Product Overview
Progress and Expertise from Bietigheim-Bissingen

As a medium-sized family company which specializes in the development, construction and production of high quality drive systems, we have proved ourselves for over 80 years developing excellent solutions in the field of drive technology. New production technologies require more complex drive systems and their components must meet strict requirements in quality and performance. ATLANTA has repeatedly adopted and implemented these requirements in new and innovative products over the recent years. We are a dependable worldwide partner and manufacturer for many different industries, including machine tool, woodworking, material handling, robotic, food packaging, special machinery and many others trust the products „Made by ATLANTA“.

Consistent quality and innovation
The consistently high quality of all ATLANTA products has always been and is always the driving force of our work. Certification to ISO 9001:2008 is the basis for the high standard of ATLANTA quality assurance both in the standard range as well as customized solutions.

Working together as true partners
We always work on a par with our customers: An intensive cooperation in all project phases creates the basis for our efficiency and success. Our national and international customers alike appreciate the sound and professional advice of our specialists. In addition, we offer fast and reliable support for technical questions and issues.

Drive technology at the highest level
We are an established manufacturer of drive technology and produce in our three plants in Bietigheim-Bissingen (Germany) high quality products like low-backlash gearboxes, racks and gears. Constant development guarantees to us to be ready for complex challenges in drive technology. Next to our extensive catalog range, we have customized solutions for servo gear-heads, linear actuators and racks as well.

Over 80 years experience in the field of Driving Elements

Eugen Seidenspinner founded the company ATLANTA Zahnrad- und Werkzeugfabrik 1933

- 1933: Beginning of the current catalog program with chain drives
- 1953: Introduction of high-performance servo gear units
- 1958: Development of integrated racks
- 1962: Market launch of the HT-High-torque gear units
- 1964: Market launch of Q4 racks and TR-pinion
- 1979: Market introduction of new E-Servo worm gear unit
- 1987: Development of the lubrication system
- 1993: Market launch of a high-speed lifting gear unit
- 1998: Development and market launch of new B-Servo worm gear unit
- 2000: Development of integrated racks
- 2003: Market launch of the HT-High-torque gear units
- 2005: Market launch of the new E-Servo worm gear unit
- 2007: Development of a new servo gear unit
- 2008: Market launch of a new design software SERVOSoft®
- 2012: Market launch of APG / APGS planetary gear units
- 2013: Development of a new design software SERVOSoft®
- 2015: Market launch of APG / APGS planetary gear units
1 With over 600 different versions of high-quality racks, we are one of the largest suppliers worldwide.

2 A modern high-bay warehouse with more than 7000 articles ensures quick delivery to meet our customers’ required transmission components.

3 Together with our customers, we develop individual solutions in drive technology.

4 The longevity and reliability of our products is subjected to a continuous improvement process, so that you can trust on „Made by ATLANTA“.
More Flexibility
The new HT and HP Right-Angle Gearboxes with modular motor flange

As a new advancement of our product development, ATLANTA has redesigned the housings for the High Torque (Series 98) and High Performance (Series 58) Servo Gearboxes for increased flexibility.

Compared to the current version, it is no longer needed to change the complete gearbox if the motor changes. Only the motor flange and the input coupling would need to be changed, the basic gearbox would remain in place.

Food safe
The new servo gear units with food safe lubricant

Manufacturing of machinery for the food industry must comply with a set of rules for general safety requirements, including cleaning and disinfection for hygiene. While drive technology is used in food processing machines and systems, it is not technically possible to eliminate 100% of the contact of food with lubricant, so food-grade lubricants is a mandatory regulation in the food industry.

If needed, we supply our servo gear units filled with food safe lubricant for use in the food industry. Due to the increasing demand, we have decided to offer all ATLANTA Servo Gear Units with food-grade lubricant. For this we have introduced a separate article number range, which you will find in our catalog Servo Drive System, chapter GA to GE.

Example for ordering of ATLANTA servo gear units with food safe lubricant:

<table>
<thead>
<tr>
<th>Type</th>
<th>Synthetic Oil</th>
<th>Food Safe Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT-High Torque</td>
<td>98 03 005</td>
<td>98 03 105</td>
</tr>
<tr>
<td>HP-High Performance</td>
<td>58 03 005</td>
<td>58 03 105</td>
</tr>
<tr>
<td>E-Economy</td>
<td>59 03 005</td>
<td>59 03 105</td>
</tr>
<tr>
<td>B-Basic</td>
<td>57 03 005</td>
<td>57 03 105</td>
</tr>
</tbody>
</table>
The world’s most extensive range of precision racks together with the complete family of servo gear units, provides an unmatched range of combinations. With the modular system it is possible to achieve the best solution to almost all possible applications.

Possible fields of application:
- High precision machine tools with electrical preload
- Machine tools
- Lifting axes
- Multiple pinion contact
- Laser cutting machines

- Wood, plastic, composite, aluminium working machines
- Machine tools
- Integrated racks
- Water cutting machines
- Tube bending systems
- Plasma cutting machines
- Woodworking machines
- Linear axis with high requirement for a smooth running

Interface EN ISO 9409-1-A
Clamp Connection
Key Connection

UHPR
Ultra High Precision Rack
Quality 3 and Quality 5

HPR
High Precision Rack
Quality 6 and Quality 7

PR
Precision Rack
Quality 8

BR
Basic Rack
Quality 9 and 10
ATLANTA Racks
The widest program of high-quality racks worldwide

### UHPR
#### Ultra High Precision Rack
- **Q3 - Quality class 3**
  Module 5 - 12 straight and helical toothed, hardened teeth, ground on all surfaces, length up to 1000mm

- **Q5 - Quality class 5**
  StrongLine
  Module 3 - 6 straight and helical toothed, case hardened and ground teeth, length up to 1000mm

### HPR
#### High Precision Rack
- **Q6 - Quality class 6**
  Module 1.5 - 12 straight and helical toothed, hardened teeth, ground on all surfaces, length up to 2000mm
  **Integrated Racks**
  Module 2 - 4 helical toothed, pitch 5, 10 and 13.33mm straight toothed, for 90° and 180° assembly with rail

- **Q7 - Quality class 7**
  Module 2 - 8 straight and helical toothed, hardened and ground teeth, length up to 2000mm
  **Round Racks**
  Module 1 - 5 straight toothed, quenched and tempered, length up to 1000mm

### PR
#### Precision Rack
- **Q8 - Quality class 8**
  Module 2 - 5 helical toothed, hardened and ground teeth, length up to 2000mm
  **Integrated Racks**
  Module 2 - 8 straight and helical toothed, hardened teeth, for rework

- **Q9 - Quality class 9**
  Module 1.5 - 10 straight and helical toothed, hardened teeth, length up to 3000mm

- **Q10 - Quality class 10**
  Module 1.5 - 12 helical toothed, hardened teeth, length up to 2000mm
  Module 1 - 10 straight toothed, hardened teeth, length up to 3000mm

### Pinion and Pinion Shaft
- **Series 24**
  Module 1.5 - 10 straight and helical toothed, case hardened and ground teeth
  **Series 24**
  Module 2 - 8 straight and helical toothed, hardened teeth, for rework

- **Series 21/23**
  Module 1.5 - 12 straight and helical toothed, hardened teeth, length up to 2000mm

- **Series 13**
  with spline profile according DIN 5480
  Module 1.5 - 4, helical toothed, case hardened and ground teeth

- **Series 78**
  TR-Torque Reducing: Module 2 - 8 straight and helical toothed, case hardened and ground teeth, for interface analog EN ISO 9409-1-A
  
  Deutsch: Patent Nr. 10 2008 034 070.2

- **Series 22**
  Plastic: Module 1 - 3 straight toothed

- **Series 20**
  Pinion shaft: Module 2 - 6 straight and helical toothed, case hardened and ground teeth for hollow shaft with key and shrink-disc connection

- **Series 74**
  Pre-load pinion shaft for zero backlash at the rack-pinion drive, module 2 - 8 helical toothed, case hardened and ground teeth
HT - High Torque
Servo Worm Gear Units
- Backlash < 1 arcmin, adjustable
- 4 sizes: centre distance 50, 63, 80 and 100 mm
- 6 ratios: 4.75; 6.75; 9.25; 14.5; 19.5; 29
- Output torque: from 90 to 1700 Nm
- Output hollow shaft for clamp connection or with interface according EN ISO 9409-1-A, generously dimensioned and supported for high additional forces
- Highest rigidity
- Highest precision
- ATEX design available

HP - High Performance
Servo Worm Gear Units
- Backlash < 2 arcmin, adjustable
- 5 sizes: centre distance 50, 63, 80 and 100 mm
- 8 ratios: 4.75; 6.75; 9.25; 14.5; 19.5; 29; 39; 50 and 52:1
- Output torque: from 11 to 1100 Nm
- Output hollow shaft with key or for clamp connection, generously dimensioned and supported for additional forces
- High rigidity
- High precision
- ATEX design available

BG - Bevel Gear
Servo Bevel Gear Units
- Backlash < 6 arcmin
- 3 sizes: centre distance 50, 63 and 80 mm
- 3 ratios: 4.75; 6.75 and 9.25:1
- Output torque: from 100 to 450 Nm
- Output hollow shaft with key or for clamp connection, generously dimensioned and supported for additional forces
- Very high rigidity
- High precision

The ATLANTA family of servo gear units represents the widest range of servo-angle gear boxes with hollow shaft, which is currently available in the market. This provides the designer the ability to find the optimal solution for almost all requirements.
ATLANTA Linear Actuators
Maximum power for any situation

In addition to high-precision racks and low backlash servo worm gear units, ATLANTA product portfolio also includes linear actuators. Linear actuators as linear motion transmissions are used in all applications where infinitely variable and accurately controllable lifting, lowering, feeding, tilting, swivelling movements must be performed with the highest precision. It does not matter whether these are horizontal, vertical, pushing or pulling. With the HS-series ATLANTA provides a high performance screw jack gear unit which makes it possible to drive high feed rates even with heavy loads. In combination of power and speed make these over hydraulic lift drives high dynamics and a very accurate positioning within the applications.

Heavy duty ball screw drive with high load capacities, combine long life with highest precision

Safety grip nut with shutdown for safety-related systems

Our proven Servo Worm Gear Units with special bearings to absorb the spindle axial forces. Hardened and ground worm shaft. Worm wheel made of special heavy-duty bronze for long life under the highest loads. Compact design with <12 arcmin backlash.

Modular motor flange for three-phase AC and all common servomotors

Before shipment, all our products undergo a series of different tests. Only after all tests are passed, they are shipped to our customers.

Our lifting cylinders are painted as standard in RAL 5012. It can be seen from distance where ATLANTA linear actuators are installed and thus the highest level of precision and reliability is known.

ATLANTA show size! With a total length of 2551mm and 255kg total weight we have built for the company KDM GmbH one of our largest high performance screw jack gearboxes in lifting cylinder version.

The loading platform of a trailer is moved with four TS100 standard screw jack gearboxes.
**HS - High Performance Screw Jack Gearbox**
- 4 sizes: HS10, HS25, HS50 and HS100
- Load capacity: 5 to 100 kN
- Design version with ball screw spindle drive, with increased load rating: rotating spindle, non-rotating spindle, lifting cylinder
- Travelling speed: up to 550 mm/s
- Duty cycle: up to 100%
- Operating with three-phase AC and servomotor

**EH - High Thrust Linear Actuator**
- 2 sizes: EH 4 and EH 8
- Load capacity: 30 to 160 kN
- Design version with trapezoidal spindle drive (with self braking): rotating and non-rotating spindle
- Design version with ball screw spindle drive, increased load rating: rotating spindle and lifting cylinder
- Travelling speed:
  - Trapezoidal spindle drive up to 83 mm/s
  - Ball screw spindle drive up to 230 mm/s
- Duty cycle:
  - Trapezoidal spindle drive up to 20%
  - Ball screw spindle drive up to 100%
- Operating with three-phase AC and servomotor

**TS - Standard Screw Jack Gearbox**
- 6 sizes: TS2, TS5, TS10, TS25, TS50 and TS100
- Load capacity: 2 to 100 kN
- Design version with trapezoidal spindle drive: rotating and non-rotating spindle
- Travelling speed: up to 25 mm/s
- Duty cycle: up to 30%
- Operating with three-phase AC motor
ATLANTA Driving Elements
Boundless precision

Lubrication System
- Lubricator, ready for mounting with accessories
- 2 sizes: 125 cm³ and 475 cm³
- Design version with and without special grease
- Lubricants: Klüber Microlube GB0 and Structovis AHD
- Operating: battery or external power supply
- Individually desired dosage, adjustable by micro-switch
- Optional with electrical detection of end position
- Extensive accessories for refilling
- Felt gear and mounting shaft module 1 to 12
- Helical and straight tooth system

Assembly Units for Racks
Assembly Kit for Integrated Racks
Deutsches Patent Nr. 10 2008 053 445.5
- For 90° and 180° version
- Available on request

Assembly Kit for Racks
Deutsches Patent Nr. 10 2006 008 461.6-52
- For racks module 2 to 12, straight and helical tooth system
- The assembly kit includes:
  1x Adjusting device
  3x Gauging roller with magnet
  1x Measuring bridge with dial gauge

Standard Gear Units
- Standard Worm Gear Units
  - 6 sizes: centre distance 40, 50, 63, 80, 100 and 125 mm
  - 10 ratios: 6.75; 9; 12; 14; 19; 29; 39; 50; 52; 62 and 82:1
  - Output torque: from 19 to 1300 Nm
  - ATEX design available

- Worm Gear Motors
  - Load capacity: 0.12 to 11 kW
  - 2, 4, 6 and 8-pole three-phase AC motor with and without brake

- Standard Bevel Gear Units
  - Heavy-duty and light version
  - 5 ratios: 1; 1.5; 2; 3 and 5:1
  - Output torque: from 2.3 to 400 Nm

Driving Elements
Over 7000 different articles directly available:
- Cylindrical worm gear drives
- Straight vevel gears
- Precision spindle drives
- Synchronous timing-belt drives
- Chain drives and accessories
- Slip hubs
- Couplings
- Shaft joints
- Connecting elements
- Stainless driving elements
Agents-Export

Austria
TAT-Technom Antriebstechnik GmbH
www.tat.at

Belgium
Vansichen Linearstechnik BVBA
www.vansichen.be

Brazil
Automation Ind. Com. Imp. e Exp. Ltda.
www.automation.com.br

China
Tianjin Ace Pillar Enterprise Co., Ltd.
www.acepillar.com.cn

Czech Republic
TAT-pohonová technika spol. s r.o.
www.cz-tat.cz

Denmark
CFT Tandhjulsfabrik A/S
www.cft.dk

Finland
EIE Maskin OY
www.eie.fi

Great Britain / Ireland
HMK Technical Services Ltd.
www.hmkdirect.com

Greece
gti-kyma
www.gti-kyma.com

India
Fluro Engineering PVT LTD
www.fluroengg.com

Italy
via ATLANTA Antriebssysteme
www.atlantagmbh.de

Korea
Intech Automation Inc.
www.intechautomation.co.kr

Netherlands
Reich-aandrijftechniek B.V
www.reich-aandrijftechniek.nl

Norway
EIE Maskin AS
www.elseko.no

Poland
Pivexin Technology sp. z o.o.
www.pivexin-tech.pl

Russia
Bibus o.o.o.
www.bibus.ru

Singapore
IMAO Machine Components
www.imao-ind.com

Slovakia
Rastech s.r.o.
pleva@rastech.sk

Spain / Portugal
Brotomatic S.L.
www.brotomatic.es

Sweden
EIE Maskin AB
www.eie.se

Switzerland
RELEX AG Antriebstechnik
www.relex.ch

Taiwan
Ace Pillar Co., Ltd.
www.acepillar.com.tw

Turkey
EKSIM Mühendislik Ltd. Sti.
www.eksimmuhendislik.com

Sales branch offices

USA
ATLANTA Drive Systems, Inc.
1775 Route 34, Unit D-10
USA - Farmingdale, NJ 07727
www.atlantadrives.com

France
ATLANTA Neugart France S.A.R.L.
9, Rue Georges Charpak
F-77127 Lieusaint
www.atlanta-neugart.com

People's Republic of China
ATLANTA Drive Technology (Shanghai) Co., Ltd
501, F/S, Building 1
389 Gangqiao Road Waigaoqiao Free Trade Zone
Postcode 200131
Shanghai, P.R. China
www.atlanta-asia.com

Austria
TAT-Technom Antriebstechnik GmbH
www.tat.at

Belgium
Vansichen Linearstechnik BVBA
www.vansichen.be

Brazil
Automation Ind. Com. Imp. e Exp. Ltda.
www.automation.com.br

China
Tianjin Ace Pillar Enterprise Co., Ltd.
www.acepillar.com.cn

Czech Republic
TAT-pohonová technika spol. s r.o.
www.cz-tat.cz

Denmark
CFT Tandhjulsfabrik A/S
www.cft.dk

Finland
EIE Maskin OY
www.eie.fi

Great Britain / Ireland
HMK Technical Services Ltd.
www.hmkdirect.com

Greece
gti-kyma
www.gti-kyma.com

India
Fluro Engineering PVT LTD
www.fluroengg.com

Italy
via ATLANTA Antriebssysteme
www.atlantagmbh.de

Korea
Intech Automation Inc.
www.intechautomation.co.kr

Netherlands
Reich-aandrijftechniek B.V
www.reich-aandrijftechniek.nl

Norway
EIE Maskin AS
www.elseko.no

Poland
Pivexin Technology sp. z o.o.
www.pivexin-tech.pl

Russia
Bibus o.o.o.
www.bibus.ru

Singapore
IMAO Machine Components
www.imao-ind.com

Slovakia
Rastech s.r.o.
pleva@rastech.sk

Spain / Portugal
Brotomatic S.L.
www.brotomatic.es

Sweden
EIE Maskin AB
www.eie.se

Switzerland
RELEX AG Antriebstechnik
www.relex.ch

Taiwan
Ace Pillar Co., Ltd.
www.acepillar.com.tw

Turkey
EKSIM Mühendislik Ltd. Sti.
www.eksimmuhendislik.com

USA
ATLANTA Drive Systems, Inc.
1775 Route 34, Unit D-10
USA - Farmingdale, NJ 07727
www.atlantadrives.com

France
ATLANTA Neugart France S.A.R.L.
9, Rue Georges Charpak
F-77127 Lieusaint
www.atlanta-neugart.com

People's Republic of China
ATLANTA Drive Technology (Shanghai) Co., Ltd
501, F/S, Building 1
389 Gangqiao Road Waigaoqiao Free Trade Zone
Postcode 200131
Shanghai, P.R. China
www.atlanta-asia.com