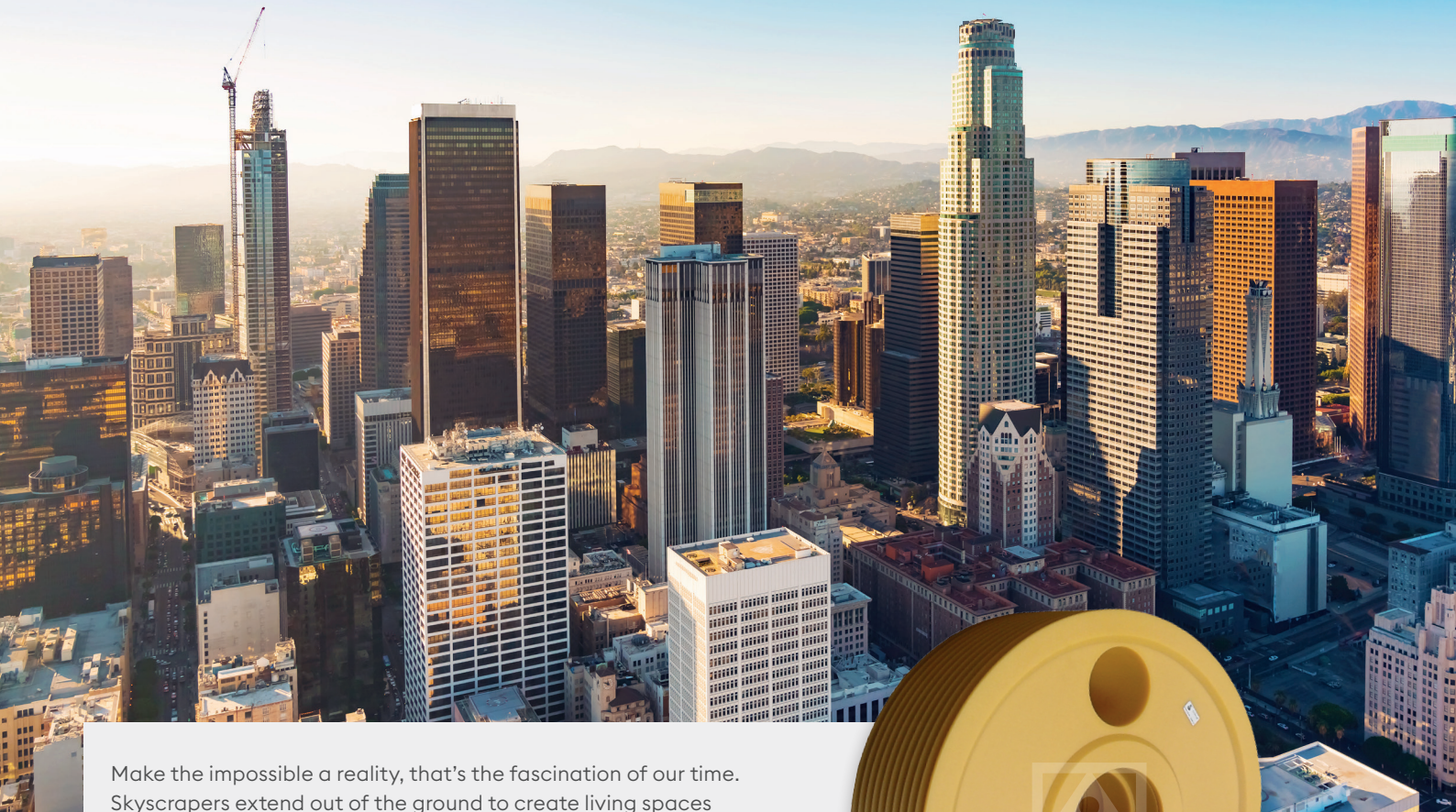
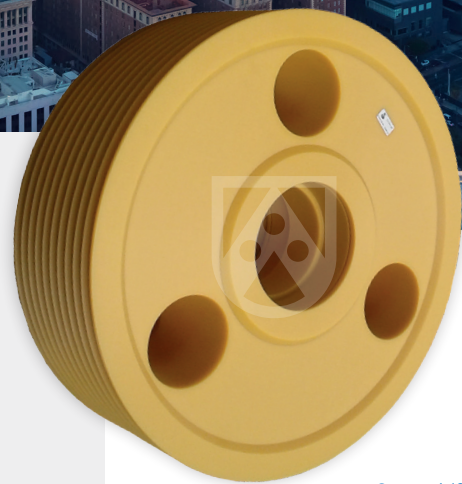


# Optamid® High-Rise deflection pulleys for application in tall buildings



Make the impossible a reality, that's the fascination of our time. Skyscrapers extend out of the ground to create living spaces between the clouds. Highest floors have to be reached in a short time. Safe, fast, comfortable, energy efficient and durable – that are the necessary properties for elevator systems. With speeds of up to 18 m/s, the cars are traveling upwards in the shafts and have to handle high loads at the same time. Especially developed for these applications, the material Optamid® High-Rise meets exactly these requirements.



Optamid® High-Rise

## Our answer: Optamid® High-Rise

Gentle, quiet and tough: Optamid® High-Rise is the material which optimally fulfills the requirements of high-rise applications. The grooves of the pulleys made from smooth material Optamid® match perfectly on the steel rope surface, allow a calm ride and minimize the risk of wire breaks. Even

under high loads and temperature fluctuations, the material convinces with its dimensional stability and thus ensures a smooth ride. Optamid® High-Rise absorbs vibrations, therefore enabling maximum driving comfort even at high load capacities and speeds.

# Advantages of Optamid® pulleys at a glance



## Reduced weight

The weight of the Optamid® pulleys is more than 50% less than that of the deflection rollers made of steel or gray cast iron. This not only makes the product easier to use, but also reduces the energy consumption and makes handling and assembly easier.



## Longer rope lifetime

Different to steel and cast iron, Optamid® gently fits to the steel ropes and minimizes the risk of wire breaks even at high loadings. The pressure is more equally distributed between groove and rope surface, which reduces the contact stress and leads to a 1.5 to 2.2 times longer rope lifetime.



## Cost reduction

The low weight also keeps transport costs low: the quick and easy assembly (one man handling) also entails an enormous time saving. The long life of the material and rope minimizes frequent and cost-intensive renewal measures and makes the system long-term durable.



## Energy saving

Direct link to the low weight: this allows a better inertia of the pulley in the application and an easier handling during transport and installation.



## Performance

The optimum deformation stability of the Optamid® ensures excellent ride comfort thanks to the vibration absorption properties.



## Recycling

Optamid® pulley can be recycled. Production remains as well as end of life cycle products can be recycled for new usage. In addition, there is no use of paints and rust protection.

## Special designed Optamid® High-Rise pulleys for deflection purpose

Even for compensation and double wrapping:

Rope speeds	up to 10 m per second
Sheave sizes	from 120 mm to 1,500 mm
Bearings	all kind of bearings can be used
Driving comfort	Optamid® dimensional stability allows smooth rides at a low noise level
Lifetime	1.5 to 2.2 times longer life of pulley and ropes thanks to reduced groove pressure
Weight	more than 50% lighter than comparable pulleys made of cast steel

**More information about our extensive offer for elevators:**



Contact us and we will discuss your optimal pulley made from Optamid® High-Rise. Do you want to know more about our engineering plastics? Visit our website:

[www.roechling.com/industrial/xanten](http://www.roechling.com/industrial/xanten)

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