

**WOLFFKRAN**

WOLFF luffing cranes  
An overview of the crane family



WOLFF luffing cranes - latticework frames by specialists



### Good visibility all around – the new WOLFF driver's cab

The new driver's cab offers lots of safety and operating comfort. To support the driver, all key information is indicated on the color monitor. The multi-adjustable seat and the new, ergonomically designed control panels allow for relaxed working. The improved heating and air conditioning now make the driver's cab a perfect workplace in all regions of the world. Tinted windows, hands-free set and a radio further enhance the working comfort in the new WOLFF driver's cab.



### Light-weight and well-conceived – the latticework frame

In 2007, WOLFFKRAN presented the innovation in luffing technology. The detached latticework design, a WOLFF patent, allows for a particularly compact construction of the counterjib and the upper part of the tower head section. This means that the light-weight crane components are easy to move and inexpensive to mount. The connection block brings the upper part of the tower head section, the counterjib and the jib together on the lower part of the tower head section. Thanks to the intelligent design of the connection block, the WOLFF luffing cranes have a very small minimum operating radius. This feature bears the signature of the specialist!



### Power up high – the drives

The WOLFF hoisting gears are characterized by their high motor output of 110 kW and 132 kW. Combined with the huge winding capacity of the winches, the products of the luffing crane portfolio ensure top speeds even at great heights. The WOLFF slewing gears complement the overall package. With their optimized driving behavior, they allow the crane driver to position the crane with the highest accuracy. WOLFF only uses frequency-controlled drives without standard transmission, which really makes a difference on the modern building site.



### Simple and safe – mounting

Being factory pre-mounted, all crane components can be assembled on your building site with very little preparatory work. The pulley block for the WOLFF 355 B comes pre-reeved. This patented solution greatly simplifies mounting. Other luffing cranes have an auxiliary winch to support the mounting process. As the components come in cleverly divided separate latticework sections, the total mounting weight is low in spite of factory pre-mounting. Thanks to the use of the time-proven bolted connection, very few loose add-on parts, and the support of the setup menu in the crane control, WOLFF realizes utmost safety while speeding up the mounting process. Mounting: really simple!



### The giants on road – transport

The WOLFF luffing cranes do not take up much space. The slewing elements easily fit on standard trucks - because speed and cost-consciousness are priorities for us. The components are ready for transport without telescoping or special securing. Oversea transport is no problem: the components can also travel aboard ship in containers. For the machine platforms of the 700 B and 1250 B, flat racks must be provided. The WOLFF goes beyond the end of the road!





## Ready for every assignment – the WOLFF system components

WOLFFKRAN supports your building site with the required system components. In step with the growing building, the luffing crane can hoist and install a tower element in one single go by means of an external system climbing unit. Alternatively, it uses an internal climbing unit to raise within the building. For this, the WOLFF only requires the space of a standard elevator shaft. For stationary installation without foundation anchor, the crane is placed on cross frames or cross frame elements. Both components can optionally be retro-fitted for mobile use. In this case, bogie trucks or movable cross frames are available to get the WOLFF going. With the modular system components, each WOLFFKRAN can be flexibly equipped for the respective application.



## Everything at a glance – the crane control

For every luffing crane, WOLFFKRAN relies on state-of-the-art crane control to ensure highest safety levels. The crane control can adjust the performance of all drives to the requirements of the construction site and supports the crane driver with extensive self-tests. Because the output regulator allows the crane control to identify output reserves, the WOLFF can easily achieve fast hoisting speeds. The standard horizontal load path, where the load is kept at the same height during retracting and luffing out, ensures efficient working on the construction site. And when there is not much room, the fine positioning function helps with optimum load handling.



## Always be on the safe side – the safety equipment

WOLFFKRAN luffing cranes are equipped with premium safety features. The cranes have a patented slack rope monitoring function which constantly monitors the derricking gear to prevent the rope slacking. Hoisting and derricking gears can additionally be equipped with auxiliary safety brakes. The diagnosis pages of the crane control provide for self-tests of the crane, ensuring its operativeness on the building site.



## The Wolff pack stands by each other – the service

To make life easier for the service staff, equipment for securing key components is provided, and the movable auxiliary crane supplied as a standard for maintenance work on the machine platform simplifies all work at the crane. The safety functions of the sophisticated crane control, the remote maintenance options and the technical advice support your work on the building site. WOLFF service: a one-stop solution!

## Arrived in the port

# WOLFFKRAN at the large-scale project in Rotterdam

### Project: De Rotterdam

#### Crane types:

- 3 x 224 B with tower height 160 m
- 2 x 355 B with tower height 154 m

#### Crane base:

- Foundation anchors

#### Height / number of buildings:

- 150 m / 3 buildings



## Job Report:

The project "De Rotterdam" in the area of the Rotterdam port, directly at the river Maas, is part of a major urban planning concept in the Netherlands. Three new buildings have been constructed, each of them 150 m high. In view of the downtown location, the project owners opted for the time-proven luffing cranes by WOLFF as the specific requirements of the project called for optimum solutions. The cranes were placed in such a way that they increase their height in keeping with the growing building and that their jibs can slew side by side. It is very helpful that the luffing cranes can be climbed independently of each other since their jibs are not in the way in this process. The installation of the WOLFF 224 B required no truck-mounted crane, it was carried out by means of the WOLFF 355 B which was mounted first. For fast progress, the luffing cranes operate on site in one-fall operation: the fast hoisting speeds of the cranes ensure that the building work advances quickly.



# WOLFFKRAN in the “metropolis at the river Main” The TaunusTurm

## Project: TaunusTurm

### Crane types:

- 2 x 180 B with tower height 80 m
- 2 x 355 B with tower height 180 m

### Crane base:

- Foundation anchors

### Height / number of buildings:

- 170 m / 1 building



## Job Report:

The “TaunusTurm” object in downtown Frankfurt is characterized by the very narrow space. Surrounded by existing buildings, the cranes had to be dimensioned for the tricky conditions on site. Obviously, the WOLFF luffing cranes are ideal for the job. The available space is of key importance not only for the installation but also for the subsequent building work. Thanks to their design, the luffing cranes score well when it comes to pre-mounting on the ground, which they managed on a small footprint. Furthermore, the luffing cranes with their luffing jib are perfectly adapted for working within the narrow Frankfurt skyline. The WOLFF external climbing units allow fast climbing as they need only one hoist with the hydraulic cylinder to insert a tower element of 4.5 m length into the existing tower. The maximum load capacities of 18 t or 28 t in combination with the powerful 60 KW (180 B) or 110 KW (355 B) hoist winches with hoisting speeds of up to 185 m/min. convince with all shell construction work at the high-rise building site.

# The BIG WOLFF 1250 B

## Power plant construction site in Wilhelmshaven

### Project: Wilhelmshaven power plant

#### Crane types:

- 1 x 355 B with tower height 9.0 m
- 1 x 1250 B with tower height 110 m

#### Crane base:

- Foundation anchor (1250 B)
- Undercarriage (355 B)

#### Height / number of buildings:

- 110 m / 1 building



### Job Report:

When the foundation for a state-of-the-art 800 MW anthracite-fired power plant was laid at the North Sea coast in Wilhelmshaven in mid-2008, the WOLFF 1250 B had its first assignment. The space available at the boiler framing is very narrow. There is not enough room for caterpillar or telescopic cranes. The WOLFF luffing crane 1250 B with its very compact dimensions, on the other hand, perfectly meets the requirements for this type of building site. Owing to its particular design and the lightweight individual segments, the WOLFF luffing crane is specifically quick and easy to mount. The central elements of the WOLFF 1250 B, for example, weigh approximately 15 t. The WOLFF 355 B is used when it comes to mobility on the construction site. For positioning the WOLFF 355 B, a specifically made crane runway was installed on the roof of the boiler frame at a height of 110 meters. The XXL luffing crane in the 1500 mt class, the WOLFF 1250 B with its maximum load capacity of 60 t, is ideal for power plant construction. Equipped with the 132 kW hoisting gear, the 'red giant' achieves a maximum load capacity of 20 t in one-fall operation, 40 t in 2-fall operation and 60 t in 3-fall operation. In the frequently used 1-fall operation, the hoist winch achieves top speeds of 190 m per minute.

