



**JOHN DEERE**

*Inboard  
Planetary Axles*

**Funk™ Drivetrain Components**



***For heavy-duty applications,  
choose axles that can carry the load.***



**BEYOND THE BOUNDARIES**

# ***Tough jobs call for tough axles***

---

## ***Funk inboard planetary axles are as tough as they come***

When workloads are heavy and conditions are harsh, your equipment needs axles that can handle the pressure.



Our TeamMate™ II family of axles has proven itself over and over – and under the most stringent conditions. Their strength and durability have made them a fixture in the forestry, ag, oil field, mining, and construction industries, as well as in a number of specialty applications.

Our high-torque, low-speed axles are designed using a building-block concept that enables us to offer thousands of configurations and, essentially, to custom-build an axle to fit your torque and load requirements precisely.

All Funk axles are non-steerable, and are built strong to contribute to the rigidity of your equipment's frame. And because they offer wide bearing spacing, they give you additional track width flexibility.

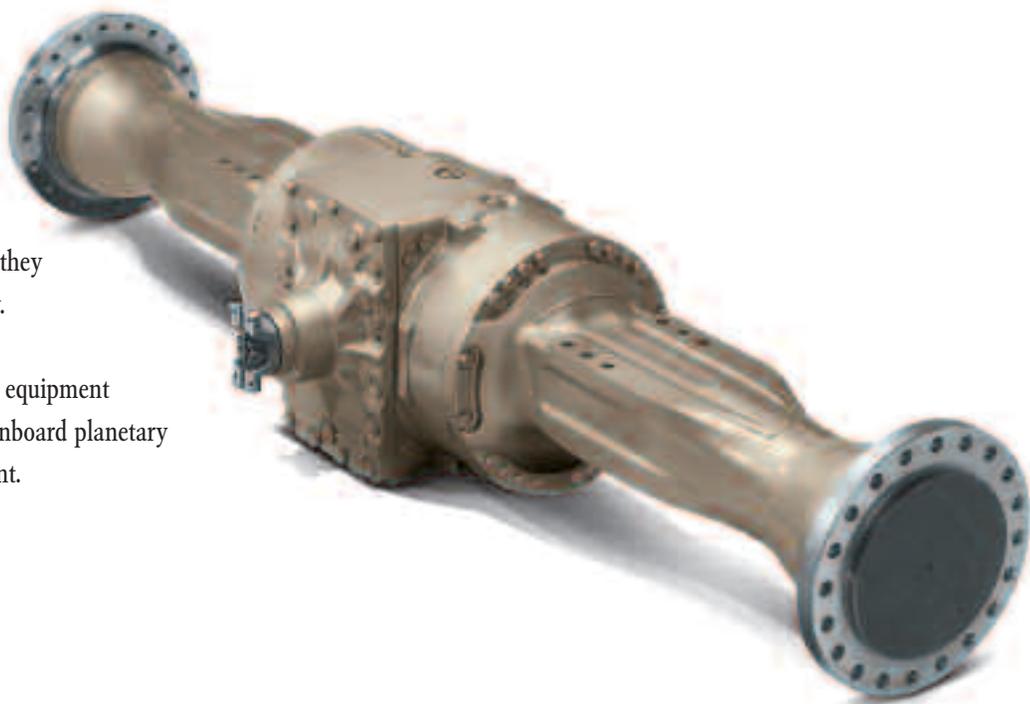
We're committed to adding value to your equipment and giving you a competitive edge. Our inboard planetary axles are one example of that commitment.

## ***For low ground pressure applications, ask for SWEDA™***

SWEDA is our Super Wide Extreme Duty Axle, and it's ideal in situations where your vehicles must leave only a minimal footprint without sacrificing rugged performance. Dual and wide tires can help in such situations, but they create additional demands on the axle – and that's where SWEDA comes in.

SWEDA offers greater flange-to-flange length, larger axle shaft size, and increased outboard bearing capacity. In addition, we employ metal-to-metal face seals to prevent oil leakage and keep debris out of the axle.

For demanding applications, be sure you ask for SWEDA.



# TeamMate II facts and figures

## SERIES 1200

Peak vertical load	Flange to flange	Reduction ratios: 15	Peak axle torque
240,000 N (54,000 lb)	1300 mm (51.18 in) 1500 mm (59.10 in) 1700 mm (66.93 in) 1953 mm (76.89 in)	Min. 4.333:1 Max. 33.429:1	35,000 Nm (310,000 in-lb) per axle shaft

## SERIES 1400

Peak vertical load	Flange to flange	Reduction ratios: 12	Peak axle torque
300,000 N (67,000 lb)	1700 mm (66.93 in) 1953 mm (76.89 in) 110 mm (4.33 in)*	Min. 16.208:1 Max. 32.914:1	47,400 Nm (420,000 in-lb) per axle shaft

\*Only with 6.400:1 FD ratio reduction.

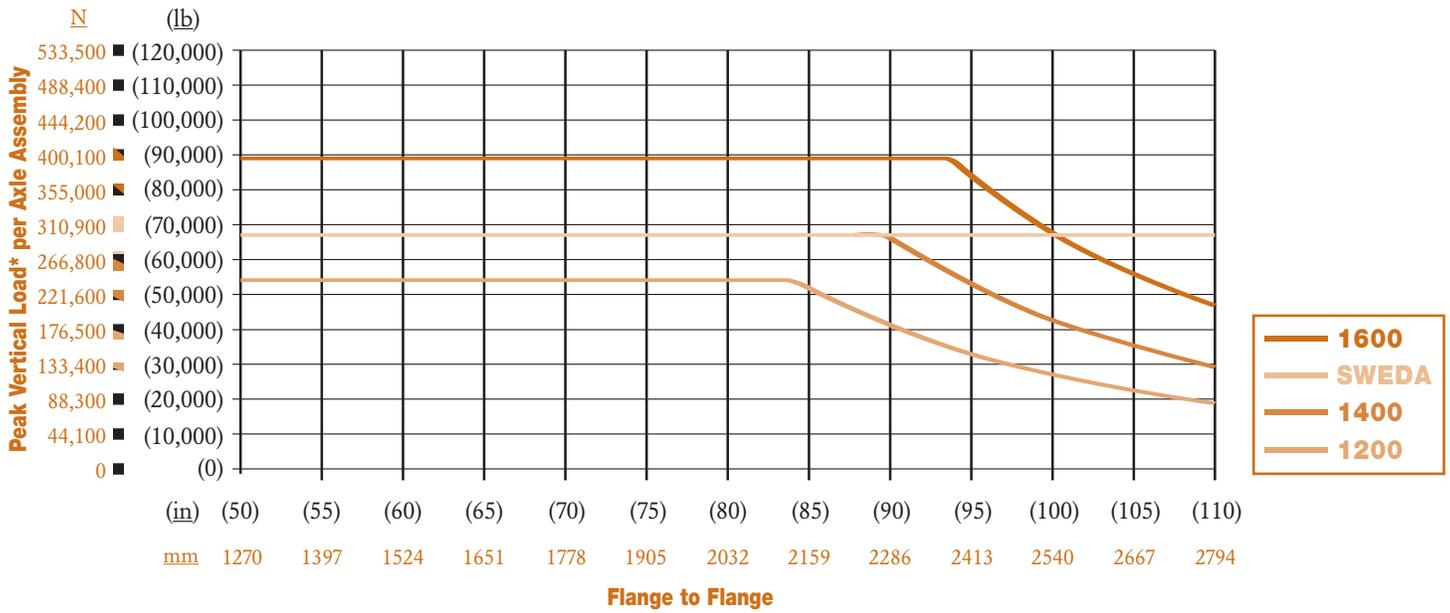
## SERIES 1400 SWEDA

Peak vertical load	Flange to flange	Reduction ratios: 3	Peak axle torque
300,000 N (67,000 lb)	2540 mm (100.00 in)	Min. 27.927:1 Max. 30.578:1	47,400 Nm (420,000 in-lb) per axle shaft

## SERIES 1600

Peak vertical load	Flange to flange	Reduction ratios: 6	Peak axle torque
395,000 N (88,000 lb)	1994 mm (78.50 in) 2094 mm (82.40 in) 2198 mm (86.54 in)	Min. 16.208:1 Max. 29.922:1	67,700 Nm (600,000 in-lb) per axle shaft





\*Peak load level (fixed axle) assuming traction-limited condition, 0.5 traction coefficient, and a specified loaded tire rolling radius.



# *TeamMate II axles at a glance*

---

## **Spiral bevel gear set**

- Designed for bidirectional operation
- Reduced sliding-tooth contact for longer life

## **Multiple inboard wet disc brakes**

- Larger sump means cooler operation and longer life
- Protected from contaminants
- Last up to four times longer than dry disc brakes
- Spark-free for hazardous environments
- Independent or dual-activated for design flexibility
- Hydraulically applied – automatic adjustment reduces routine maintenance costs
- Anti-chatter brake facing improves operation
- Annular brake (1,000 psi/6,895 kPa) offers greater installation flexibility with lower operating pressure, increased torque capacity, and decreased brake repair costs
- Parking brake option

## **Building-block design**

- Thousands of configurations
- Properly sized axles minimize installation costs
- Wide range of standard reduction ratios that match up with existing powertrain components
- Fixed-mount or centerline oscillation vehicle mounting options
- Large mounting area on axle housing accommodates variety of frame-mount locations
- Axle flange stud hole or tapped hole options
- Simple design means fewer parts for greater reliability, minimal parts and service inventory

## **Differential options**

- Standard, no-spin, or John Deere DIF-LOK, matched to application requirements
- Operator-controlled DIF-LOK matches axle operation to conditions; provides better steering control, maneuverability, and tire life
- Hydraulic design for on-the-go engagement

## **Oscillation**

- Centerline oscillation reduces driveline arc for longer life
- Eliminates need for cradle, reducing installation costs
- Dual-pivot oscillation means easy installation, adjustment, and maintenance

## **Input yoke dust seal**

- Improves life of long-input shaft seal

## **Inboard planetary reduction**

- Large planetary handles torque and forward-reverse transitions
- Larger sump for cooler operation
- Planetary doesn't compete with wheel space, so tire size is flexible



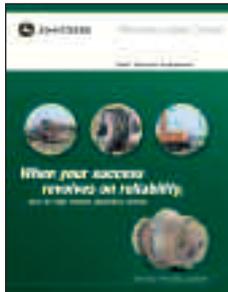
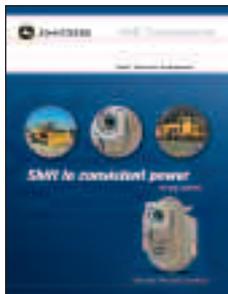
For additional information, contact:

**John Deere Power Systems**  
3801 West Ridgeway Avenue  
P.O. Box 5100  
Waterloo, IA 50704-5100  
Phone: +1 800 533 6446 (U.S.)  
Phone: +1 319 292 6060 (Canada)  
Fax: +1 319 292 5075  
E-mail: [jdpower@JohnDeere.com](mailto:jdpower@JohnDeere.com)

**John Deere Power Systems**  
Doornelei, 24  
2018 Antwerpen  
Belgium  
Phone: +32 3 238 89 69  
Fax: +32 3 248 54 98

## Want more information?

For additional information on Funk drivetrain components, please request our brochures.



# Proven off-highway performance

## Your equipment deserves nothing less

Staying true to the John Deere commitment, Funk drivetrain components incorporate over 150 years of off-highway vehicle experience.

Our continued promise is to provide you with an array of robust designs to meet your demanding OEM needs. When you choose a Funk inboard planetary axle, you know you are getting the best combination of performance, reliability, and durability.

Our application engineers are ready to assist you in selecting the options that best fit your needs. We also offer dedicated OEM service and long-term aftermarket support.

To see the value we can add to your equipment, call us today at 1-800-533-6446.

## The power of a worldwide support network

With John Deere, you never have far to go to find expert assistance and advice. The more than 4,000 service locations throughout the world give you peace of mind that you can get service when and where you need it.

