MACHINING COMPETENCE

M4000 – High performance made universal.
MILLING COMPETENCE – COMBINED IN ONE UNIVERSAL SYSTEM.

Shoulder milling cutter M4132
Ø 25 – 80 mm
apmax = 9 mm

Adapter types
– ScrewFit
– Weldon shank
– Shell mill

Shoulder milling Roughing
Shoulder milling Finishing
Face milling Roughing
Inclined plunging
Pocket milling
Circular interpolation milling
Plunging
Slot milling
Chamfering
M4002 high-feed milling cutter
Ø 25 – 66 mm
μₘₐₓ = 1.5 mm

Adapter types
– ScrewFit
– Shell mill

Chamfer milling cutter M4574
Ø 12 – 32 mm
κ = 45°

Adapter types
– ScrewFit
– Straight shank

ONE INDEXABLE INSERT SHAPE
AND ALMOST ANYTHING IS POSSIBLE

Cost efficiency when milling – and high flexibly
The M4000 is the universal system solution for all users that want to keep many options open when milling. The M4000 masters all machining tasks using one uniform indexable insert shape.

Whether it is a shoulder milling cutter, a high-feed milling cutter or a chamfer milling cutter – the system indexable inserts can be used in all tools within the M4000 range.

The low storage and procurement costs clearly indicate that this system places particular emphasis on cost efficiency. Efficiency is also maximised thanks to extremely easy handling and impressive performance data across the M4000 tool family.
 Whether it is a chamfer milling cutter, a shoulder milling cutter or a high-feed milling cutter – the system indexable inserts are at home on every M4000 tool body.

Depending on the application, two different geometries are available. The universal one – F57, and the stable one – D57. A specific wave profile on the flank face provides the necessary overview at all times, making it easy to visually identify the different geometries. The stable geometry is only marked with one wave whereas the universal variant has two waves on the flank face.

**High performance – simple and clearly laid out**

Walter’s tool bodies and indexable inserts are used wherever process reliability is more than just words. Compromising on process reliability is unthinkable, even with such a universal tool solution as the M4000. The decisive advantage begins with the cutting material. Almost every machining process can be carried out highly efficiently using the entire force of the system indexable inserts.

The entire M4000 tool family – including all future tools – can be equipped with a single indexable insert shape.

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**SLIM SYSTEM, BROAD RANGE**

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**ECONOMY AND EFFICIENCY IMPLEMENTED CONSISTENTLY.**

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**Cutting-material costs per component**

- M4132 Walter
- Competition

- Up to 50% reduction

**Tool life T**

- Competition
- M4132 Walter

- Up to +130%
The different geometries are easy to identify visually:

- **D57** – the stable one = one wave
- **F57** – the universal one = two waves

Identification markings for the four cutting edges

The system indexable inserts also have different graphic markings on the rake face which can be used as a guide when changing the cutting edge. But the M4000 system can do much more. There is no restriction on fields of application and it can also hold special indexable inserts. For the high-feed milling cutter, a circumference-sintered insert with facet is included in the program range for improved surfaces. The maximum cutting edge stability provides a further variant with a large corner radius.

As an option, a circumference-ground indexable insert with additional facet is specially available for the M4132 shoulder milling cutter to provide maximum precision.
INCREASED RESPONSIBILITY, REDUCED POWER REQUIREMENT.

Comprehensive tests prove that the M4000 power requirements have been reduced significantly. Easy-cutting geometries, an increased clearance angle and an optimised installation position are important construction features that help to use energy in the production environment in an extremely economical manner. The savings potential that has been proven in practice is over 14%. As a result, the M4000 makes a valuable contribution to resource-saving and therefore more economical production.

Responsibility that pays off
As costs and environmental aspects often go hand in hand, it is worth looking a little more closely, particularly at power requirements.

Today, continually rising energy costs call for tools in a brand new efficiency class: At least as powerful as before, but economical and environmentally friendly like never before. The M4000 can meet that ambitious objective with impressive measured values. Compared with similar tools on the market,
INVESTING IN THE FUTURE WITH CO\textsubscript{2} COMPENSATION

Thinking ahead means compensating our CO\textsubscript{2}

High environmental standards have been firmly anchored in Walter’s company culture for many years. Using the M4000, Walter and its renowned partner FirstClimate have now shown that the powerful tool system can already be manufactured with 100\% CO\textsubscript{2} compensation. Together with FirstClimate, Walter has offset the entire supply chain. From procuring the raw materials, developing and manufacturing through to packaging and storage – the entire CO\textsubscript{2} requirement was offset and documented in accordance with ISO 14064.

The CO\textsubscript{2} footprint that is determined in this way is the binding basis for the Walter Green Compensation project on Borneo’s southern coast: Preserving the Tanjung Puting National Park, acquiring land-use rights along the national park borders to prevent deforestation in favour of palm oil plantations, reforesting and protecting the habitat of endangered orangutans.