

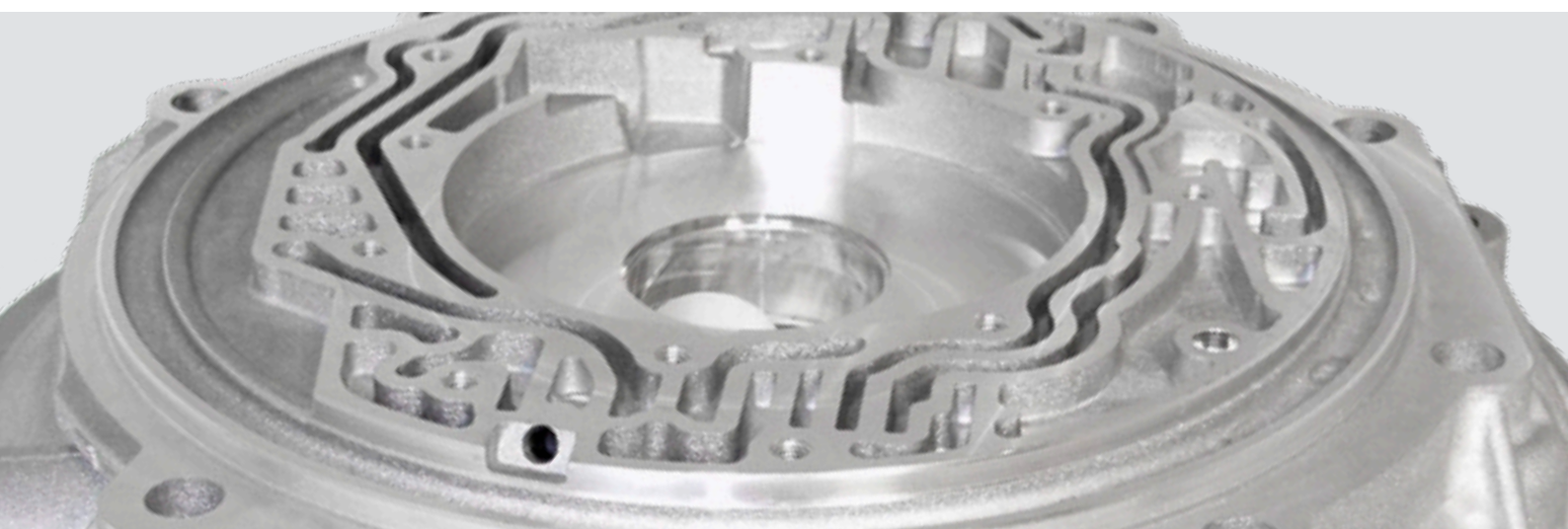
THE NEW VALUE FRONTIER



AUTOMOTIVE

Converter
housing

Converter housing



UM Dandia™ tooling solutions for the automotive industry



Kyocera Unimerco

– your innovative partner

Kyocera Unimerco specialises in the manufacture of high performance PCD tooling, designed according to customer requirements. Some of the benefits of working together with us are:

Optimisation support

We do not just deliver tools. Our highly qualified tooling technicians have in-depth knowledge of automotive applications and each problem is analysed thoroughly to come up with the best possible solution for you. In other words, we take complete care of your tool performance and ensure that you get the expected output.



Delivery time

As a rule, we are able to deliver PCD tools in 6-8 weeks. In most cases, we will deliver you a design concept for the PCD tooling solution for review. And of course if you require it, we are able to make in-house tests, based on an hourly payment. The result will be documented in a report for you. Thereby we secure that our tools are delivered "ready-to-use".



Not only regrinding but RE-NEW®

All tools are developed and manufactured utilizing the latest technology. And we regrind your tools with the same concern that we use to manufacture new tools. Original tool geometries are secured in our RE-NEW® process. We also RE-NEW® other tool brands with very good results - often better than when you received the tool as new.

100% repeatability

Due to a unique internally developed norm system and a very advanced drawing database, we are able to continuously deliver tools with the exact same geometries throughout all future deliveries, regardless in which of our manufacturing facilities your tools are being produced.

We look forward to your inquiry for a customized PCD tooling solution.



UM DANDIA™ PCD Tools

– Converter housing

We have in-depth knowledge of machining aluminum parts. Our tool package for steering housing components provides you with the following benefits:

One shot tools

The result of extensive research and development activities is the “one shot” solution for many of the features on converter housings. So rather than using traditional drill and ream process, with UM DANDIA™ you can cut to finished size in “one shot”. The most important benefit of “one shot” tools is reduced machining time.

Combination tools

Like with roughing and finishing tools, a number of other tool designs have been developed in order to combine several operations in one tool. This has been possible for many operations – like milling/reaming, reaming/grooving and drilling/reaming.

Fewer tools needed

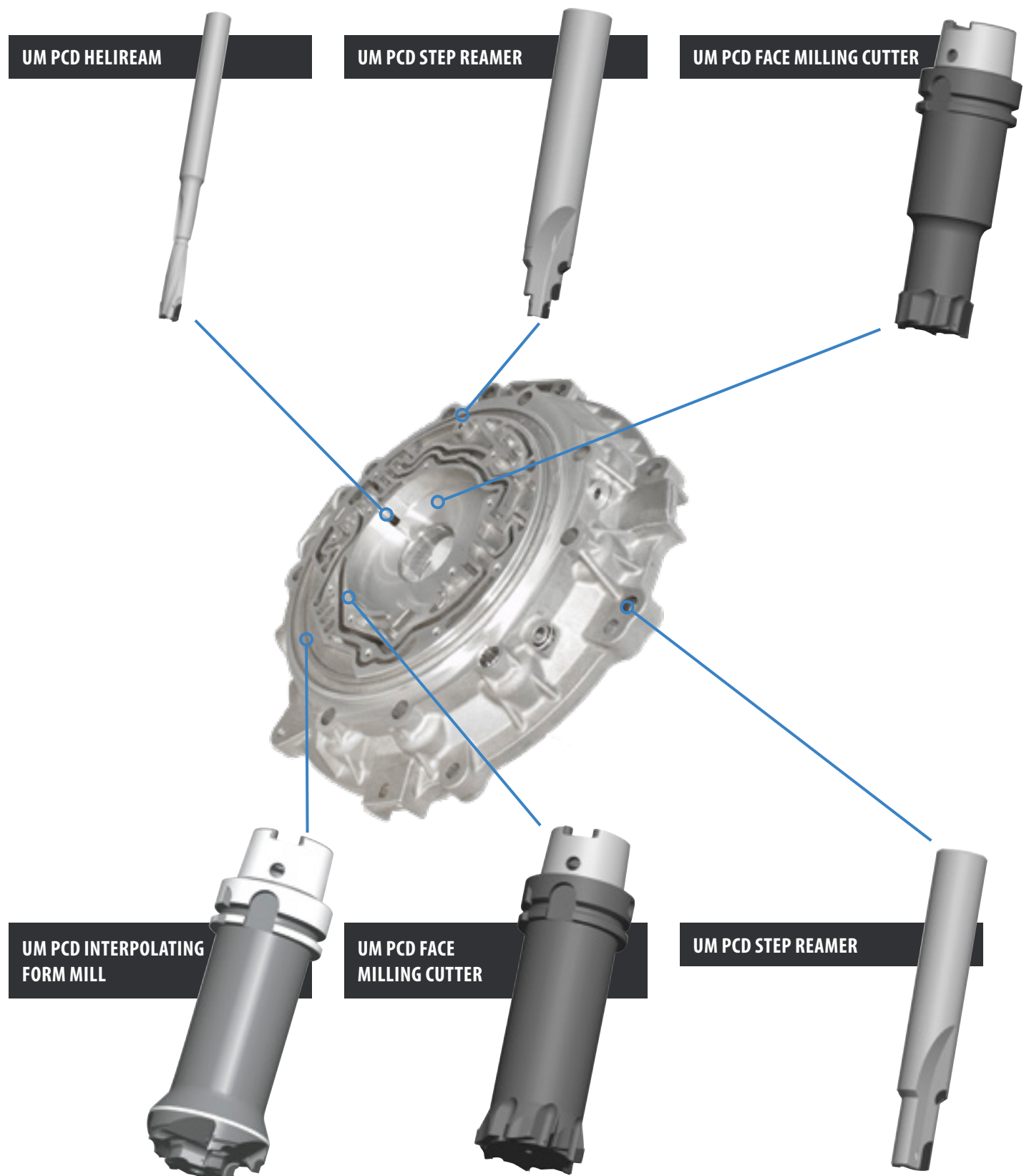
The combination of our “one shot” and “combination tool” approach has lead to a need for much less total tools. In fact, with the tooling solution from KYOCERA UNIMERCO, you may require 25% fewer total tools, compared to our competitors. Less tooling means shorter cycle time and thereby higher productivity.

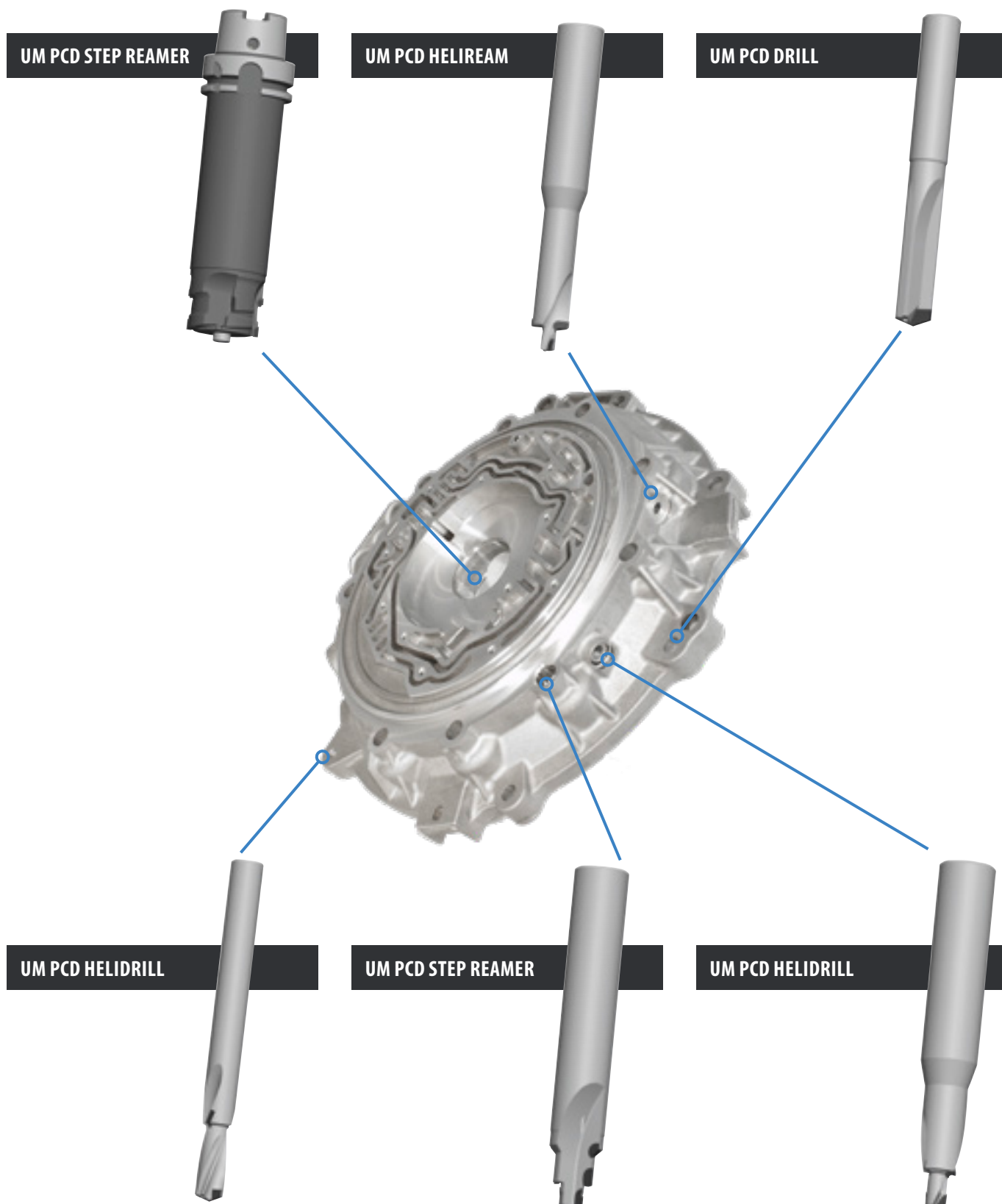
Surface finish

With UM DANDIA™ tooling, you will be able to achieve excellent surface finish results, great Cp and Cpk values - all with a shorter cycle time. Other benefits are lower coolant cost and a better production environment - all due to the advantages of using tools specifically designed for MQL applications.



Converter housing - tool package





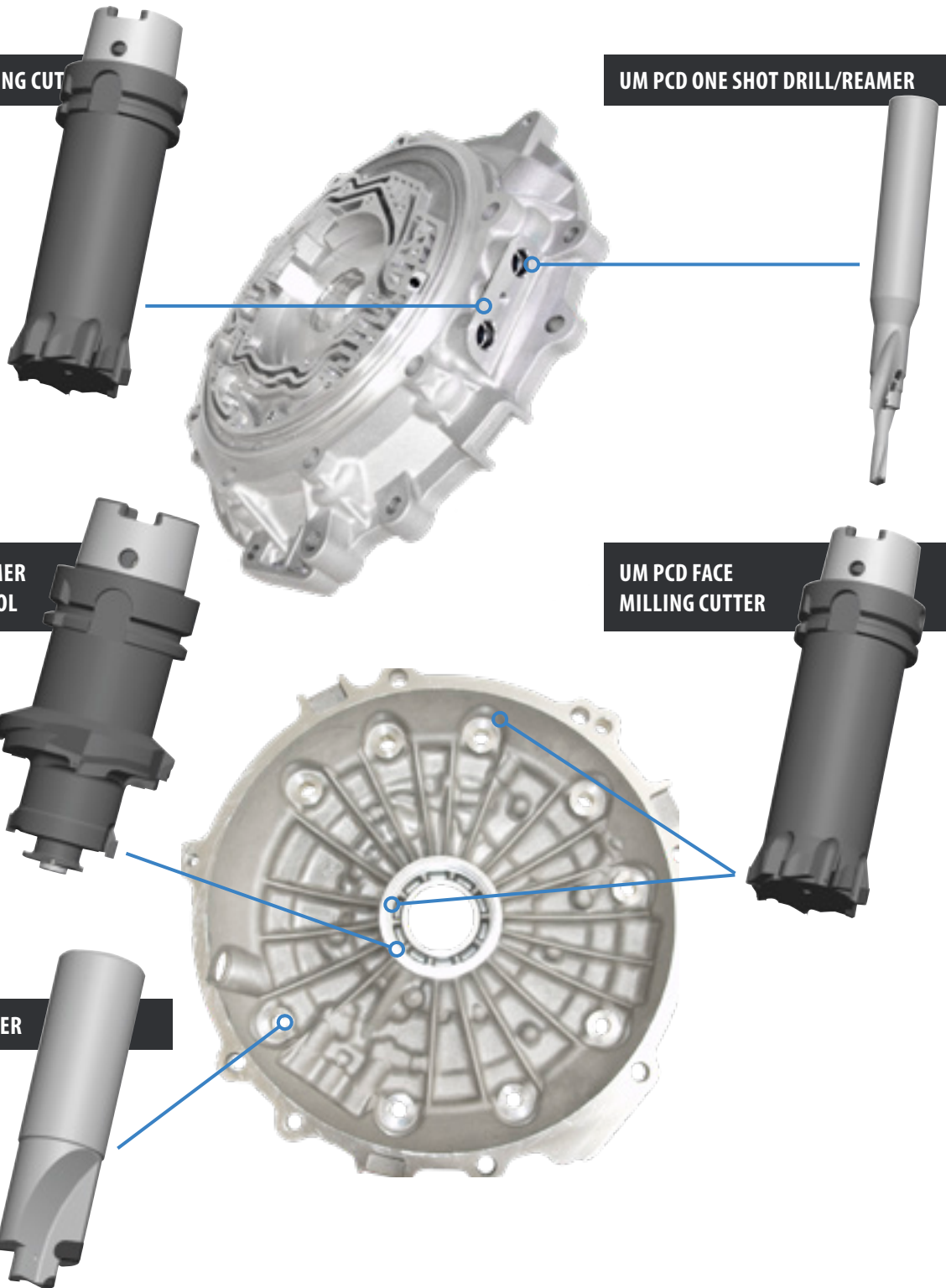
UM PCD FACE MILLING CUT

UM PCD ONE SHOT DRILL/REAMER

**UM PCD STEP REAMER
AND GROOVING TOOL**

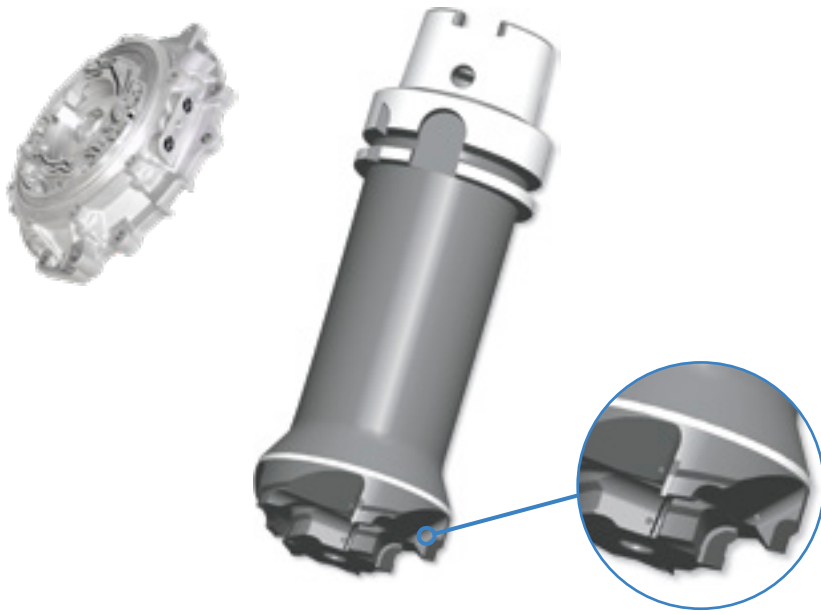
**UM PCD FACE
MILLING CUTTER**

UM PCD STEPREAMER



Optimisation examples

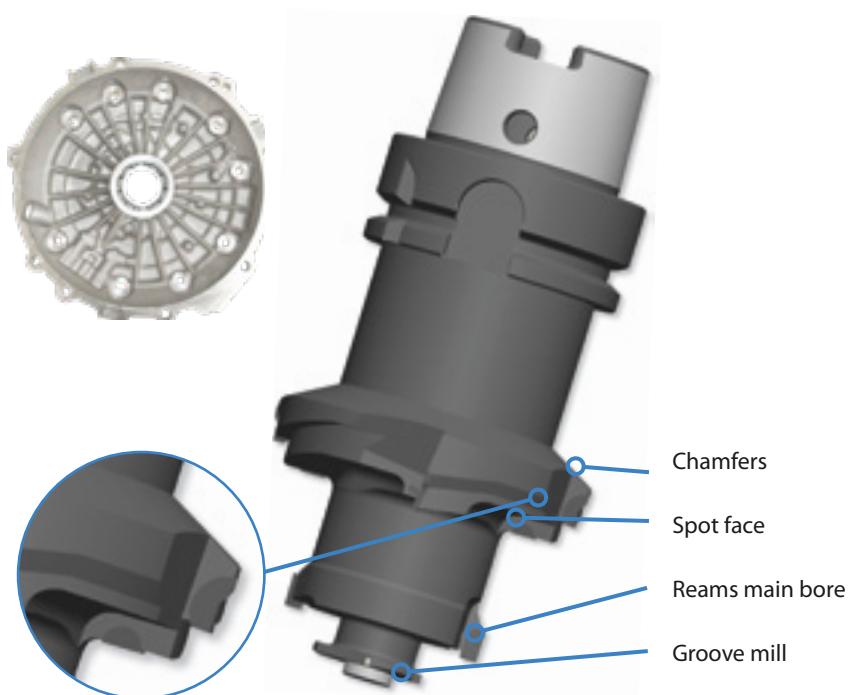
COMBINATION TOOL – SPECIAL INTERPOLATING FORM MILL



Features and benefits

- 1 pass interpolating milling of several different faces at once
- Eliminates 2 tool changes
- No rough + finish pass
- Only 1 shot to complete complex form

COMBINATION TOOL – REAM + SPOT FACE + GROOVE



Features and benefits

- 1 pass ream, spot face + chamfers – no need for roughing tools
- Mirror finish in main bore
- Groove mill interpolates groove after ream operation
- Eliminates 2 tool changes

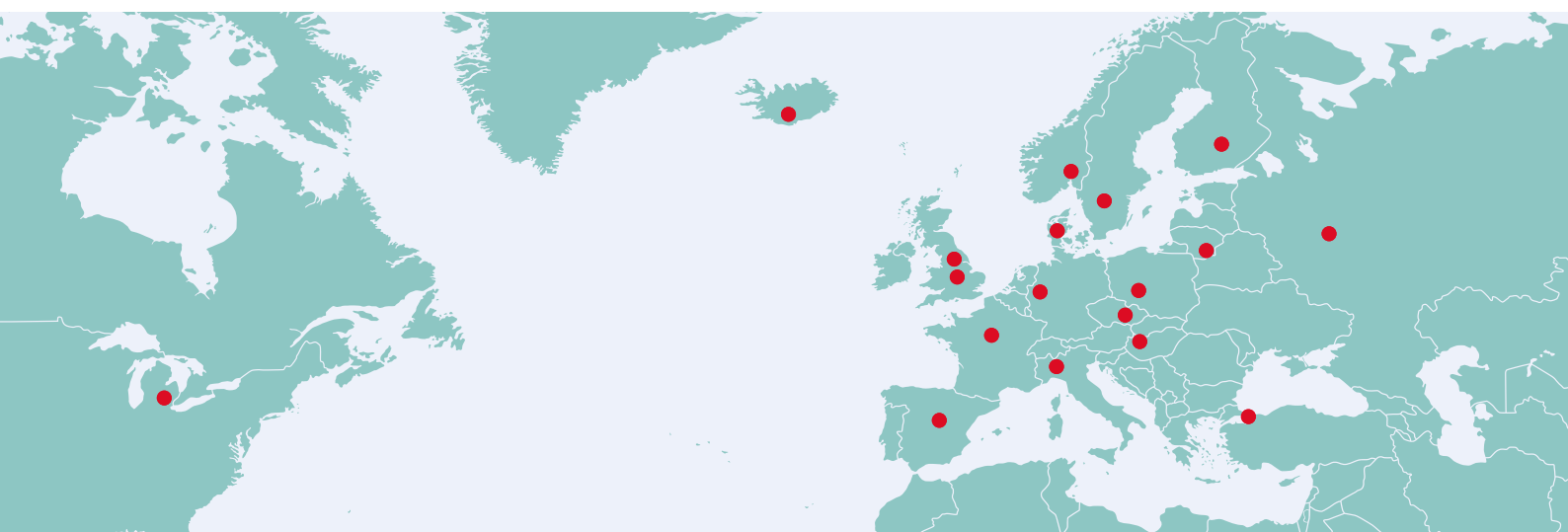
Industrial tooling solutions

Kyocera Unimerco is a global manufacturer and distributor, providing standard and customized cutting tool solutions as well as know-how and optimization guidance for the manufacturing industry.

The company was founded in 1964 and has since expanded into 17 countries, with more than 700 employees.

Today the company is part of the Japan-based Kyocera Corporation.

In 1998 the Sheffield branch was established. It is specialised in supplying the industrial market with inserts, standard tools and related tooling solutions.



www.kyocera-unimerco.co.uk

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