

# CMX - CERAMIZER® FOR FOUR STROKE WET CLUTCH MOTORCYCLE ENGINES USED IN SPORTS

## BENEFITS

- Ensures constant protection of all engine metal parts prone to friction for 5 000 km of sports driving and 10 000 km of normal driving. This protection is particularly important during extreme driving, heavy load to the engine, high oil temperature, sudden changes of speed.
- Eliminates dry engine starting, protecting all surfaces prone to friction during repeatable engine starts.
- Protects the engine against overheating caused by extreme overloads and friction during sports driving.
- Protects the following elements against friction: cylinders, rings, ring grooves, piston coats, bearing shells, crankshaft pivots, crankshafts bearings, camshaft cams, hydraulic tappets, cylinders and pistons of automated hydraulic tappets, camshaft bearings, camshaft chains, piston bolts, piston wheel assemblies, bearings and sprockets of oil pump, injectors ( from the oil lubrication side); also gearbox bearings and sprockets ( if common lubrication of engine and gearbox occurs)
- Hardens and increases resistance of metal surfaces in the engine prone to friction.
- Slows down wear and tear processes of metal surfaces for approx. 5 000 km.
- Active nanocomponents smoothen microdefects and instantaneously lower the friction coefficient of engine surfaces prone to friction, thus ameliorating their lubrication.
- Increases the intervals of valve slack regulation.
- Increases power, torque, efficiency and engine dynamics.
- Lowers oil temperature.
- Restores nominal oil pressure.
- Decreases oil overconsumption.
- Increases and equalises compression pressure.
- Facilitates engine starts.
- Lowers the risk of frying and blocking the piston rings.
- Decreases vibrations and noise ensuring a quieter engine operation.
- Regenerates engine surfaces prone to friction during exploitation without the need to dismantle the mechanism- just by applying to oil.
- Compensates slack generating from friction of metal surfaces.
- Reduces smoke and particulate matter emissions.
- Enables fuel savings of up to 5%.
- Increases engine durability.
- In most cases allows to save money on costly engine repairs.

## HOW IT WORKS

Regeneration with Ceramizer enables to restore nominal size and proper geometry of surfaces in cooperation, where friction occurs, through mounting of a ceramic-metal layer with unique properties.



**Just add to oil and drive for 100 km.**

Regeneration is conducted without dismantling the mechanism during normal exploitation. Thermodynamic processes occurring on surfaces subject to friction purify them from residue and create the ceramic-metal layer in all spots, particularly the exploited / worn ones. The mounting process stabilizes along with the diminishing of the friction coefficient.

The mounting process makes the cracks of metal surfaces smaller and after reaching nominal values, stops automatically, having rebuilt the surfaces to a close to nominal shape. It means that in more worn-out spots the layer will be thicker than in those where friction was weaker, consequently restoring the geometry to nominal levels.

## GENERAL RULES OF APPLICATION

- The highest effectiveness in Ceramizer usage is guaranteed when applying according to the user manual.
- Do not change the oil during the whole ceramization process (200 km or 5 mth) Change the oil according to the service book.
- Ceramizer can be mixed with any oil and applied to any type of engine
- Lowered dosage of Ceramizer will not bring the expected result.
- Increased dosage of Ceramizer (e.g. 2 times) will not cause any side effects, just prolongs the time of creation of the metal-ceramic layer
- We recommend using CMX along with CP fuel additive for optimal results.

## DOSAGING OF CERAMIZER®

Dosaging of Ceramizer CMX is presented in the table herebelow:

### DOSAGING:

| Engine size in cc:   | 50-500 | 501-1300 | over 1300 |
|----------------------|--------|----------|-----------|
| Number of CSX boxes: | 1      | 2        | 3         |

### Package contains (1 BOX):

One syringe of Ceramizer product 1 x 4,5 g net weight and user manual.

## RECOMMENDATIONS

- Perform cylinder compression pressure test (before and after applying Ceramizer) in order to confirm the efficiency of Ceramizer.
- Use at any stage of exploitation, we suggest to add CMX just after oil change in order to continue CMX treatment in longer period (until next oil change).
- Use preventively in order to protect the engine against friction, prolonging its lifespan and flawless operation time.
- CMX can be mixed with any oil type.
- Use CMX preventively on every oil change or 1/ 5000 km sports driving.
- Do not change oil during first 200 km after applying CMX.
- In a new engine use CMX after the run-in period and after engine overhaul use after min. 250 km.

## INSTRUCTIONS

- Change oil and oil filter before applying Ceramizer.
- Start the engine and heat it up to working temperature of 90 °C.
- In the winter time, heat up the product to approx. 25 °C e.g. by holding it in the palm (the substance has the consistency of lube and dissolves in approx. 25 °C)
- Shake the syringe firmly for about 30 seconds.
- Pour the whole syringe/s in through the oil intake.
- Start the engine and leave it on idle for around 10 mins.
- Drive smoothly for approx. 100 km or leave the engine on idle for around 3h.



## REMARKS

- In case of prior use of oil additives (with molybdenum or teflon) it is advised to flush the engine before using Ceramizer. Otherwise the ceramization process may last longer and its efficiency will be diminished.
- In case of mechanical malfunctions of the engine ( broken piston ring, slack in valves, deep scratches on cylinders) it is advised to fix the malfunctions before applying Ceramizer.
- In case of engine overhaul, drive 250-300 km before applying Ceramizer.

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**PRODUCT MADE IN POLAND**

4. Ceramizer does not regenerate spots, where friction of rubber or plastic against metal occurs.
5. Syringes which have a minor leak from underneath the piston are still ready to use.
6. During creation of the metal-ceramic layer, a short term increase in emission of smoke may occur, according to Ceramizer additional cleaning ability.
7. CMX has the advantage of only 100 km needed for the process to finish (or 3hrs on idle), which allows Ceramizer for its effective use in motorsports.
8. The CMX creates a layer which is as effective as in Ceramizer CM. This layer is however thinner and thus lasts for a shorter time, so it is advised to apply CMX on every oil change.
9. The effectiveness of CMX is the same in every engine type.

## SAFETY

1. Product is safe to use according to current EU regulations.
2. Store in temperature of below +40 °C. When the temperature crosses that level, the product may sedimentate and in such case shake the syringe and cool it down below +40 °C before using.
3. Does not clog oil filters or channels.
4. Does not contain molybdenum or teflon.
5. Ceramizer does not change oil properties, does not cause soot creation, sulphuric ash, phosphorus or sulphur creation, thus it is safe to use in motorcycle engines and gearboxes.

## SAFETY GUARANTEE

1. We guarantee that CMX is not an oil densifier and will not damage the engine, because its concentrated 9g dosage does not change oil properties (including its viscosity).
2. During over 15 years of Ceramizer market presence there has never been a case of malfunction of the engine or other mechanism stemming from Ceramizer application.
3. Use of Ceramizer is completely safe, which is confirmed by independent tests and over 250 pages of customer testimonials (also video testimonials available on Youtube).
4. Ceramizer® can be used with any oil type.
5. Ceramizer® CMX does not contain teflon, molybdenum, sulphur or any substances harmful to the engine.
6. Ceramizer does not clog oil filters, or oil channels as its particles are smaller than filter pores.
7. Ceramizer® CMX does not react with rubber seals of the engine.

## RESEARCH

Efficiency proven during tests available on [www.ceramizer.com](http://www.ceramizer.com)

## EFFICIENCY

The durability and effectiveness of the metal-ceramic layer is around 5 000 km or 100 mth. After this mileage it is advised to reuse Ceramizer.

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