



Since MovIt Brakes USA only offers 100% perfection - we found after many years of research and road testing the unique and ultimate solution. MOV IT-CER Ceramic Rotor

Explanation of MOV IT-CER ceramic rotor:

Polyacronitrile fiber sheets are needled together to create a PANOX preform. The future rotors are cut out of this preform. These "raw" discs are carbonized at $>1500^{\circ}\text{C}$ to convert the Polyacronitrile fibers to carbon fibers. These carbonized rotors are then densified during a 14 day chemical vapor infiltration process. The rotors are then carbon-carbon. The rotors are then machined to the final geometry. Some faces are machined over thickness to allow for future machining. Now high rate silicon infiltration converts the carbon-carbon rotors to a carbon silicon carbide rotor within approx. 16 hours.

finally, all faces are machined to the given tolerances and dimensions using polycrystalline diamond machine tooling which is required due to the hardness of the material. Finally, a strict x-ray scan and porosity check to ensure the same density throughout the entire rotor.

Advantages of the MOV IT-CER rotor ceramic rotor over a cast iron rotor:

- Weight
- Lifetime
- Cost

The first improvement of a MOV IT-CER rotor over the cast iron rotors is the reduced weight. The weight is reduced by approx. 50% over a same size cast iron rotor (more is not realistic although others claim). So this means a saving of between 4 and 8 kgs. (!) on each corner of the car. As a result, the car feels as if it is "lighter", responds better to the throttle and handles amazingly better. to give an example: driving over a bump on a highway at 70 mph, this bump can be heard AND felt in your feet and in the seat. If you take off 6 kg from each wheel, you will still "hear" the bump, but you hardly feel it anymore since the wheel is so much lighter and follows to the road much quicker. The next important advantage is the much quicker steering response. The car seems to "eat" the corners, turning right or left is much "lighter" and the car turns in the desired direction much quicker and more accurately.

These are the advantages that you really feel; you don't have to measure this. Many others claim a better gas mileage, which is certainly the case, but who checks the 100% accurate gas mileage of a sports- or racecar?

The second important advantage is the lifetime.

A MOV IT-CER rotor is extremely strong. Only polycrystalline diamond machine tooling is able to machine the surface of this rotor. The wear of this rotor is much less than the wear of a cast iron rotor. While replacing several cast iron rotors, the MOV IT-CER rotor can be left on the car and just the pads will ever need to be replaced.

One big advantage of the MOV IT-CER rotor compared to other ceramic rotors is the many times higher lifetime of the MOV IT-CER rotor.

The MOV IT-CER rotor is made in a completely different way than all other ceramic rotors. A MOV IT-CER rotor starts his life as Polyacronitrile laminar fiber sheets, which are needled together in way that the fibers are oriented only in two directions (0 & 90°). This long fiber structure is kept for the entire production process until the rotor is finished.

As a result, the thermal conductivity and the thermal capacity of the MOV IT-CER rotor are much higher compared to ceramic rotors that are used on some production cars these days. Those rotors are made out of a chopped fiber compound, so the fibers are much shorter which results in a bad thermal conductivity and poor thermal capacity. Of course the strength of those rotors is also reduced due to the lower material integrity. Since the structure of the MOV IT-CER rotor is the same throughout the entire rotor, the lifetime is several times higher than the lifetime of the chopped fiber version. The MOV IT-CER rotor can be used all the way down until the fading resistance and / or pedal travel is no longer satisfying. This will take years of hard use and thousands of miles. So talking serious, as long as you want to have the MOV IT-CER rotor on whatever car, you only buy it once and take it from one car into the next. Just change the hats and caliper supports. In our opinion, this is one big advantage of the MOV IT-CER rotor over the chopped fiber production rotors found on some production cars produced these days since those have to be replaced once the 0.5 mm thick friction layer is worn.

Another important advantage of the MOV IT-CER rotor is the much faster cooling compared to other ceramic rotors. The long fiber structure transfers the heat throughout the entire rotor quicker and thus dissipates the heat much quicker than a rotor with short chopped fibers that cannot transfer the heat.

As a result of this highly sophisticated and intelligent design of the MOV IT-CER rotor, the cost of the complete brake at the end of the day is much lower than the cost for normal, cast iron rotors. The lifetime is many times higher, so one invests money only once to enjoy many years along with the benefits of reduced weight, improved stopping AND handling of your car.

Combined with the ultra-strong MOV IT-6 BILLET calipers this brake certainly is one of the best brakes ever made for fast sport cars.

Let's summarize:

- Less weight
- Better handling
- Better acceleration
- Higher lifetime durability/reliability
- Lower long term cost

- Less temperature compared to other ceramic rotors
- Better Braking!

Imagine if you could get tires that stand any abuse for 100K+ miles and have 50% less weight!

We have 3 different pads available street, race and endurance.
All stop well when cold, NO warming up needed as with carbon rotors. Remember, the MovIt CER is a ceramic/carbon rotor, not a carbon/carbon rotor.

Rotor Sizes Available:

322mm
342mm
370mm
380mm
396mm



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