

DATA SHEET

Wheels >

**SWIFT CHANGE GIANT MINING TRUCK
RIMS 51" AND 57"**

Giant Swift Change Rims >

Mining tyre and wheel servicing organisations work to maximise machine productivity and efficiencies. GKN Wheels has worked closely with these organisations to design, manufacture and now launch a range of products to make it the supplier of choice for mining wheels.

Changing or rotating a tyre assembly on a mining machine can be challenging and time consuming. With GKN Wheels' Swift Change Rims, tyre removal is significantly faster than with standard rims ensuring machine downtime is minimized. Designed at GKN Wheels' Mining Technology Center in North America, the Swift Change design enables tyres to be changed without removing the outer or inner wheel assembly arrangement resulting in time saving and safer operation.

GKN Wheels offers full-service wheel technology solutions from design and testing through to manufacture of quarry and mining rims.

Research and Design

Working with Original Equipment Manufacturers engineers, mine operators and other after-market customers, GKN Wheels has reviewed the significant requirements of mining equipment, operating demands, the extreme loads and stresses and harsh mining environment to design and manufacture highly reliable and durable products.

GKN Wheels use the best design methodologies including computer simulations, Finite Element Analysis, which is backed by extensive in-field testing. GKN Wheels' solutions offer improved profile structures without adding unnecessary weight – in summary – GKN Wheels ensures you receive an efficient product to meet your needs.

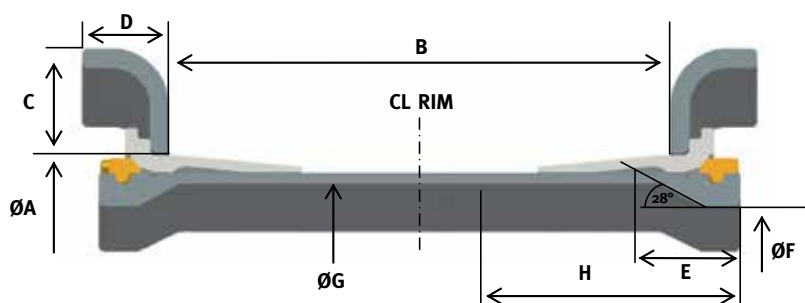
A Quality Product and Service

Quality is fundamental to GKN's product range across all sectors and product designs. All performance criteria comply with at least one of the following regional and international rim and tyre standards – TRA, ETRTO, JATMA and ISO.

GKN Wheels use materials tailored for each application. GKN's mining wheels use high strength low alloy steels (HSLA). Forged and seamless rings are used in key areas, including the gutter band and back area, greatly increasing strength and fatigue durability.

Inspection verifications are undertaken using state of the art technology, such as Non Destructive Testing (NDT). All circumferential welds are inspected using ultrasonic or x-ray techniques to ensure consistent quality and integrity. This attention to detail translates into extended service life, reliable performance, safer operations and lower maintenance costs.

GIANT SWIFT CHANGE – OUTER RIM >



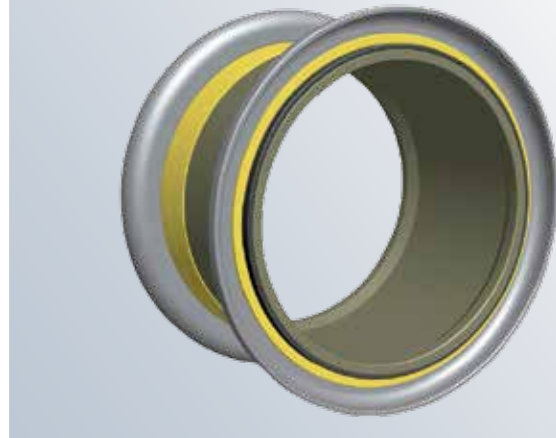
DIMENSIONAL INFORMATION																
RIM SIZE	A RIM SIZE		B RIM WIDTH		C FLANGE HEIGHT		D FLANGE WIDTH		E BEVEL POSITION		F GUTTER DIAMETER		G RIM BASE DIAMETER		H VALVE HOLE POSITION	
Dia-width/Flange HT.	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
51 - 24.00 / 5.0	1,295.4	51.0	609.6	24.0	127.0	5.0	98.55	3.88	148.84	5.86	1,148.60	45.22	1,212.6	47.74	318.4	12.53
57 - 29.00 / 6.0	1,295.4	51.0	736.6	29.0	152.4	6.0	121.92	4.80	148.84	5.86	1,300.99	51.22	1,365.0	53.74	473.0	18.62

OUTER RIM ASSEMBLY INFORMATION									
RIM SIZE Dia-width/ Flange HT.	RECOMMENDED TYRE SIZE(S)	PART NUMBERS						ASSEMBLY WEIGHT (KG/LBS)	
		RIM BASE	BEADSEAT	FLANGE (2 REQUIRED)	OUTER LOCK RING	INNER LOCK RING (Two piece lock ring)	O-RING ¹		
51 - 24.00 / 5.0	33.00* 51	RM5124002	BS51003	FL51004	LR51003	LR51007	OR451T	1,294	2,853
57 - 29.00 / 6.0	40.00* 57, 46/90R 57, 37.00R 57	RM5729002	BS57003	FL57003	LR57003	LR57004	OR457T	1,606	3,540

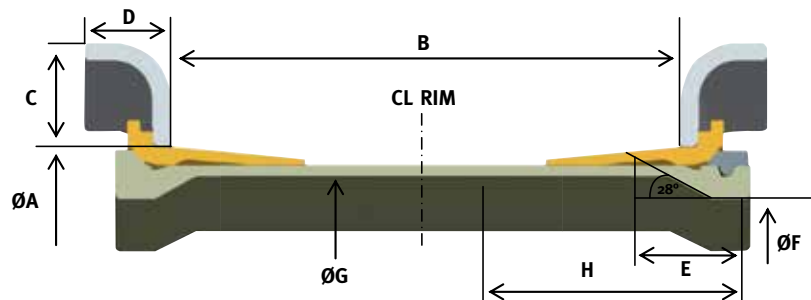
¹O-ring – for reference only

BENEFITS INCLUDE >

- > Modified seven piece rim intended for tubeless operation
- > Ultrasonic weld and flaw inspected circumferential welds
- > Forged and seamless ring material used for critical components
- > Heavy duty lock ring
- > Extensive application of various high strength low alloy steel (HSLA)
- > All critical surfaces fully machined
- > POSI LOK for reduced flange slippage
- > Bead seat band and back band have an integral continuous tool pocket feature
- > Rim profiles comply with at least one of the following standards – TRA, ETRTO, JATMA and ISO
- > Available in sizes: 51" and 57" diameter and 22" – 60" width
- > 51" and 57" Giant Swift Change Rims also available as Giant Standard Rim profile
- > Swift Change Rims available for 63" diameter
- > Ease of service/maintenance
- > Typical applications: 120 Ton – 280 Ton Haul Truck
- > Reduced downtime/easier tyre fitting
- > Maximising equipment efficiency = Increased productivity
- > Complete wheel solutions available
- > GKN Wheels' diverse product range and global presence mean that we are well-placed to be the a key supplier for all mining wheels requirements



GIANT SWIFT CHANGE – INNER RIM >



DIMENSIONAL INFORMATION

RIM SIZE	A RIM SIZE		B RIM WIDTH		C FLANGE HEIGHT		D FLANGE WIDTH		E BEVEL POSITION		F GUTTER DIAMETER		G RIM BASE DIAMETER		H VALVE HOLE POSITION	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
51 - 24.00 / 5.0	1,295.4	51.0	609.6	24.0	127.0	5.0	98.55	3.88	148.84	5.86	1,148.60	45.22	1,212.6	47.74	310.0	12.20
57 - 29.00 / 6.0	1,295.4	51.0	736.6	29.0	152.4	6.0	121.92	4.80	148.84	5.86	1,300.99	51.22	1,365.0	53.74	318.4	12.53

INNER RIM ASSEMBLY INFORMATION

RIM SIZE Dia-width/ Flange HT.	RECOMMENDED TYRE SIZE(S)	PART NUMBERS					ASSEMBLY WEIGHT (KG/LBS)	
		RIM BASE	BEADSEAT	FLANGE (2 required)	LOCK RING	O-RING ¹		
51 - 24.00 / 5.0	33.00* 51	RM5124003	BS51003	FL51004	LR51007	OR451T	1,217	2,683
57 - 29.00 / 6.0	40.00* 57, 46/90R 57, 37.00R 57	RM5729003	BS57003	FL57003	LR57004	OR457T	1,587	3,499

¹O-ring – for reference only

TECHNOLOGY

SWIFT WHEEL TECHNOLOGY FROM GKN WHEELS >

Mining tyre and wheel servicing organisations work to help maximise machine productivity and efficiencies. GKN Wheels has worked closely with these organisations to design, manufacture and now launch a range of products to make it the supplier of choice for mining wheels.

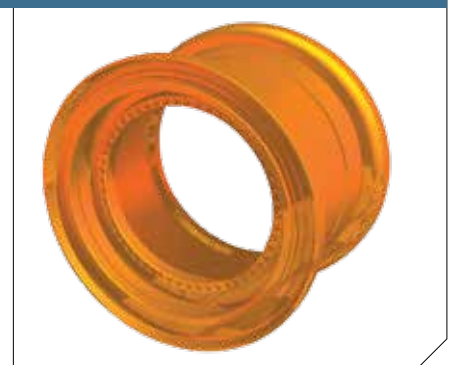


SWIFT CHANGE RIMS >

Changing or rotating a tyre assembly on a mining machine can be challenging and time consuming.

With GKN Wheels' Swift Change Rims, tyre removal is significantly faster than with standard rims ensuring machine downtime is minimised.

- > Swift Change Giant Mining Truck Rims 51"
- > Swift Change Giant Mining Truck Rims 57"
- > Swift Change Mega Haul Truck Rims 63"



SWIFT ID >

Swift ID chips use radio-frequency electromagnetic fields via a wireless system to transfer data from the tag attached to the wheel to a handheld reader of the service/maintenance team. Data from the handheld device is transferred to a centrally synchronised database which can be easily accessed online anywhere in the world.

Swift ID will provide data on part number, manufacture date, bill of material, service intervals, rim assembly information and spare parts information.

Data available will include:

- > Part number
- > Unique ID number
- > Manufacture date
- > Bill of materials/Spare parts etc
- > Quality sign off
- > Safety instructions
- > Torque values
- > Re-torque guidelines
- > Maintenance checklist

Key Features & Benefits >

- > Swift ID chips are easily attachable to the wheel
- > Scratch and moisture resistant
- > Customised software designed for the handheld readers
- > Customised web based tracking software



Swift ID

www.gknwheels.com/swift