

THE SHARQ GRADING METHOD

{ The Little or No
Down Pressure
Approach }

**OPERATOR
INSTRUCTION
MANUAL**



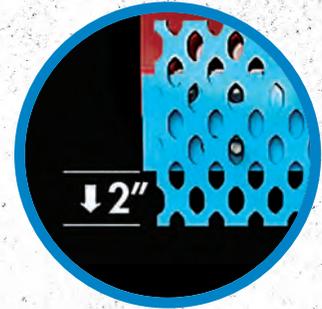
www.equipmentblades.com

Sharq™

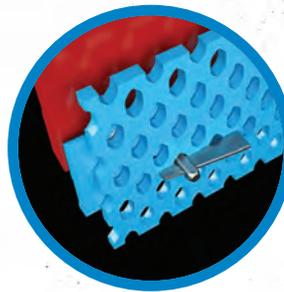
1

BLADE INSTALLATION AND POSITIONING

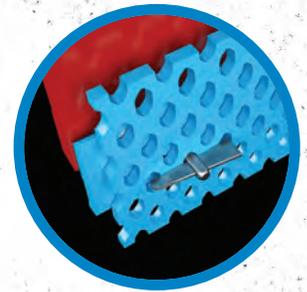
Place the cutting edge onto the mounting board quick change bolts. The cutting edge should hang approximately 2" below the mounting board. Make sure the surface of the mounting board and moldboard are clean to secure the blades properly.



Take the long flat edge of the wedge and place it against the cutting edge. **Get each wedge started into the wedge bolts before fully hammering them in.** Once you have all the wedges started, you can strike them until they won't go any further. It is essential to make sure they are as tight as they can be.



Get all of the wedges started in the bolts to assure the blades are flush with the mounting board.

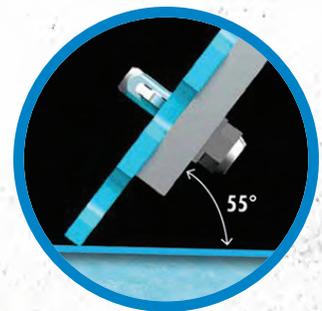


After all the wedges are started, hammer them in tight.



Place this long flat side of the wedge against the steel

Once the cutting edges are installed, roll the top of the moldboard all the way back so the blades are placed at a forward cutting angle like shown in the image to the right.



**EQUIPMENT
BLADES**

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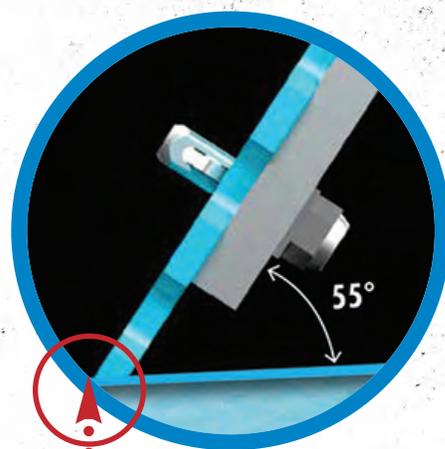


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FIND THE ROAD SURFACE

Find the road surface simply by running the moldboard in float for 10 feet or so, then take it out of float (this helps you find the top of the road as a good starting point). From there, you may have to go up or down a touch to find the sweet spot. ***Do not continue to grade in float.** Set crown angle as you normally would. Also, set the angle of the moldboard to achieve proper flow and scouring of the material.

With the top of the moldboard all the way back and the blade is on the ground: the edges should be at an ideal 55 degrees forward cutting angle. This is sharpen mode. Sharpen the blades so they are sharp like a knife.



- Sharpen the edge to a sharp point.
- Strive to keep this sharp point.



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FIND MATERIAL, CUT AND STAY SHARP

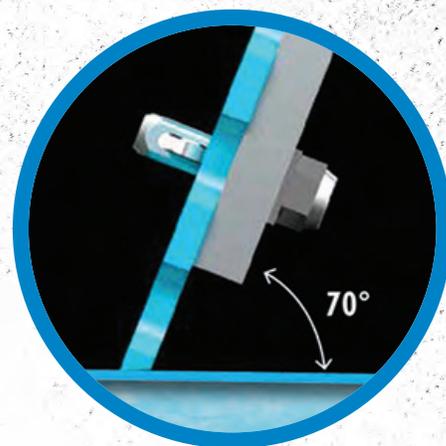
To pick up more material or cut to take out washboards, roll the moldboard forward just 5, 10, or 15 degrees max. If it starts digging or cutting too much NEVER LIFT UP. Simply roll the top of the moldboard all the way back to the sharpening position. Roll it forward to cut again.

Continue the process. Roll forward to cut, roll back to sharpen. Repeat-Repeat-Repeat. This process is key to maximizing the cutting ability and wear life of the blade.

PERFORMANCE TIP

The hardest thing for operators to learn when using Sharq Edges is to NOT USE hydraulic down pressure!

.....
Always Use The Little or No Down Pressure Approach!



When you need more material roll the moldboard forward to a maximum of 70 degrees.



Ideal range from 55-70 degrees



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OUT WITH THE OLD. IN WITH THE NEW.

THE OLD WAY

Using the hydraulic down pressure to go down for more material and lifting for less material. Often times the top of the moldboard is rolled forward to push down and pull and drag the material.

THE SHARQ METHOD

Start with the top of the moldboard all the way back to sharpen. Roll it forward 5-15 degrees for more cutting and material. Roll the top of the mold board back 5-15 degrees for less material. No down pressure required.



**EQUIPMENT
BLADES**

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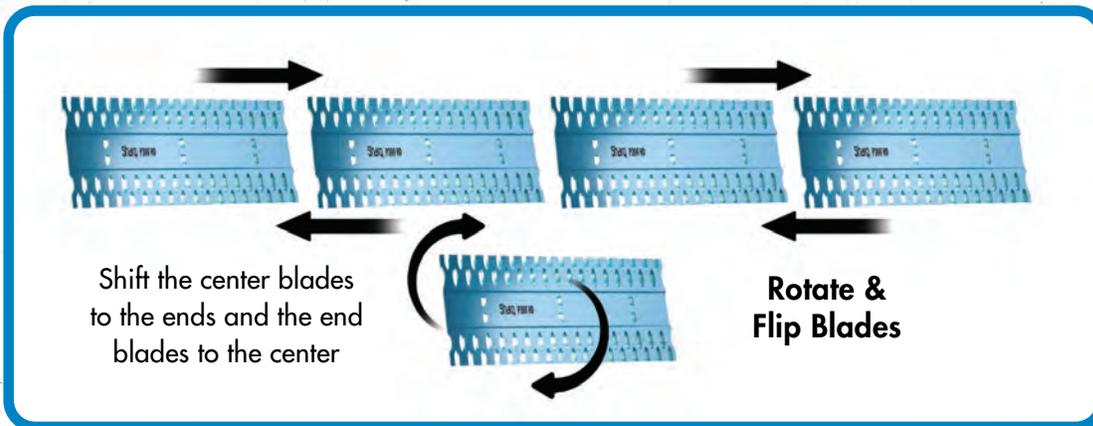
KEEP A STRAIGHT EDGE

Keep a straight edge by shifting the center blades to the ends and the end blades to the center. This makes more efficient use of the steel and prevents waste.



Check out this efficient use of steel

No more grinding the ends of grader blades down because of counter-crowning. Some have gone as far as straightening the grader blades with a torch. This problem goes away with the flexibility of the Sharq quick-change system.



ADJUST THE BLADES AS THEY WEAR

As the blades wear you are required to adjust the blades down to make sure you don't wear into the mounting boards. Always try to keep the edge 2" below the mounting board. There are several adjustment options with the P300. With the other edges there are 2 adjustments (starting with the bottom hole) on one side and 2 adjustments on the other side after you flip them.

**EQUIPMENT
BLADES**

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MASTER THE SHARQ METHOD

Try shifting up to 4th, 5th or 6th gear and back off on the throttle. This is not meant to go faster – but to keep the same ideal speed of 5.5 to 6 MPH max. These Sharp edges will cut with ease with the machine at close to idle or running at drastically reduced RPM's. Play around with this to find what works best for you. Let the blade do the work for you!

20-50%
FUEL SAVINGS

15 CHANGE BLADES IN JUST
MINUTES
ANYWHERE, EVEN ON THE ROAD!

**EQUIPMENT
BLADES**

Sharq™



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NEVER GRADE THE OLD WAY AGAIN!

Pushing down on the blade to try to make it cut will wear ANY **BLADE** down faster than needed.

Forcing and pushing any blade with **DOWN** pressure will heat the blades up and temper the steel. This causes a loss in hardness in the steel and adds to the blades wearing out faster.

If you push down on blades you start lifting the grader and lose traction. When you lose traction, normally you apply the differential lock to help to improve traction, this leads to extra tire wear.

GRADING TIP!

If you cannot cut through the wash boards or pot holes in the first run, then get it in a second pass.

It's more economical and faster.

.....
NOTE: By dragging and pushing blades against the road surface you merely fill in the pot holes and washboards. When you run Sharp with the Sharq Edges, you get under and cut out these problem areas with ease!

PERFORMANCE TIPS

DO NOT RUN IN FLOAT
The A-Frame is too heavy

DO NOT ROLL THE MOLDBOARD FORWARD
No further than a 70 degree forward angle.

NEVER 75-90 DEGREES
Remember to keep the point sharp and No Down Pressure!

**EQUIPMENT
BLADES**

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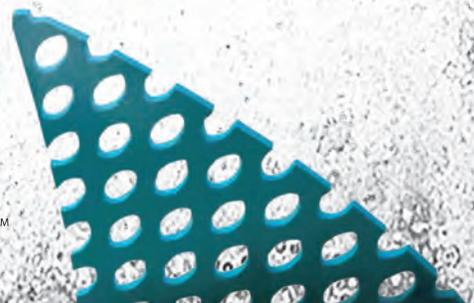


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WINTER PLOWING

In winter conditions the method is basically the same. The Sharq Blades can run on asphalt and cement because there is little or no down pressure. The P-300 will cut ice and snow pack when nothing else will cut it. In a snow plowing environment run with the top of the mold board all the way back and only roll it forward 5 degrees to cut thick ice and snow. *DO NOT RUN THESE IN FLOAT.

In snow and ice, the raked surface of the P-300 will improve vehicle traction, plus it also allows for the sun to work more efficiently at melting the snow and ice. Chemicals and sand will also react more efficiently in the raked environment. This will lead to a reduction of the chemicals required to achieve the same results. If the road has been sanded, then on the next go around, the P-300 will make the road look like it has been sanded again. Sand sits in the grooves that the P-300 has created and traffic will pack it in.



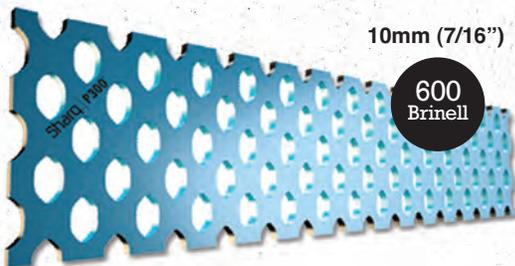
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YOU HAVE ACHIEVED THE GOAL!

Effectively fixing roads, making them safer and more cost effective.

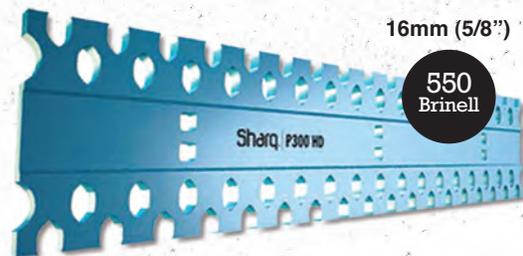
P-300

- Cuts away washboards, potholes & wheel ruts.
- Evenly distributes fines across the road.
- Safe raked surface ideal for salt, sand & stopping.
- Ideal for ice and packed snow.



P-300 HD

- Cuts away washboards, potholes and wheel ruts.
- Longer lasting than P300.
- Evenly distributes fines across the road.
- Safe raked surface ideal for salt, sand & stopping.



RAM

- Superior wear life.
- Excellent snow plow blade
- Great summer maintenance blade for hot and dry conditions.
- Works for directional plows and wings.



THE BEST SNOW AND ICE CUTTING BLADE MADE

CARBIDE

- Superior wear life.
- Designed to resist fractures & wear damage
- Designed for plowing snow.



FLAT

- Excellent snow and ice cutting blade
- Great summer maintenance blade.
- Thin design means better cutting & less resistance.



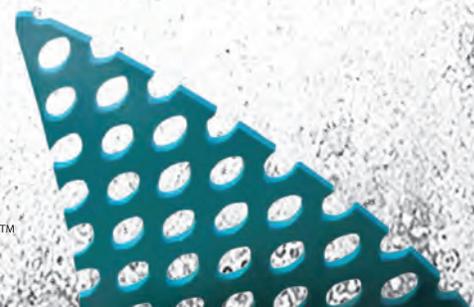
CARBIDE SERRATED

- Superior wear life.
- Designed to resist fractures & wear damage
- Excellent for black ice and difficult ice conditions.



**EQUIPMENT
BLADES**

SharqTM





FREQUENTLY ASKED QUESTIONS

Who invented Sharq Edges System?

A: Olofsfors of Sweden invented and patented the system over 30 years ago and they have perfected the system with 30 plus years of experience.

How much do these blades cost?

A: They cost a little more than traditional grader blades but should wear 2-4 times longer.

How can these thin blades possibly last as long a regular grader blade?

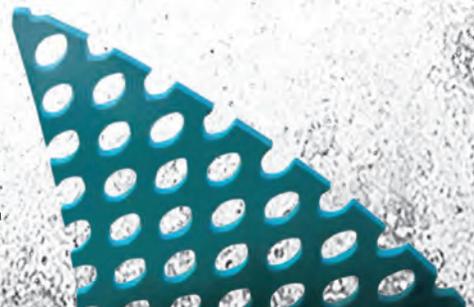
A: When you don't use the hydraulics to push down to dig you remove a lot of friction. Friction causes heat and heat melts steel. So, when you grade with these you use little or no down pressure and the blades don't heat up. Also, the steel is 35% harder than traditional through hardened grader blades. When you adapt to the Sharq method of grading, the Sharq Edges will typically last at least 2X longer than traditional grader blades.

How long do the P-300's, Rams, Flat, HD's last?

A: As with any blade it depends #1 on the operator, #2 the road conditions and #3 the composition of the road material. Too many variables...Hot, dry, frozen, wet, ice, granite, lime stone, sand, dirt, clay. We have seen a range of 40 hours to 600 hours. In an average gravel road environment, we would average 100-200 hours for a P-300 and Flats. In the same conditions the Ram and P-300 HD might go 200-300 hours.

Will the wedges come loose?

A: The wedges will not come loose when they're pounded in tight.



How long does the hardware and wedges last?

A: About a year. The Wedge bolts can be turned 180 degrees to double the wear life.

How hard is the steel?

A: 550-600 Brinell approximately 35% harder than through hardened grader blades.

Are there carbide blades available?

A: Yes, we have three different styles: Straight single insert, serrated single insert, and conical scarifier bit boards.

How much fuel can I expect to save?

A: We have customers that are seeing a 35% reduction in their fuel consumption, or an average of 2 gallons an hour savings.

I prefer carbides so I don't have to change the blades.

A: Carbides are not the ideal blade for fixing and shaping the roads. They are great blades for maintaining. The Sharq Edges are ideal for maintaining AND fixing roads. They are light weight and can easily be changed anywhere with a hammer. Many operators will safely secure an extra set on the grader so they can change them out on the road in less than 15 minutes. The trauma of changing blades goes away forever with the quick-change system!

I don't like these blades because I have to get out and adjust them.

A: Again, the trauma of changing blades goes away but we have a solution for those that don't like to ever change or adjust the blades and that is the HMS 6000 bit boards. They mix the material similar to the P-300 and they use the conical scarifier kennemetal style bits. These bit boards also use the same quick change system so they can be changed out easily depending on the road conditions.



How often do you have to adjust the blades?

A: Depending on the conditions of the road material. It could be as often as every couple of hours or as little as once every couple of weeks. An average might be once a day or once every other day.

Can you wedge the blades from the back side?

A: Yes, and only with the Olofsfors Sharq Edges can you do this with one wedge, the same wedge the same blades, no other hardware required.

Is the method different from running traditional grader blades?

A: Yes. This is a NO DOWN PRESSURE approach to grading.
THE OLD WAY — Using the hydraulic down pressure to go down for more material and lifting for less material. Often times the top of the moldboard is rolled forward to push down and pull & drag the material.
THE SHARQ METHOD — Start with the top of the moldboard all the way back to sharpen. Roll it forward 5-15 degrees for more cutting and material. Roll the top of the mold board back 5-15 degrees for less material.

Do you have carbides for summer use?

A: P-300 is much more economical and cuts better than a carbide solution however, we do have the HMS 6000 bit boards. They mix the material similar to the P-300 and use the carbide conical scarifier kennemetal style bits. These bit boards also use the same quick change system so they can be changed out easily depending on the road conditions.

What should I do if the grader starts to hop?

A: Grader hop can be caused by tire pressure, speed, and the road conditions. A great way to prevent this hop is to carry a little more material in the moldboard. Bump the top of the mold board forward 5 or 10 degrees and this should "stop the hop".



**TAKE THE
SHARQ
CHALLENGE**

**KEEP
TRACK
OF YOUR
SAVINGS**

- ✓ Fuel per hour
- ✓ Hours per edge
- ✓ Tire wear
- ✓ How often you need to return to the roads
- ✓ Compliments on roads vs. complaints

Push yourselves to see how much money you can save.

.....
Let us know how well you're doing with the system.

.....
Any and all feedback helps.

**THE SHARQ
GRADING
METHOD**

*{ The Little or No
Down Pressure
Approach! }*

**EQUIPMENT
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