

Courtesy of Kässbohrer Geländefahrzeug AG



Comer Industries & Kässbohrer Geländefahrzeug AG



KÄSSBOHRER GELÄNDEFahrZEUG AG

Kässbohrer

“Comer Industries showed great flexibility and technical capability in adapting a standard product to a very special application”.

Marc Frank – Engineering Power Transmission,
Kässbohrer Geländefahrzeug AG

For over 120 years, Kässbohrer has been developing vehicles that have pushed the boundaries of vehicles engineering. Kässbohrer Geländefahrzeug AG is one of the major manufacturers of high quality snowgroomers, marketed under the brand Pistenbully, that is the official supplier for the FIS Alpine Ski World Championships 2017.

Kässbohrer Geländefahrzeug AG’ Needs: a Performing Track Drive for New Advanced Snowgroomers

The Pistenbully snowgroomer is a dedicated vehicle to prepare and maintain ski slopes. It is a completely new generation vehicle: intuitive controls, the most powerful engine in its class with eco-friendly exhaust gas technology and a wealth of other innovations. The machine is capable to climb steep slopes in any environmental condition; it has an operation weight of 7,000 kg and features a 186 kW engine. Snowgroomers are well recognized in the market as one of the heaviest application for the drivetrain.

Comer Industries’ Solution, a Compact and Price Sensitive Product

The new issue for the Pistenbully 100 vehicle was to find a specific solution to match the special requirements of the application, selecting a product base from the standard catalogue.

This approach led to the choice of redesigning and adapting Comer Industries PGR-802T track drive according to design specifications set up by the customer at the beginning of the project.

The drivetrain solution consists of one main component: the track drive to propel the vehicle. Comer Industries has developed a two stage planetary gear with rotating housing PGR-802T. The Engineering team introduced a very low ratio to achieve the requested high speed and a parking brake which is located externally to allow a better design and improve the heat exchange. This track drive is able to provide 6,900 Nm and 230 rpm, featuring a quite high power density in a very small space.

The compactness of Comer Industries design was one of the key point for the success of the solution.

Concrete Results

The Pistenbully 100 snowgroomer was successfully introduced in the market and is well appreciated by the final customers of Kässbohrer as an economical and efficient vehicle: with 20% more thrust, the PistenBully 100 is now more agile and more powerful, with less fuel consumption.

Thanks to the launch of this machine model, the German company is looking forward to keeping its leadership in the worldwide snowgroomer market.

Providing track drives for snowgroomers is not a new challenge for Comer Industries: for nearly 20 years, the company has been designing and manufacturing customized drive for propel and slewing function specifically for this application.