

5.23-2



*Renewed economy  
at its best*

E

**FLENDER**

5:23 | Sunrise



Effectively converting the power of the sun: Flender drives help to perfectly exploit regenerative energy sources. **CAVEX worm gear units** in solar collector tracking drives help to catch the sunlight and thus ensure the best possible conversion from energy into electric current.



## ***Flender: Tradition & innovation***

**Quality power transmission to the customers' advantage**

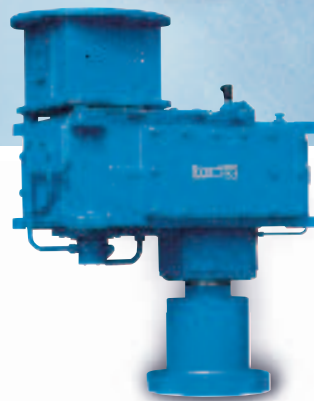
For over 100 years Flender stands for design, development, and manufacture of state-of-the-art power transmission equipment. With innumerable new designs and their development, the company achieved the market and technology leadership in many fields of application. Thanks to the specialist experience of the Flender engineers, complex technical components become easily applicable high-tech products. From advice via design and manufacture down to sales and service, Flender offers its customers to be their partner over the entire product life cycle – world-wide for standard and special design solutions.



5:42 | Starting into the day

*Service, too, has contributed to making Flender a successful international company which optimally links tradition with innovation. Flender – as the partner of the mechanical and plant engineering industry – stands by the customers' side, wherever they engage themselves, and for that uses the latest means of communication. Besides a worldwide network of more than 80 branch offices, subsidiaries and sales offices, a time- and cost-saving preventive maintenance system ensures comprehensive customer care. Highest demands on quality and safety in processing are issues for which Flender finds the best possible technical solutions – successfully.*

*Most modern manufacturing facilities such as the gear unit assembly plant in Friedrichsfeld form the basis for high-quality products. Highly skilled employees guarantee optimal realization and comprehensive after-sales service; they are the best ambassadors of Flender's corporate culture.*



*Environmentally friendly sewage treatment plant with Flender drive components. No matter whether the disposal of industrial or domestic sewage water is concerned: the company offers drive solutions for all cases, e.g. **FLENDER aerator gear units**.*



7.1



7:12 | Breakfast



*Flender helps to provide not only the salt for your soup, but also the sugar for your tea. Manufacturers of sugar mills rely on Flender power transmission equipment. The sugar extraction process requires sophisticated machines which are driven by mechanical and electrical components, e.g. by [PLANUREX planetary gear units](#).*



7:46 | The tram arrives

# *The right partner for each industrial sector*

Everyday, you have it in black and white



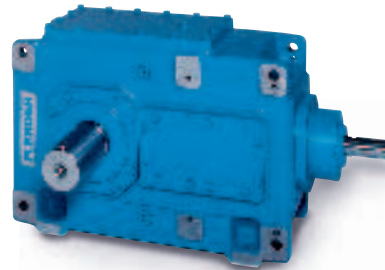
8:02 | News



*The printing and paper-making machinery industries rely on **FLENDER gear units**. The products are perfectly suitable for the papermaking and finishing plants which require highly sensitive controllable drives with reliable control units.*



*On the way to work and back home, people frequently meet Flender products: Tramways, railway motor coaches and locomotives are equipped with **FLENDER axle drives and couplings** ensuring safety, comfort and economy.*



Where energy is converted into motion – Flender is there. Over many years, wide-ranging experience and knowledge in power transmission technology was derived from our latest research programmes, which plays a part in everybody's everyday life. The early morning newspaper and the trade journal in the office are some examples. Flender is the right partner for each industrial sector and knows the customers and their markets. Each industrial sector has its own requirements, needs specific solutions and specialist advice. Therefore, Flender has set up business units where competence and knowledge have been concentrated. Thanks to the modular construction system, many industry-related drive solutions featuring

reliability and long service life can be realized from the standard product range. The resulting added value presents better sales possibilities for the customer. For the tried and tested standard and special design solutions result in a reduction of expenses and improved competitiveness. References from all over the world verify our wide-ranging industry-related competence. Owing to a high speed in realization, Flender is in a position to make technical progress by its own efforts and quickly offer solutions to its customers. At Flender's, "time to market" is not a one-way street: products are designed in continuous co-operation with the customers. After all, fast-moving markets need optimum solutions as fast as possible.





*Lifts in administration buildings and escalators in shopping centres frequently have one thing in common: Flender drives. With the compact **CAVEX worm helical gear units** the company offers drive solutions featuring indifference, high load bearing capacity, high performance, and low noise emission.*



8:24 | Arriving at the office



## **Global** **partnership**

**World-wide by the customer's side**

For Flender, the customer is always the centre of attention – in all corporate decisions. The vicinity to the customer and giving him specialist advice are very important. Flender supports its customers in their tasks with perfect service world-wide. The objectives have been clearly defined: short delivery times, high availability, as well

8:24-10-08



10:08 | Informing a customer



*Flender supports the production of copper which is, for example, used in telephone cables. Belt conveyor systems in copper ore mining profit from powerful **FLENDER bevel-helical gear units**; **FLENDER-PBUC gear units** are reliable drives for bucket wheel excavators.*



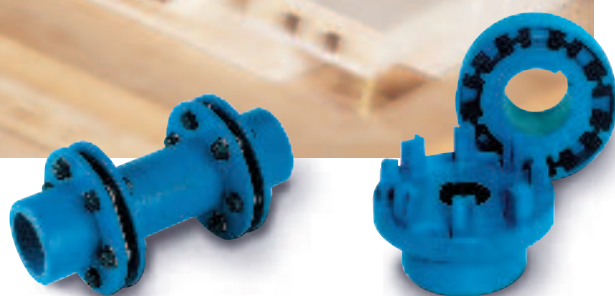
as strict keeping to delivery times. With its standard products, Flender relies on large quantities in order to be able to ensure optimum cost effectiveness.

All branch offices, subsidiaries, and sales offices work according to the Flender quality standards. This is supervised by quality officers in the 30 international assembly centres and all manufacturing facilities. In addition, the companies are interlinked via the Flender Information System (FIS) in such a way that customer information is immediately available at all locations. Including modern media into the processes of development, maintenance, and sales has advantages for all parties concerned.

Another advantage of Flender is the self-reliance in the castings area. By it, the dependence of the company on external suppliers is reduced and the delivery performance for the customers improved.

Flender Guss in Saxon Chemnitz/Wittgensdorf is one of the most modern mechanized foundries in Europe. It covers the entire castings demand of the company and is in a position to provide the international markets with substantial quantities. Owing to the latest production technology and highly productive manufacturing plants, Flender meets – also in this area – the highest standards set by customers from the various industrial sectors.





*ARPEX couplings and N-EUPEX couplings are proving themselves in the chemical industry. Here, drive solutions for delivering and pumping aggressive or hot media or explosion-proof drives are required.*



## ***A diversity of variants to meet the requirements***

**On good terms with e-commerce**

Product innovations and improving the development processes result in changes in technology, costs, and processes. And they result in different behaviour of people. At Flender, innovation processes are not only marked by the willingness of the staff to change and to develop; here the incentive for developing ideas as quickly as possible





16:03 | Preparing documents



Flender offers drive solutions for the construction equipment industry, for example, for cranes and concrete mixers. One of it is the **FLENDER hoisting gear drive**. The company offers its customers planning, control, programming, design, and start-up – from one source of supply.



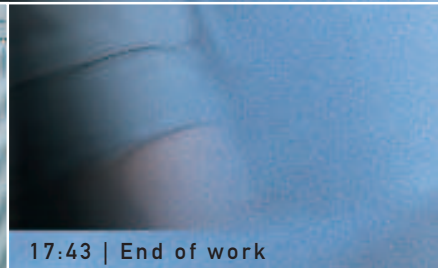
Plastic foils are made in plants equipped with **FLENDER single screw extruder gear units**. Furthermore, Flender offers standardized **double screw extruder gear units** for plastics and rubber processing machinery.

so that things become ready for production and an advantage for the customer, plays an important part. Flender gives its engineers freedom to think out ideas and transform them into products. Yet, it is not the short-term profit of the company which is to the fore, but the long-term success of the customers. After all, Flender will be successful only if the companies of its customers are successful.

This is one more reason why e-commerce was set up; it will become another support for international business relations. In addition to the sales structures, Internet

([www.flender.com](http://www.flender.com)) makes possible the detailed introduction of products and industry-related solutions. With the Net-CAT®, the customer can configure complete drive trains, download the CAD drawings, and integrate them into his system. Additionally, in the Flender store he has the opportunity to order products round the clock; even standard product spare parts can be quickly procured. The chemical industry, for example, profits from it, which according to our experience frequently orders from the standard product range. Thus, Flender fulfils customer requirements even faster.

17:43-18:46



17:43 | End of work



You can rely on **FLENDER girth gear units**. The production of building materials such as cement is optimized by Flender drive solutions. Excellent workmanship and standardized product design mean reduction in investment expense and operating costs for the customers.

## **Energy – Motion** **Flender**

**Engineering progress paying off**

The employees of Flender world-wide intensively work on it that their company will continue to be one of the market and technology leaders in power transmission technology.

As co-founder of "Forschungsvereinigung Antriebstechnik" (research association of the German power trans-





*Using the power of the wind: Flender gear units, couplings and generators for wind power stations ensure the best exploitation of natural energy sources. Particularly in view of the realization of highest efficiencies, **FLENDER gear units for wind power stations** provide a solution.*

mission companies) Flender has set as its goal to remain at the top of development by its own efforts. The company invests a lot in the development of the grown expertise, so R&D efforts being made are enormous. In the individual operative areas, Flender engineers cooperate directly with the customers of the mechanical and plant engineering industry and thus are able to include their requirements immediately in the innovation processes.

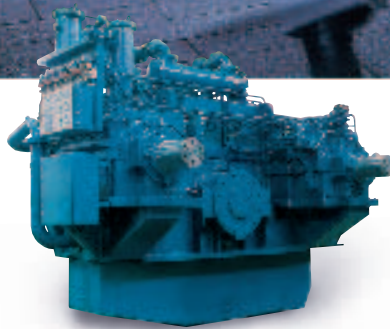
This in-house competence at Flender ensures that the customers' requirements for smaller, lighter and quieter systems will be met. This plays an important part, for

example, in the innovative wind power technology. In wind power stations becoming more and more powerful, the drive trains must show optimal noise, vibration and temperature behaviour. As partner of the equipment manufacturers, Flender continuously improves the powerful wind turbine gear units so that they perfectly fulfil the requirements in the confined space of the nacelle.

Complete innovative solutions for the entire drive train can also be offered to this industrial sector. The requirements are clear: high reliability, long service life, high efficiency, and thus better environmental compatibility.



20:03 | To the restaurant



*NAVILUS gearboxes are optimal components for marine propulsion systems. Flender engineers have specialist knowledge of gearboxes used in marine engineering which they provide customers of the shipbuilding industry already in the planning stage.*

## **Qualification** **results in quality**

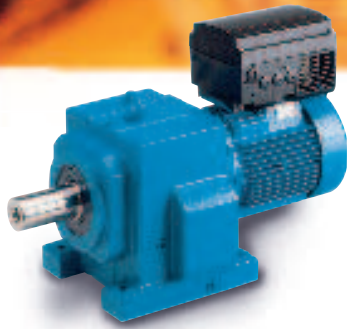
**By teamwork to Flender perfection**

The will to perfection – to Flender perfection – is the impetus for the highly skilled teams who by regularly attending training courses and seminars have the latest information on technology. Result: Flender products stand out due to their high reliability, high quality, and





20:38 | In good mood



*Flender takes care of the proper mixture: the food industry relies on **MOTOX-N helical geared motors** in mills and mixers. In co-operation with the leading OEMs, Flender drive systems are being continuously improved.*



long service life, no matter which loads they have to bear, for example, in a marine propulsion system. This is quality in accordance with the wishes and in the interests of our customers; the economic optimum achieved through technology and service.

The continuous improvement of the products is the foundation for their economic success. Flender goes even further and also continuously improves the creation of new products: in a separate department, all internal suggestions for improvements are collected and as part of the quality management assessed by a team of specialists, and realized for the benefit of the company and the customers. Experienced creativity and short ways to

decision are features of this form of manufacturing optimization. In this way, the functional scope, safety, quality, service life, and compatibility of Flender products are realistically and quickly improved by process optimization in the manufacture.

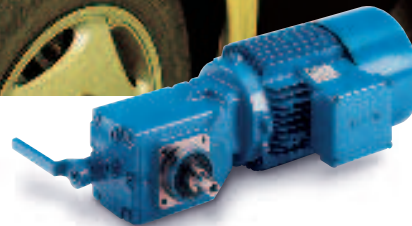
This success motivates the employees to accept new challenges. Through the close customer contact, experiences of users are unearthed again and again, which Flender engineers immediately include in the continuous improvement of the products.

Thus, working in partnership in product development is practised daily and serves as a basis for still more productivity and higher quality at Flender.

21:53:22



21:53 | Returning home



Flender's specialist experience in the automotive industry ensures the manufacture of cars, for **monorail suspension railway drives** play an important part in the assembly. Here, differentiated and customized Flender drive solutions for lifting and transporting are used.

## ***Flender: full service around the product***

**We have the complete product life cycle in our sight**

With each sale of a product, the customer relationship starts anew for Flender. Every customer can rely on the services of the company and the world-wide after-sales service on 365 days a year; re-engineering of outside products included. In addition to the advantages gained from the product by integral system solutions

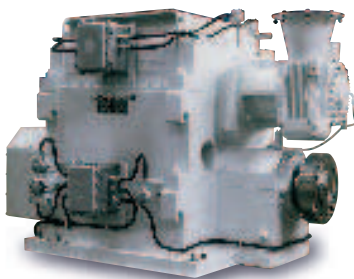




22:48 | Reading a good book



*Flender casts light on the matter: The company supplies **high-speed gear units** and **high-capacity motors** for the generation of power from regenerative energy sources and fossil combustibles. No matter in which conditions the drive systems have to work: quality by Flender ensures safety in production around the clock.*



the customer gets safety and services which cover the entire product live cycle.

An automatic monitoring system also contributes to it. In the service technology, power transmission and machine diagnostics knowledge have been combined with the practical experiences Flender engineers derived from the latest measuring, computing, and communications technology.

The telediagnosics and monitoring system GearControllor® makes possible early detection of irregularities caused by wear. Result: preventive maintenance concepts. Investment expense and operating costs at cus-

tomers are noticeably reduced and plant availability is increased to a maximum.

Flender engineers can carry out measurements worldwide via phone, radio, Internet, or satellite. The data collected in this way immediately give information about the actual condition of systems and components. In this way, unforeseen idle times and subsequent damage as well as unnecessary cost are avoided.

With the realization of this service concept it becomes clear, how firmly Flender as a company of long standing is at the head of technical development; Flender – renewed economy at its best.



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