretch, ice bath, then shower I crawl under the covers to warm up and dream of waking up to snow.

Mila Headlamps

Now Available from Nordic Ultratune
by Mark Waechter

Mila headlamps are from Sweden, where for many months each winter it is light outside only a few hours each day. But that doesn't limit what they do – for decades Swedes have been perfecting headlamps so that night-time cross country skiing can continue through the long winter nights.

The Mila lamps are ridiculously bright halogen headlights with a very wide beam. While most headlamps are adequate for walking (maybe), or camp chores (maybe), or reading in a tent, they don't really have a bright or wide enough beam to accommodate night skiing. A wide beam Mila halogen headlamp gives you a new way to see in the dark.

For me, the quest for a super headlight has been a result of needing to ski after work. In the dark, easy skiing with no trees (i.e. golf course skiing) isn't too bad. But that night-time run, through the trees, down *Inside Passage* on skate skis might be more than you bargained for without something super bright.

I've tried a variety of light setups, most recently a Niterider with a custom rechargeable battery pack (I'm an electrical engineer, too, so I can do that...). But during my week at the World Cup races in Canmore last season, the Euro skiers and servicemen were mostly using the big and super-bright Mila lamps. The big Mila lamps made my set-up seem weak.

The Mila PLS 100 headlamp features both a 10 watt and a 20 watt bulb and gives you the option of two very bright settings. A key feature of the PLS 100 is the large 100mm (3.5 inch) reflector which provides a big wide beam of light. The adjustable headset is lightweight and has been designed to be both comfortable and to keep the light in place while running. The 6 volt, 9 amp-hour nickel metal hydride rechargeable battery attaches to the headlamp with a power cord and can be carried in a waist pack or hydration pack.

This is a great light system for cross country or back country skiing, running, or any sport where bright lighting is needed. It comes with an overnight battery charger. Burn time: 5 hours at

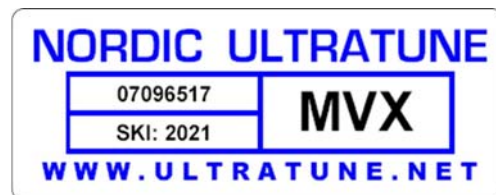
10W, 2 hours 20 minutes at 20 watts. Weight is 200g (7 oz.) for the headgear and lamp. Battery weight is 630g (22 oz.). The price is \$329.



The Mila PLS 100 Headlamp
modeled by Kelsey

By special arrangement with Mila USA, Nordic Ultratune will have Mila headlamps and visors for sale.

If you need a super bright light for skiing, snowshoeing, adventure racing events, or winter cycle commuting, then the Mila PLS 100 is the way to go. Send email to: xcgrind@ultratune.net if you have questions or would like one sent to you.



Test Skis & Ski Tests

By Mark Waechter

Ski testing at Nordic Ultratune is done with a set of six pairs of identical, factory matched, skate skis.

Why Matched Skis?

Ski tests are intended to test a single variable. Tests have to be done on identical skis – otherwise the skis add a high level of uncertainty.

Testing Grinds or Structures

When I'm testing structures (grinds), I use identical skis that are identically prepared except for different grind structures on the ski bases. With all the skis treated the same, with the same wax, the variation in test results can be referred to the single difference between the group of skis. It's simple and certain and effective.

Wax Tests with Matched Skis

Glide wax testing requires all the matched skis have the same base structure as well. With Ultratune's test skis, I go so far as to make sure that all the skis get the same grind, on the same day, in the same grind batch.



While it's guaranteed that World Cup teams are carrying a set of test skis, many domestic clubs and trade teams also use a set of matched skis to test glide waxes. A set of skis with identical base structures can be waxed with different preparations, and tested side by side. This makes it easy to determine the best wax.

Some teams, perhaps with only a few pairs of matched skis, will wax each single ski differently, and simply test by feel. Testing by feel requires a good sense of which skis are gliding most easily, both at low speeds, on descents, and climbs. In addition to requiring fewer pairs of skis, testing by feel doesn't require any special timers or speed trap setups.

On the other hand, waxing pairs allows objective data gathering with speed tests, which can quantify the differences and eliminates a little bit

of the guess work. Speed trap testing, in set tracks, is especially effective if you're using skate skis to test gliders for a classic race.

When can you test with unmatched skis?

Race day ski testing for the athlete can be done with mixed skis, since the goal is only to identify which pair of skis is running the fastest.

If you've got 3 pairs of skis, maybe different models from different years, with different structures, and maybe even different waxes, then it's still easy to identify which pair is running the fastest. You test the pairs and obviously you race on the best pair. But there's no way to draw definitive conclusions from your testing about the factors that make the ski fast. Was it the ski flex? Was it the wax? Was it the base structure? Was it the condition of the base material?



I routinely get comments from skiers who make conclusions about grind structures, skis, or wax based on side-by-side comparison of mixed skis. This is nearly useless, though there are times when a single factor is so overwhelmingly positive (or negative) that some reasonable conclusions can be made.

Take Notes

Take notes on your ski tests. Identify the date, the weather, the temperature, the consistency of the snow, the location. Write down anything that might be useful.

Clearly describe the goal of the test. If you're trying to decide whether Solda Green, Toko HF Blue, or Swix LF4 is running the best, then by all means write that down! Make a note of anything that would be considered an uncontrolled variable, or anything that would possibly add uncertainty to the results.



The Mazama Ski Rodeo

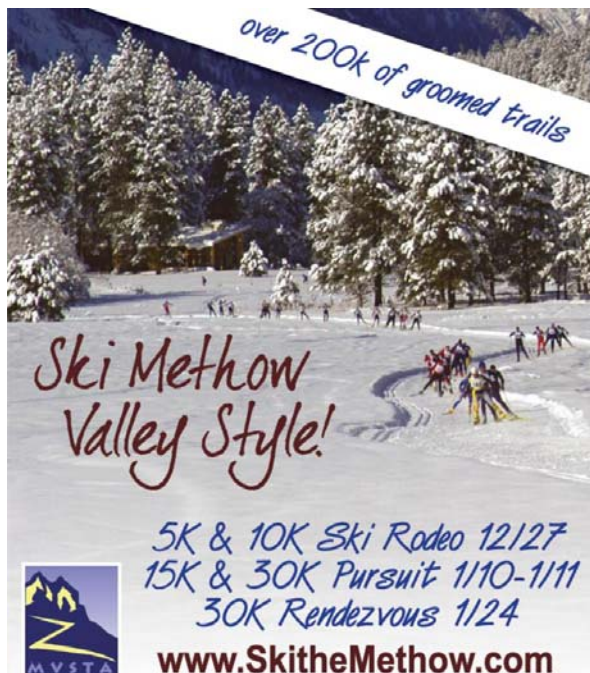
by Mark Waechter

The MAZAMA SKI RODEO is a 10 km skate race held on the last Sunday of the year. It's one of those races that's defined as a "fun race" and draws a big crowd of recreational skiers. Yet, at the pointy end of the race the competition is definitely low-fat and very, very, fast.

The Ski Rodeo is nominally a family and community skate ski event on the Mazama end of the Methow Valley trails with distances for all ages and abilities. Following the event, at the awards ceremony at the Mazama Community Center, you can indulge in cookies, pastries, and hot drinks. There's also a random prize drawing, so you might become a winner, even if you've finished mid-pack.

The Ski Rodeo has been in existence for more than 20 years, and each year it draws a terrific spectrum of skiers. In the past few years, the podium has been dominated by Olympians and Supertour competitors.


In the middle and tail-end of the pack, you'll see families, friends, and some skiers in costumes and cowboy hats.



over 200k of groomed trails

Ski Methow Valley Style!

5K & 10K Ski Rodeo 12/27
15K & 30K Pursuit 1/10-1/11
30K Rendezvous 1/24

 www.SkitheMethow.com



Giddyup! It's the Mazama Ski Rodeo!

The local organizers clearly know that this isn't the day for crack o' dawn bullhorns and an interval start list. It's a mass-start race, with the stampede starting at 11:00 to accommodate holiday heads that are a bit bleary. There's plenty of time for a double-shot and cinnamon roll at the Mazama Store before the start.

The scenery in Mazama is simply fabulous. Nestled on the narrow valley floor, flanked by the Goat Wall, the course passes through mixed terrain. The race starts with a bang, leaving the Mazama Community Center and looping clockwise through the big meadow, past the biathlon range on Foster's Ranch, then the route climbs through the woods and across the Goat Creek bridge, which would normally be a photo stop for visiting ski tourists. After a few short steep stair-step climbs, and a quick road crossing, the course dives down through a couple of technical turns and immediately into the snaking route of the MVSTA's community trail. Popping out onto an open meadow about 2 kilometers from the finish, the skiers head for home and a wide finishing straight.

The big finish area makes for an exciting finale, whether it's a sprint for 1st place, or the big shoot-out with your training buddy for bragging rights.

If you live in Washington state, or if you're looking for a real change of pace in your holiday schedule, definitely think about attending the Mazama Ski Rodeo. And keep an eye out for me – I'll be there for sure.



Podium-Ready Skis at Ultratune



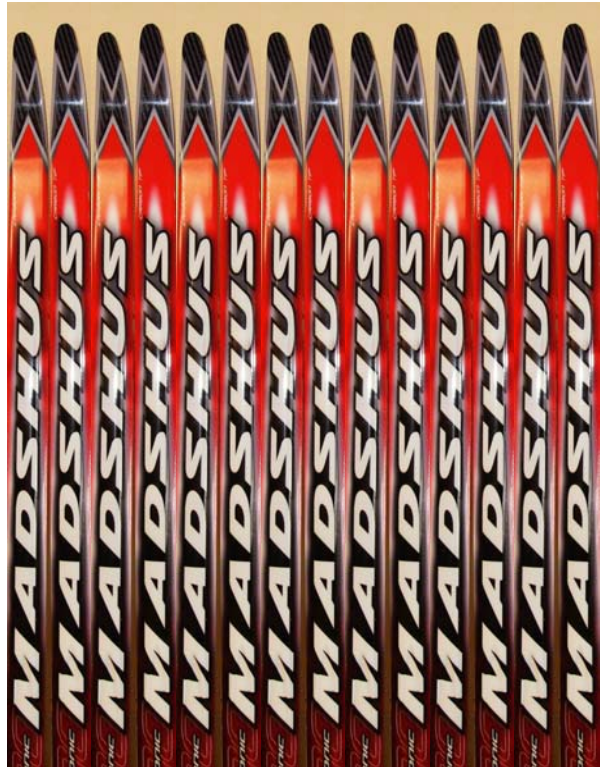
Ultratune will again offer flex fit, hand picked skis for the 2008/09 season. The price, including stone grind of your choice and hotbox service is \$524 for either the Madshus Nanosonic or Rossignol Xium models. If you'd like some, let me know! xcgrind@ultratune.net

The hand picked ski program works like this: You send me a note letting me know what you want; I'll need some size and weight info, along with information on preferences. Boot size helps, too. I'll pick skis for you, and then I'll contact you for grind info and payment. They'll be stone ground, hotboxed, bindings mounted, etc, and shipped to you.

Ultratune has been reserving ski picks for the 2008 season. The first 100 pairs of skis arrived in the first week of October with more to come soon. If you'd like some, let us know.

The Rossignol Xium skis remain unchanged for the 08-09 season.

Madshus skis have changed their graphics, but the Nanosonic skis are otherwise the same.



Some of the new 2009 Madshus skis

FOR MORE INFORMATION
There's a review of the Rossignol Xium Carbon and the Madshus Nanosonic Highspeed in the March 2007 edition of the Ultratune newsletter.



Skiing in the Methow Valley.



Skis have arrived, and we're picking carefully, with lots to choose from.

When to Stone Grind Skis

Skis are subject to damage every time you ski on them or wax them, or just leave them sitting around. Abrasive skiing conditions, heat from wax irons, and exposure to air all degrade your ski bases. The performance of your skis is greatly affected by the condition of the P-Tex and the surface condition of your skis.

If your skis have base damage, they can be improved with a fresh grind. Any of these symptoms can be remedied with a new base finish from Nordic Ultratune:

- *Skis just aren't fast as they used to be...*
- *Surface scratches*
- *Skis won't hold wax*
- *Over-heated, oxidized, dried out*
- *No structure remaining*
- *No longer flat – convex or concave*

In addition, you can choose the base structure that you need – whether it's an all-around structure for your one-and-only pair of skis, or a special purpose grind for specific snow conditions.



Hey, where are the safety glasses?!

Hotbox Services at Nordic Ultratune

I routinely get emails asking for clarification of our Hotbox services. Here's what we offer:

Hotbox Basic - In our basic Hotbox process, skis are waxed with a warm paraffin and placed in the Hotbox for 90 minutes for thorough wax penetration. **At \$15 it's a bargain.**

Hotbox Deluxe - With the Hotbox Deluxe process, the skis receive an antistatic treatment using a special process, followed by a warm paraffin, then Hotboxed for 3 hours, providing super-saturation. The Hotbox Deluxe is highly recommended for all stone-ground skis, especially if you plan to race very soon after receiving your skis from the grinder.



More on Why to Grind New Skis

Skis intended for specific conditions will need to be structured for the best possible performance. Ultratune can help you choose the best base structures for your needs. Get rid of excuses by getting the skis prepared for top speed, right away.

It certainly true that the p-tex bases on new skis are better than they've been in the past. But it's very likely that your new skis have been sitting in a warehouse for the better part of a year. Often new skis have dried-out, oxidized base material. **It's also common for new skis to have a relatively aggressive structure on the base which can be slow for all but wet or icy conditions.** Sometimes new skis have scratches and often brand-new skis aren't perfectly flat.

Naturally, you want fast skis. A grind and hotbox will have them race ready.



Please clean your skis - don't send them looking like this!

Odds & Ends

Observations from Flex Testing New Skis

Each year I test the new skis on the Ultratune digital flex press, as I make picks for customers. In the process I gather information, and notice differences in the products.

Rossignol is marking their race skis with more info than the past couple of years, and the newly added information makes it easier to *start* the ski selection process, since I can immediately grab a few pairs that are in the right range to begin testing at the bench.



The Ultratune digital flex press.

Last year the Madshus skis were incredibly closely matched (left & right ski in a pair), but they were often a bit softer than the label on the skis. Precisely matched, but not so accurately marked. The result was that customers got great skis if they were carefully picked on the bench. This season (08-09), the quality is again super – I don't think anyone in the industry has such good quality control. A change from last year, though, is that the skis are much closer to the labeled markings on the skis. Kudos to Madshus for maintaining such great quality, and also for improving the labeling a bit

I work with both Madshus and Rossignol to stay up to date on their selection recommendations, and combine that knowledge with my own experiences and feedback from sponsored racers.

I feel that it's still necessary to hand select the skis; the intelligent ski pick is still dependent on getting a ski that is properly correlated to the skier's weight and needs. This is true not only for classic skis, but skaters as well. A well-fitted ski makes a world of difference. Combine a well-fitted new ski with a racing grind and hotbox prep, and you've got yourself a pair of race ready skis. And a big smile.

SOLDA Ski Wax

This winter, Nordic Ultratune will have some of your favorite Solda racing wax products in the shop.

Ultratune won't have the entire line, but we've selected products that are proven winners. These products can be used to build your primary race wax kit, or to augment your existing set of race waxes.

You'll find the F40 series of high-fluoro waxes, the S20/S30 additives, the HP04 and HP05 top coat powders, plus the Powerjet 1 & 4 blocks.



A sample of the Solda items at Ultratune

The northwest has long been a hotspot for Solda products – because they work, because they're competitively priced, and because there has historically been a good knowledge base among racers and technicians.

Ultratune will still have a great selection of wax and tools from Toko and Swix, but the addition of Solda racing products will answer the requests of many of the racers.



NORDIC ULTRATUNE

September 2008 WORK ORDER FORM & PRICE LIST

(Please attach one copy of this form to each pair of skis)

INSTRUCTIONS:

- Please: we must have a fully completed order form to begin work on your skis!
- A personal check or charge card info (Visa/Mastercard) must accompany your skis.
- Remove all wax from skis - there will be a \$5.00 surcharge for removing wax from skis.
- Tie skis together with rubber bands or tape - ski ties will not be returned.
- Fold this form and tape it to your skis. One work order form per pair.

SHIP SKIS TO:

**NORDIC
ULTRATUNE**
134 Riverside Ave
Winthrop, WA 98862

Grinds (all grinds include travel wax):

	Prices in US\$
LJ03 - general purpose "all around" grind; very good on classic skis	\$ 64.00
MVX - universal layered cross-structure for skate skis in "east slope" conditions	\$ 64.00
MVL - general purpose linear grind for classic skis in colder "east slope" conditions	\$ 64.00
615B - fine, layered, interference pattern for skate skis in colder conditions	\$ 76.00
XC01 - for extreme cold conditions; linear grind with a secondary polishing stage	\$ 76.00
XC02 - for cold & dry snow; linear grind with a secondary polishing stage	\$ 76.00
SLC02 - an excellent klister grind for classic skis; a 2-stage compound grind	\$ 76.00
R2.3, R3.3 - for coarse, transformed snow, high humidity - 3-stage compound grind	\$ 88.00

Waxing (add to the above price):

Hot Box Basic - paraffin wax with 90 minute hotbox soak	\$ 15.00
Hot Box Deluxe - anti-static treatment followed by paraffin wax & 3 hour hotbox soak	\$ 25.00

Additional Services (add to the above price):

Binding Installation (specify boot size _____)	\$ 12.00
Ultratune Flex Analysis	\$ 15.00
Rush order and overnight shipping (please call in advance)	\$ 35.00

Subtotal: \$ _____

Washington residents add 7.7% sales tax: \$ _____

Packaging, Shipping & Insurance: \$20.00 first pair, \$10.00 subsequent pairs \$ _____

Total: \$ _____

SHIPPING ADDRESS

SKI INFO

NAME			
ADDRESS			
APT / SUITE			
CITY			
STATE		ZIP	

BRAND			
LAST 4 DIGITS OF SERIAL NUMBER			
SKATE		CLASSIC	

SKIER INFO FOR FLEX ANALYSIS

SKIER HEIGHT		WEIGHT	
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NOTES

DATE			
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CHARGE CARD PAYMENT INFORMATION

NAME ON CARD			
VISA / M.C.		EXP	
SIGNATURE			

