

**Job Report**

# Duty Cycle Crawler Crane

## **HS 8070 HD**

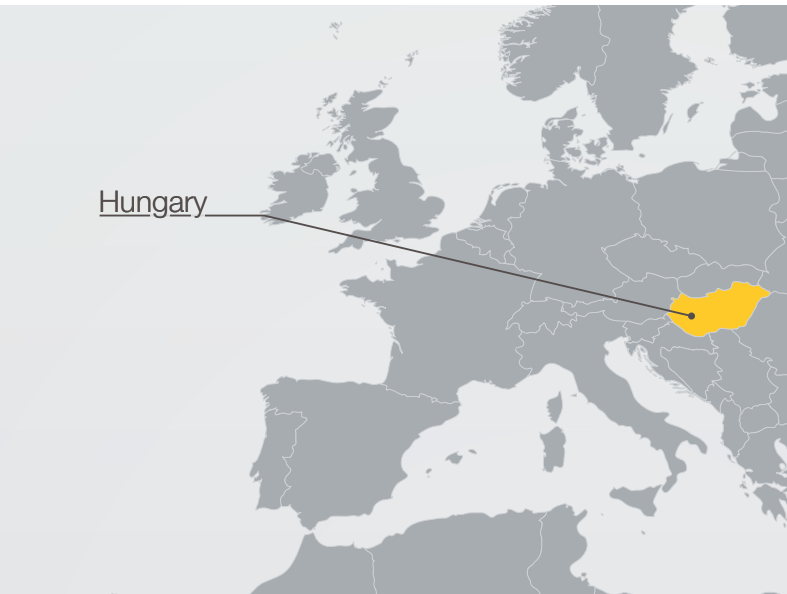
**“The low fuel consumption of the HS 8070 HD is exceptional. For gravel turnovers of 300 t per hour it requires up to 30% less diesel than similar machines.”**

Florian Wiedemann,  
Technical Managing Director  
Kiesabbau Wiedemann



# **LIEBHERR**

Hungary



## Situation

The Hungarian motorway system currently has a length of about 1,500 km. It has a radial form with Budapest as the capital in the centre. At the moment those motorway sections are

expanded that are strongly affected by the European transit traffic. Roads mainly used by tourists as well as the accessibility of industrial plants shall be improved.

## Task

In this infrastructure project the German company “Kiesabbau Wiedemann” used two duty cycle crawler cranes from Liebherr for the extraction of sand and gravel. In total, the machines had to extract approximately 5.5 million tonnes of sand and gravel in the course of one year. Despite the relatively large volume of

the extraction, Kiesabbau Wiedemann decided against a larger machine and opted for two HS 8070 HD instead, thus considering the difficult soil conditions. The ground pressure could be thus kept as low as possible while lifting the dragline bucket.

## Solution

For about one year, the duty cycle crawler cranes worked twenty-four hours, seven days a week in order to meet the requirements for gravel. Each machine was equipped with a 23 m long boom as well as a dragline bucket with a filling capacity of 3 m<sup>3</sup>. Every day about 16,000 t of sand and gravel were extracted from depths of down to 12 m. That means a turnover of approximately 330 t per hour and machine. The average diesel consumption was only 24-26 litres per hour. In addition,

a well-experienced team of six operators achieved low cycle times of under one minute.

The two efficient duty cycle crawler cranes from Liebherr demonstrated their high capabilities in Hungary, not least owing to excellently matched components, a solid swing drive and the robust mechanics of the free-fall winches, which were especially designed for dynamic dragline operation.

## Technical Data: HS 8070 HD – Dragline Operation

Engine power:	320 kW
Max. lifting capacity:	70 t
Max. winch line pull:	2 × 200 kN

Operating weight:	68 t
Min. transport width:	3,000 mm
Boom length:	29 m