The Profi-Flex Wheel is GKN Wheels’ manually adjustable variable track wheel and a well proven industry standard.

A key trend within the agricultural market in recent years has been the move towards bigger farms, meaning that tractors spend more time on the road with a need to travel faster. There is also a need for a greater frequency of track adjustments to suit the needs of varying crops. These changing demands placed on vehicles produce additional stresses on wheels. GKN Wheels’ Profi-Flex Wheel incorporates many design features that make it the most capable, adjustable wheel on the market today.

The Profi-Flex Wheel features 16 different track positions, with 15mm between each, meaning a more accurate position can be achieved when planting multiple crops or moving from field-to-field. The variable width also lends itself to situations where more steering ability or traction may be required.

Profi-Flex is used globally by major agricultural equipment manufacturers. The component tolerances have been developed to allow all adjustable track wheels to be suitable for operations at speeds of up to 50kph.

Key to performance is a continuously welded flange ring which joins the centre disc to the wheel rim, creating a constant cross section flange ring ensuring an even distribution of loads between the rim and disc, which in turn minimises stress on the wheel. In addition, the flange has a very flat profile, giving an excellent surface for bolt location and making it easy to maintain the pre-loaded torque.

The Profi-Flex Wheel from GKN has proven so successful in matching the current requirements of the agricultural market that more than 100,000 a year are now being sold.
Profi-Flex Wheels: Features and Benefits

Profi-Flex Adjustable Track
Technical overview

A continuously welded flange ring joins the bolted centre disc to the wheel rim. This constant cross section flange ring ensures an even distribution of load between the wheel rim and the disc, an essential requirement to minimise stresses in critical bolted and welded joints. This helps promote high performance life and low fatigue by providing a structurally efficient joining structure. The wheel disc is fastened to the flange ring using a series of specifically developed bolts and spacers. These spaces provide two key benefits:

1. **Increased bolt stretch.** The spacer means that a longer bolt can be used than if the offsets were provided by a shaped disc or flange ring alone. It is generally the case that the longer the bolt that is used, the more stretch than can be developed in the fixing. This increased stretch provides a significant increase in the resistance of the bolt to loosen during service.

2. **16 offset positions.** The space can be repositioned with respect to the disc and wheel rim to help achieve 16 different offset positions.

GKN’s Paint Plant Tech

GKN Wheels are leading the industry and offer a technologically advanced paint process. All of their wheels are finished to the highest finish available, known as C5 High, offering improved salt-spray resistance and long-term protection from corrosion across a wide range of climatic conditions, meaning wheels from GKN have a longer life-span and higher durability no matter what their environment. Typically, GKN’s wheels are pre-treated with a zinc phosphate coating which allows for improved corrosion protection, then given an electrocoat and finally a high performance top coat is applied. GKN Wheels are proud to offer best in class paint finish as standard, meaning you can rely on every single one of their wheels to deliver long term benefits and reliability for all.