

DEVELOPED TO WITHSTAND THE DEMANDS OF RAMP OPERATIONS

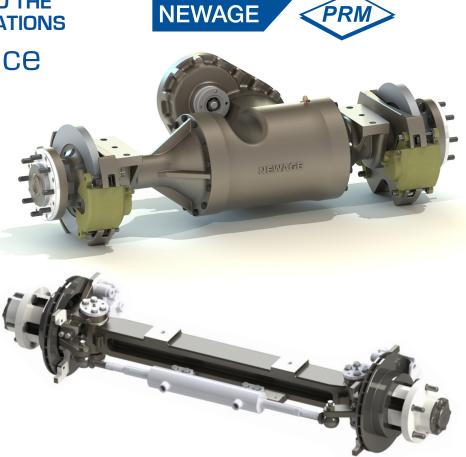
High performance

Steer and drive axles for GSE

RAMPTECH® NEWAGE Axles

are engineered as a direct replacement to provide a seamless conversion. They also offer greater compatibility with a variety of track widths and mounting widths.

The design of the RAMPTECH® NEWAGE Axles makes them the optimal extended life replacement for older axles or for new GSE applications.



KEY FEATURES AND BENEFITS

STEER AXLES

- No more king pins this axle uses a trunnion design with tapered roller bearings to provide better load distribution for longer life
- Solid cast iron construction much stronger than welded tubular construction

DRIVE AXLES

- · Greater load and towing capacity than gse axles used today
- Triple reduction gear sets with an inboard planetary design provides better load and torque distribution over a single ring and pinion gear set
- Multiple gear ratios are available easily matched to load and torque ratings
- Park brake options are available



RAMPTECH. NEWAGE GSE STEER AND DRIVE AXLES

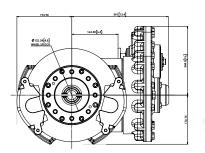
RAMPTECH® NEWAGE 512 SERIES DRIVE AXLE

512

NEWAGE

The RAMPTECH® NEWAGE 512 Series Drive Axle is the ideal replacement axle for GSE. It will fit most standard baggage and cargo tow tractors.

The 512 axle is a direct no hassle bolt-in replacement and provides a seamless conversion.





KEY FEATURES AND BENEFITS

- Axle load capacity up to 6,600 lbs. (3,000 Kg)
- Tow capacity up to 30 tons (27 tonnes)
- Triple reducation gear sets with inboard planetary design provides better load and torque distribution over single ring and pinion gear sets
- Multiple gear ratios available easily matched to load and torque requirements
- Uses same dual floating calipers, bolt-on rotors, and brake pads commonly used in gse
- Park brake options are available

SPECIFICATIONS

Standard Ratios

Nominal Axle Load Rating

Typical Vehicle Drawbar Pull

Brakes

Dry Weight

Park Brake

Wheel Fixings

Input Flange Type

Standard Mounting Centers

9.9 / 12.3 / 14.4 / 15.8 / 19.9

6,600 lbs. (3,000 kg) based on 48 in. (1,219 mm) wheel track maximum

towed load - 30 Tons (27 Tonnes)

6,000 lbs (26,700N)

Dual floating calipers, bolt-on rotors, and brake pads

commonly used in GSE

Approximately 660 lbs. (300 Kg)

Optional (disc mounted)

8 studs: $9/16 \times 18$ UNF - 3A on 6.5 in. PCD (165 mm)

30.11 in. (765 mm) mounting centers, across 6.25 in. (159 mm) with

4 x 0.811 in. (21 mm) diameter holes

(Optional mountings and track widths are available upon request)

- CHARLATTE CT5G
- NMC WOLLARD 60
- TAYLOR DUNN/ TIGER TC 30/60
- TUG M1A
- TUG MA30/MA50
- TUG MR/MT
- TROWIN MK3
- Inquire for other applications



RAMPTECH® NEWAGE 512S SERIES DEAD STEER AXLE

512S

The RAMPTECH® NEWAGE Dead Steer Axles are the ideal

replacement axles specifically designed for TUG MA tractors. This design can be adapted to other tractors. Please let us know your requirements.

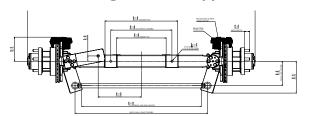


RAMPTECH® NEWAGE Dead Steer Axles

use trunnion knuckles similar to those used large aircraft tow tractors.

The 512S axle is the only cast iron I-beam design for GSE applications





Shown with optional brakes and power steering. Please designate the configuration when ordering.

KEY FEATURES AND BENEFITS

- Solid cast iron "I" beam more durable than welded tubular construction
- Solid cast iron knuckles stronger than welded assemblies
- No more king pins this axle uses a trunnion design with tapered roller bearings to provide better load distribution for longer life
- · Greaseable joints and draglink

SPECIFICATIONS

Max Steer Angle 55°

rigio

5,000 lbs. (2,268 Kg) based on 48 in. (1,219 mm) track

Brakes

Single floating calipers with bolt-on rotors (NOTE: Track increases to 52" (1320 mm) with brake option)

Dry Weight

209 lbs. (95 Kg)

Wheel Fixings

1/2 x 20 UNF on 5.5 PCD (140 mm)

Standard Mounting Centers

Nominal Axle Load Rating

 $15.48\ \text{in.}$ (393 mm) across 3.14 in. (80 mm) x 3.14 in. (80 mm) diameter section

- TUG MA30/MA50
- TIGER TC 40/60
- TROWIN MK3
- Inquire for other applications



RAMPTECH® NEWAGE 512DS DEAD DRIVE AXLE

512DS

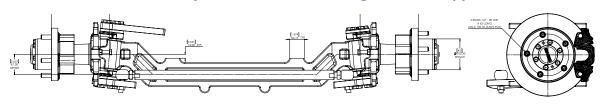
The RAMPTECH® NEWAGE Dead Steer Axles are the ideal

replacement axle specifically designed for TUG M1A tractors. This design can be adapted to other tractors. Please let us know your requirements. NEWAGE PRM

RAMPTECH® NEWAGE Dead Steer Axles

use trunnion knuckles similar to those used large aircraft tow tractors.

The 512S axle is the only cast iron I-beam design for GSE applications



Shown with optional brakes and power steering. Please designate the configuration when ordering.

KEY FEATURES AND BENEFITS

- Solid cast iron "I" beam more durable than welded tubular construction
- Solid cast iron knuckles stronger than welded assemblies
- No more king pins this axle uses a trunnion design with tapered roller bearings to provide better load distribution for longer life
- · Greaseable joints and draglink

SPECIFICATIONS

Max Steer Angle 40°

Nominal Axle Load Rating 5,000 lbs. (2,268 Kg) based on 48 in. (1,219 mm) track

Brakes Single floating calipers with bolt-on rotors

Dry Weight 205 lbs. (93 Kg)

Wheel Fixings 1/2 x 20 UNF on 5.5 PCD (140 mm)

Standard Mounting Centers 16.22 in. (412 mm) across 3/14 in. (80 mm) x 3.14 in. (80 mm) diameter section

- TUG M1A
- Inquire for other applications



RAMPTECH® NEWAGE 612 SERIES **DRIVE AXLE**

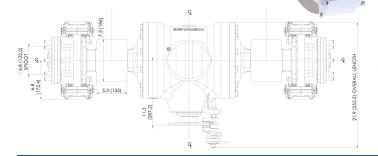
612

The RAMPTECH® NEWAGE 612 Series GSE tractor axles are designed as a direct replacement for the Meritor (Axletech) TA268 axle. With two types of wheel configurations and three gear ratios there is an option available to meet any operational requirements.

NEWAGE



The 612 series axle features robust, heavy duty military grade calipers to ensure optimal performance under the toughest demands.





KEY FEATURES AND BENEFITS

- · Military grade brake system
- In-board planetary design
- · Optional pinion-mounted disk parking brake
- Uses original wheels

SPECIFICATIONS

Standard Ratios

Nominal Axle Load Rating

Typical Vehicle Drawbar Pull

Brakes

Dry Weight

Park Brake

Wheel Fixings

Standard Mounting Centers

F8 studs: M 20 x 1.5 on 10.83 in. (275 mm) PCD or 8 studs: 9/16 x 18 UNF - 3A on 6.5 in. PCD (165 mm)

Input Flange Type

13.2 / 15.8 / 19.7

14,300 lbs. [6,486 Kg] based on 48 in. [1,219 mm] wheel track Maximum Towed Load - 60 Tons (54 Tonnes)

14,000 lbs. (62,275 N)

Dual caliper 4 piston hydraulic disc brakes

Approximately 730 lbs. [330 Kg]

Optional (disc mounted)

Between 23.5 in. (597 mm) and 30.3 in. (770 mm)

HS1410

- NMC WOLLARD M100
- TAYLOR DUNN TC100/120
- Inquire for other applications



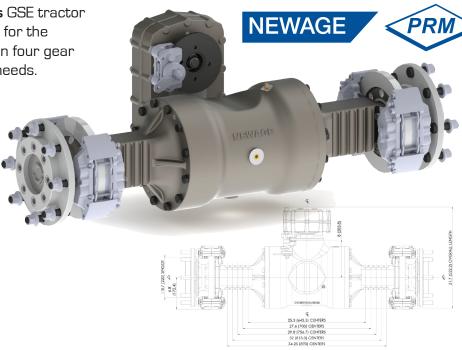
RAMPTECH® NEWAGE 613 SERIES DRIVE AXLE

613

The RAMPTECH® NEWAGE 613 Series GSE tractor axle is designed as a direct replacement for the Omsi axles. The 613 axles are available in four gear ratios to suite your specific operational needs.

This axle features external heavy duty military grade calipers replacing the inboard wet brakes used on the Omsi axle. This makes servicing the brakes significantly quicker.

The 613 axle can be used as a direct drop-in replacement for the TUG MR/MT tractor or inquire for other applications.



KEY FEATURES AND BENEFITS

- Military specification brake system
- In-board planetary design
- Optional pinion-mounted disk parking brake

SPECIFICATIONS

Standard Ratios 10.1 / 13.2 / 15.8 / 19.7

Nominal Axle Load Rating 12,100 lbs. [5,500 Kg] based on 50 in. [1,270 mm] wheel track

Maximum Towed Load - 60 Tons (54 Tonnes)

Typical Vehicle Drawbar Pull 12,000 lbs. (53,400 N)

Brakes Dual caliper 4 piston hydraulic disc brakes

Dry Weight Approximately 880 lbs. (400 Kg)

Park Brake Optional (disc mounted)

Wheel Fixings 8 studs: M 20 x 1.5 on 10.83 in. (275 mm) PCD or 8 studs:

 $9/16\,x$ 18 UNF – 3A on 6.5 in. PCD (165 mm)

Standard Mounting Centers Between 25.3 in. (643 mm) and 34.25 in. (870 mm)

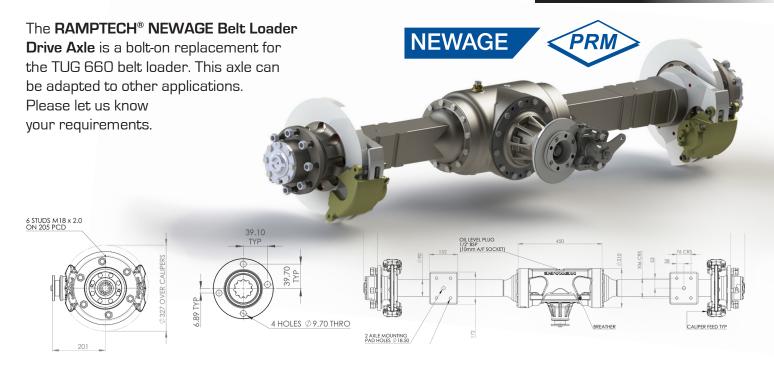
Input Flange Type HS1410

- TUG MR/MT
- TROWIN MK4
- Inquire for other applications



RAMPTECH® NEWAGE 216B BELT LOADED DRIVE AXLE

216B



KEY FEATURES AND BENEFITS

- Floating calipers, bolt-on rotors, and brake pads common to the GSE industry
- · Optional disk-mounted parking brake
- Direct replacement for THE original 660 axle

SPECIFICATIONS

Standard Ratios 14

Nominal Axle Load Rating 7,000 lbs. (3,200 Kg) based on 64 in. (1,626 mm) wheel track

Brakes Single floating calipers with bolt on rotors

Dry Weight 397 lbs. (180 Kg)

Park Brake Optional (disc mounted)

Wheel Fixings 8 studs: 9/16 x 18 UNF- 3A on 6.5 in. PCD (165 mm)

Standard Mounting Centers 39.75 in. (1010 mm) mounting centers and across 3.625 in. (92 mm) x 3 in. (76 mm) axial recess centers with diameter

of 0.590 in. (15 mm) for 'U' bolt mountings

Input Flange Type HS1410

Differential Limited Slip Differential (optional open differential)

- TUG 660 BELT LOADER
- Mallaghan SKYBELT
- Mallaghan BENDIBELT
- PHOENIX MBL
- Inquire for other applications



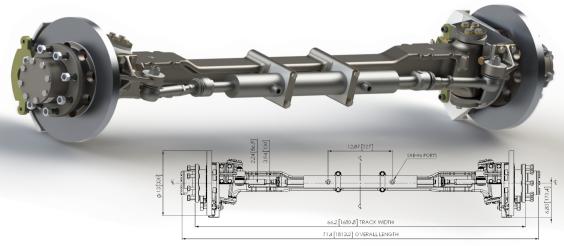
RAMPTECH® NEWAGE 216S DEAD STEER AXLE

216S

The RAMPTECH® NEWAGE Belt Loader Drive Axle is a bolt-on replacement for axles used in belt loader applications.



This axle is made from durable solid cast iron constructed "I" beam, solid cast iron steer knuckles, non-king pin design using tapered roller bearing trunnions, and maintenancefree tie rods.



KEY FEATURES AND BENEFITS

- Solid cast iron "I" beam more durable than welded tubular construction
- Solid cast iron knuckles stronger than welded assemblies
- No more king pins this axle uses a trunnion design with tapered roller bearings to provide better load distribution for longer life
- Self-lubricating joints and draglink

SPECIFICATIONS

Max Steer Angle

Nominal Axle Load Rating

6,400 lbs. (2,900 Kg) based on 66.2 in. (1,682 mm) wheel track

Brakes Single floating calipers with bolt-on rotors

Optional (disc mounted)

Dry Weight

349 lbs. (158 Kg)

Park Brake Wheel Fixings

Standard Mounting Centers

8 studs: 9/16 x 18 UNF - 3A on 6.5 in. PCD [165 mm]

39.75 in. (1010 mm) mounting centers and across 3.625 in. (92 mm) x 3 in. (76 mm) axial recess centers with diameter of 0.590 in. (15 mm) for 'U' bolt mountings

APPLICATIONS

- TUG 660 BELT LOADER
- · Mallaghan SKYBELT
- Mallaghan BENDIBELT
- PHOENIX MBL
- Inquire for other applications



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US & CANADA +1-631-501-1300 customerservice-hg@sageparts.com

MEXICO, CARIBBEAN & LATIN AMERICA +57-311-297-8100 customerservice-mcla@sageparts.com

ASIA PACIFIC +852 2949 6257 customerservice-hk@sageparts.com

HINITED KINGDOM +44 0 161 8642246 customerserviceuk@sageparts.com

EUROPE +331 64 02 53 00 customerservice-eu@sageparts.com



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