

Customized gear solutions for rough ambient conditions !

Complementary to the modular Drive System MAS 2000, Watt Drive also offers gear units for extra tough ambient conditions, especially high temperatures. The basis of these constructions are components out of the MAS- modular gear system. The additional features for the customers requirements are designed according to the application. The following example describes a helical bevel gear unit (type K..) with motor adapter for a roller table drive.



picture 2

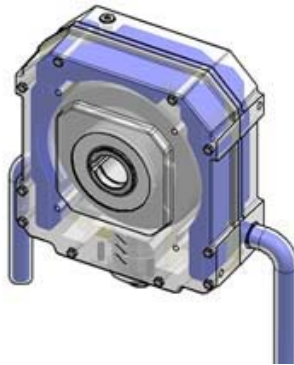
The helical bevel gear units are configured in shaft-mounted design with direct torque support on the housing of the motor adapter. They are useable for high load conditions, all parts provide high safety in rough applications and are available with the following additional features:

- integrated water jacket
- ductile iron housings
- smooth surface
- protection sheet metal
- seal rings for high ambient temperatures
- synthetic oil
- oil level indication stick
- motor adapter

integrated water jacket:

The water jacket is used for cooling of the gear unit. It is designed around the main housing and is directly casted onto it. (see **picture 1**).

Two 1 inch threads are used as connection for the cooling fluid, the cooling duct is pressure proof up to 20 bar.



picture 1

ductile iron housings:

The gear housing is manufactured from ductile iron EN-GJS-400-15 to withstand extreme mechanical stress (e.g. in the steel industry).

smooth surface:

To simplify the cleaning of the soiled gear units, the surface is designed smooth and free of outlines.

protection sheet metal:

The used sheet metal coverage (see **picture 2**) protects the gear unit and especially the seal ring against damages from flying and hot parts.

Seal rings for high ambient temperatures and synthetic oil:

In this application the used seal rings are made of heat resistant material.

The sliding surfaces of the seal rings on the output shaft are induction hardened, the used lubricant is prepared for high ambient temperatures.

oil level indication stick:

The oil level indication stick is flush-mounted in the housing to protect the stick against mechanical damages.

Unlike a conventional oil sight glass the stick is made of steel to fulfill the higher mechanical demands.

motor adapter:

The adapter can be built according to the motor dimensions and is available in "clamping" and "plug in" design. So the customer has the possibility to change the motor quickly ("dry" motor connection).

The described embodiments impart the Watt gear units features which are not possible with standard drives. Our longtime application experience in designing and producing of mechanical drive components supports our customers to find the optimum solution for their challenging requirements.

You can find further information about the Watt Drive product range on our website www.wattdrive.com.