Raise performance

with tandem operation

Do you have to move particularly long or bulky goods safely and securely in your operation? Is a single crane just not enough? Do you view the use of two independently controlled cranes as potentially risky?
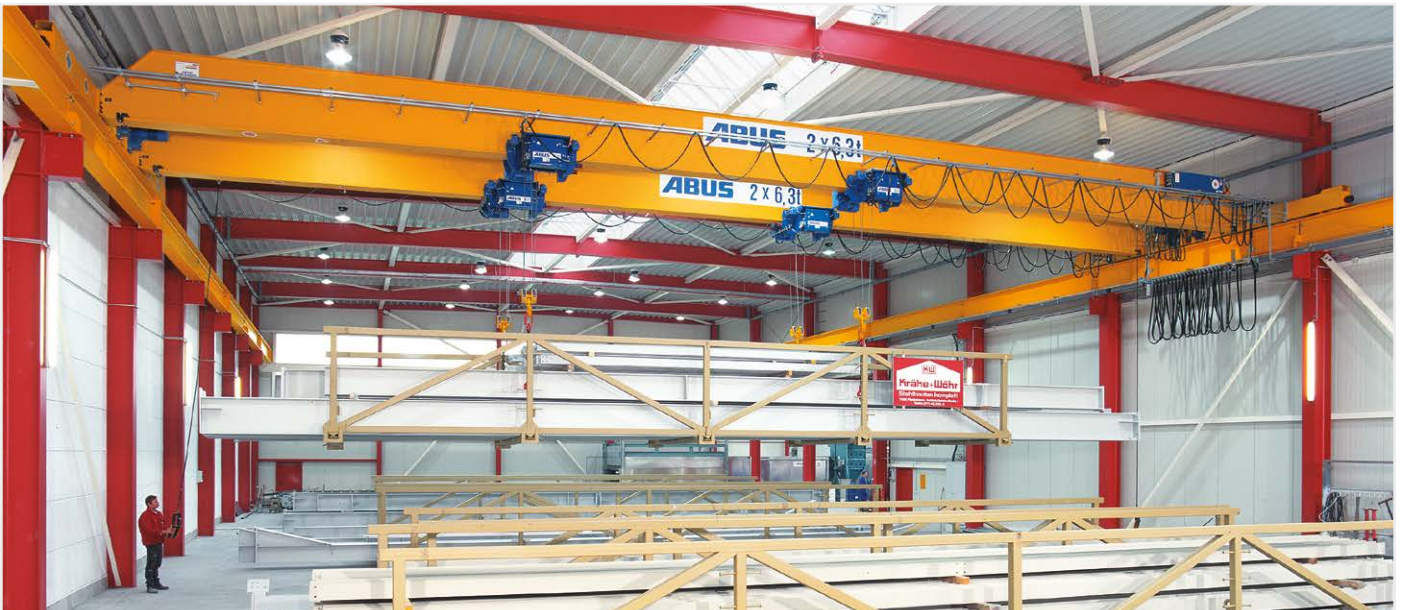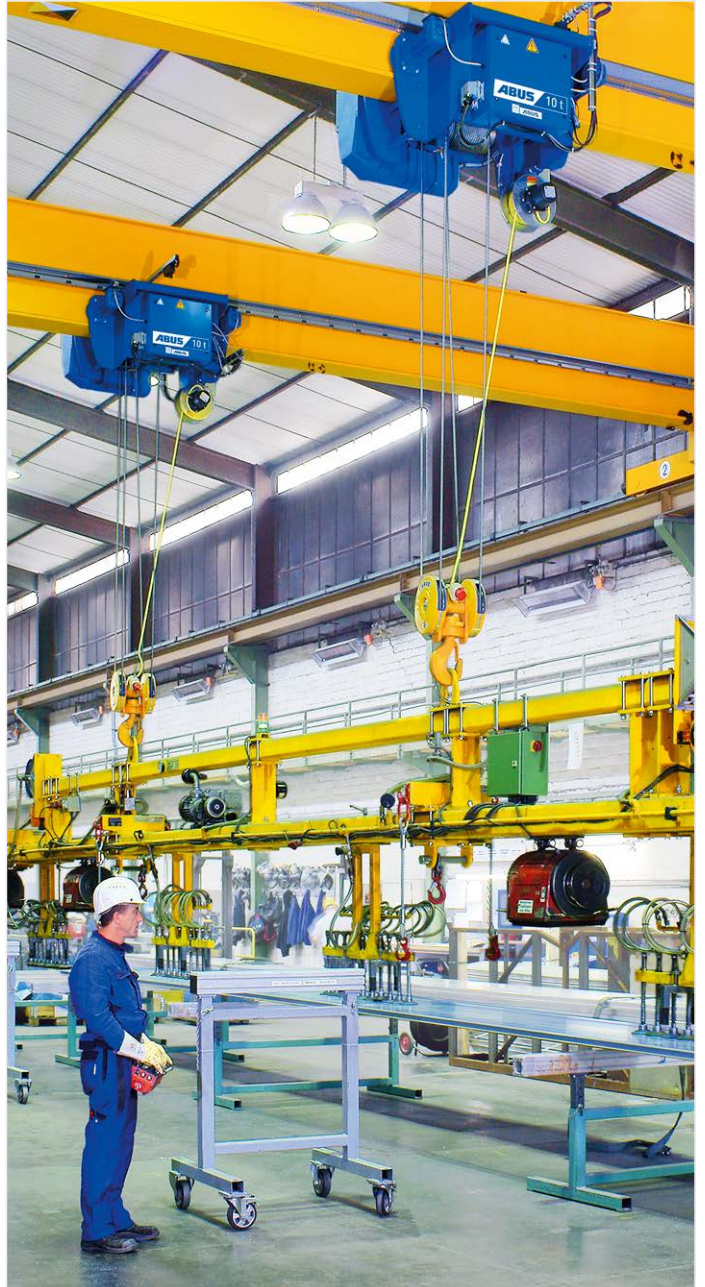

ABUS tandem control offers a professional solution for this particular logistical challenge. It makes it possible to move two cranes simultaneously via remote control. The operator is able to select the optimal location according to the actual operating conditions. In general, both cranes and their hoists are broadly structurally identical and move in tandem at the same speed and in parallel in the direction selected. The cranes thus operate as a pair to complete both cross and long travel motions, as well as lifting and lowering of the load.

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Two for one

for your operation

Two cranes in tandem function like a single machine. The operation and safety functions are designed accordingly. If one of the cranes or one of the hoists runs into a travel stop, then both cranes stop. After this, continued travel is possible at a slower speed between the points of braking and shut-down; the same applies to limits on the hook path. If either of the two hoists are overloaded, then both are stopped. In tandem operation it is possible to lift loads which are heavier than the maximum load capacity of either one of the individual cranes involved. With an equal load distribution a total load can be achieved which is equal to the sum of the two maximum capacities of the cranes involved. Existing crane installations can be retrofitted with tandem controls provided the necessary technical requirements are in place.

Sensitive

handling

Cranes for use in tandem operation can be fitted with conventional contactor controls. Alternatively, motor control via a frequency converter is recommended for specific operational requirements. This allows fine adjustments to be made for the respective transport task. The ABUS tandem cranes are fitted with a safety PLC (safety programmable controller) and communicate with each other photoelectrically via light barriers. Different signal lamps with long-life LEDs indicate the cranes operating status to the crane operator. ABURemote remote control supports the operation of cranes with ABUS tandem control. Corresponding switches enable user friendly control and monitoring of the various crane functions. The tandem control function can be switched off via a selector switch on the ABURemote so that each crane or hoist can also be used individually. Remote controls from other manufacturers can also be used if they meet the requirements.

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Lengthwise

or crosswise

Tandem control for two parallel cranes is particularly suited to the transport of goods along the length of the production hall. The tandem variant with two hoists on one crane lends itself to movements in the transverse direction.

Your safety

is our focus

The following guidelines, regulations and standards are examples of those taken into account in the design of the ABUS tandem control.

Machinery directive	Crane accident prevention regulations
2006/42/EC	BGV D6

Machine safety	
Electrical equipment	Safety-related parts of control systems
DIN EN 60204-32	DIN EN ISO 13849-1

Cranes	
Overhead and gantry cranes	Power-driven hoists
(Type C – Standard) DIN EN 15011	(Part 2) DIN EN 14492-2

Tandem operation of cranes/trolleys
VDI 4467

ABUS tandem control conforms to performance level C, category 2 in accordance with section 5.3.4.1 of EN 15011.

All

firmly under control

ABUS tandem control handles complex requirements involved with materials flow in operations. It improves safety in the transport of large or "critical" goods and increases the maximum load capacity available in the operation. With tandem and remote control combined, an experienced crane operator can safely and easily control even large handling tasks.

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