In the motor development of passenger cars at the works in Untertürkeim, Germany Daimler applies the dry ice blasting technology of the Swiss company ASCO CARBON DIOXIDE LTD.

It is essential that various motor components such as pistons, cylinder heads, oil pans and crankcases are cleaned gently from silicone residues, oil, grease, ashes and other contamination or sealing compounds. Due to the fact that these components are measured before and after tests in the geometric measurement and test engineering, it is important that they are cleaned gently after the tests and that the measured data are not adulterated due to an abrasive cleaning method.

The dry ice blasting technology has the advantage that it is gentle and therefore it does not damage the surfaces in any way. As an alternative only complex manual cleaning methods or cleaning by using solvent could be taken into consideration, however, they would be much more time-consuming. Even more important than the timesaving during the cleaning process is the assurance that the components are utterly clean after one cleaning process.

Every double-measuring and secondary cleaning which are required due to not completely clean components mean a loss. By using the dry ice blasting technology there is assurance that the components are utterly clean after one cleaning process.
Consequently, the dry ice blasting technology is not only an easy and fast cleaning method which does not damage components, furthermore it is also a method which supports the process planning.

A special case is the cleaning of pistons, their narrow ring groove cannot even be cleaned measurably with dry ice. Thanks to a mounted crown of light on the gun a solution was found, that this ring groove can be primary cleaned with dry ice so that the rest of the contamination can be removed in the ultrasonic bath afterwards.

**ASCO** and Daimler look back on a long and close collaboration in the field of the dry ice blasting technology, so that the dry ice blasting technology of the application field at Daimler can be further developed and optimized continuously and individually in an open dialogue.
About ASCO:

ASCO is a provider of complete CO₂ and dry ice solutions with customers worldwide. The product range includes CO₂ production and recovery plants, dry ice blasting units, dry ice production machines, CO₂ cylinder filling systems, CO₂ vaporisers, CO₂ storage tanks, CO₂ dosing systems for water neutralisation and various other CO₂ and dry ice equipment. Thanks to this broad product range and more than 130 years of practical experience in the wide field of CO₂ and dry ice, customers profit from individual, complete CO₂ solutions from a single source.

Since 2007 ASCO has been part of the international industrial gas enterprise Messer Group and is its competence centre for CO₂. By joining forces with the German BUSE Gasteck GmbH & Co. KG, based in Bad Hönningen, in the year 2014, the expertise and product portfolio was pooled and significantly expanded. This applies in particular to the complex field of CO₂ recovery. To achieve optimum customer support in North America, the US subsidiary ASCO CARBON DIOXIDE INC (ASCO Inc.), based in Jacksonville / FL, was founded in July 2016.
We supply:

- CO₂ Production Plants
- CO₂ Stack Gas Recovery Plants
- CO₂ Gas Recovery Systems for Dry Ice Machines
- Dry Ice Slices / Block / Pelletizer Machines
- Dry Ice Blasting Systems
- CO₂ and Cryogenic Static and Transportable Tanks
- CO₂ Pumps and Cylinder Filling Systems
- Atmospheric CO₂ Vaporiser
- CO₂ Detectors
- CO₂ Flowmeters
- Low to Low Pressure CO₂ Transfer Pumps
- CO₂ Testing Equipment (Dew-Point / Purity / Carbonation)
- CO₂ Equipment