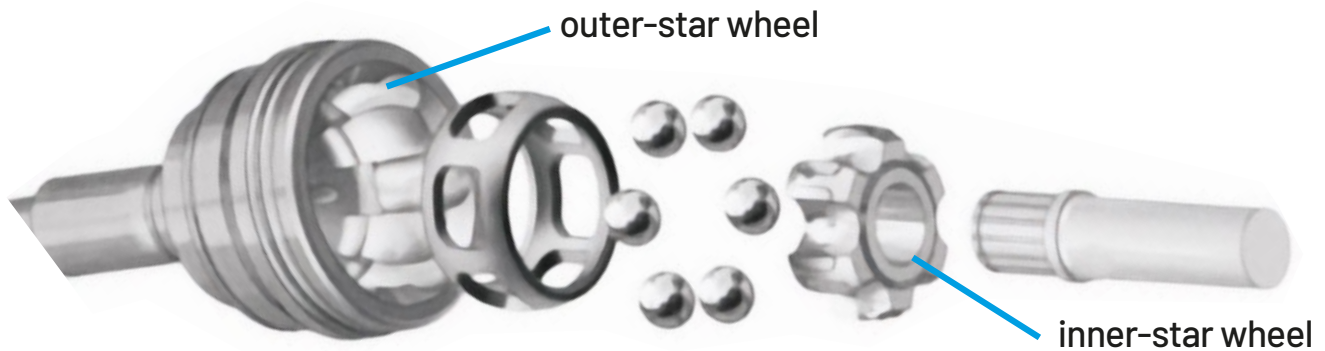




CVJ BALL-NOSE MILL

MTHM | MTSMF | MTSMR SERIES





Ball cage type constant velocity joint is one of the key essential parts of modern automobile. Its emergence promoted the automobile's progress and development of front-wheel drive and all-wheel drive technology.

The traditional processing of the inner-star wheel and the outer-star wheel, which is used in CV joint milling machine and grinding machine conducting wet milling and grinding. The processing is tedious and difficult to guarantee the precision, with low processing efficiency and higher cost.

Aimed at the disadvantages of traditional processing technology of the inner/outer-star wheel, depending on years of technical advantages and working site experiences, GWT researched and developed CVJ ball-nose mill which is special for machining the inner/outer-star wheel roller.



CVJ ball-nose mill has advantages as below:

- Milling replace grinding is well realized a more flexible processing method.
- Milling surface produces compressive stress and the grinding surface produces tensile stress, so machining work piece produced by milling replace grinding owns higher antifatigue strength and good durability.
- Good environmental protection, air-cooled dry cutting avoids the high maintenance cost of cutting fluid and does not cause environmental pollution.
- The processing efficiency is greatly improved.

Matched tool holder



Tool holder for machining inner-star wheel



Tool holder for machining outer-star wheel

GWT CVJ ball-nose mill is classified as hard milling (MTHM) series and soft milling (MTSMR/MTSMF) series.



MTHM series

Used for finish processing of the inner/outer-star wheel alter heat treatment.



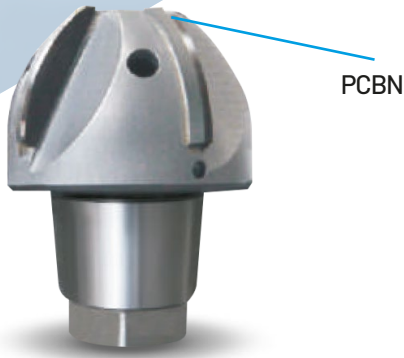
MTHM series

Used for finish processing of the inner/outer-star wheel alter heat treatment.



MTHM series

Used for finish processing of the inner/outer-star wheel alter heat treatment.



MTHM Series

Adopting PCBN high speed hard and dry cutting processing technology, the ball track which is on inner/outer-star wheel can be formed in one time.

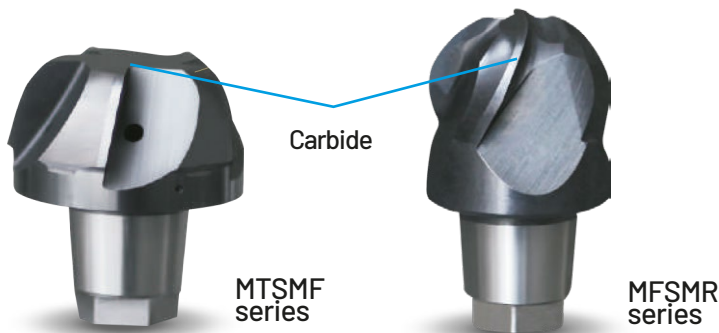
PCBN cutting edge material.

- Quick and accurate clamping on the taper face and end face .
- Four blade structure with good cutting stability.
- Special treatment of the blades, stronger blade strength and performance.
- The air vent arrangement is favorable for cooling and chip removal in time.
- Profile tolerance of cutting edge is $\pm 0.003\text{mm}$, cutting edge runout is within 0.005mm .
- High strength steel tool body.
- Simple and convenient disassembly.

MTHM series specifications

Type	Diameter of steel ball mm	Number of blade Z	Blade Material	Tool body material
MTHM-0120AS	Ø12.700	4	PCBN	Steel
MTHM-0130AS	Ø13.494	4	PCBN	Steel
MTHM-0140AS	Ø14.288	4	PCBN	Steel
MTHM-0150AS	Ø15.081	4	PCBN	Steel
MTHM-0160AS	Ø16.00	4	PCBN	Steel
MTHM-0170AS	Ø17.15	4	PCBN	Steel
MTHM-0190AS	Ø18.00	4	PCBN	Steel
MTHM-0190AS	Ø19.050	4	PCBN	Steel
MTHM-0200AS	Ø20.00	4	PCBN	Steel
MTHM-0210AS	Ø21.431	4	PCBN	Steel
MTHM-0220AS	Ø22.00	4	PCBN	Steel
MTHM-0230AS	Ø23.019	4	PCBN	Steel


MTSMF / MFSMR Series




- Tool blade material is fine-grained cemented carbide.
- Rough machining series matched with finishing series.
- Special coating.
- Quick and accurate clamping on the taper face and end face.
- Simple and convenient disassembly.



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