

Duty Cycle Crawler Crane HS 8100 HD with **Slurry Wall Grab HSG 5-18 L** Job Report

“The Liebherr package is designed so that we can work to our full capacity.”

Rossi Fabio
Assistant Manager, SAOS s.r.l.



LIEBHERR



Situation

The metro in Milan is being expanded. Opened in 1964, the “Metropolitana di Milano” is scheduled to be expanded by 2022 with the new line M4. The 15 km long route with 21 stations between San Cristoforo and Linate Aeroporto is being executed over a period of seven years. Our customer SAOS s.r.l. is currently installing slurry walls for the new sta-

tions in the central section of the jobsite at San Babila. For this work they are relying on the duty cycle crawler crane HS 8100 HD with hydraulic slurry wall grab HSG 5-18 L. The interaction is optimized so that work can be carried out quickly, precisely and above all efficiently. Additionally, SAOS also have a HS 855 HD and two HS 835 HD in use.

Implementation

While international crowds stroll through the Italian metropolis, the extremely confined space at the Piazza San Babila is a major challenge for the construction work. In this section SAOS is installing 6,300 m² of slurry walls for the metro extension. At 130 m² per day, the Liebherr package underlines its high productivity. The hydraulic slurry wall grab is modularly designed and has an extremely robust base body with low centre of gravity. This provides for improved vertical positioning of the slurry wall and the lifting capacity of the HS 8100 HD is optimally utilized. The heavy weight of the

grab is viable thanks to the proven synchronisation of the duty cycle crawler crane’s free-fall winches. In San Babila SAOS are excavating bites of 2,800 × 1,200 mm with depths of up to 54 m. Layers of gravel, sand and loam have to be penetrated. One bite requires 16 hours, whereby half of the time is required for excavating. Subsequently the reinforcement is inserted and concrete is filled. During the execution of the work for the new M4 line SAOS has to install slurry walls totalling 84,000 m².

Advantages

The slurry wall package can be optimally adapted to the conditions on the jobsite and convinces, above all, through its extremely high efficiency. SAOS confirm the low fuel consumption of only 20 l per hour during the current operations in Milan. Our customer is extremely satisfied and, moreover,

emphasizes the flexibility and reliability, as well as the simple and precise operation of the HS 8100 HD. The Liebherr duty cycle crawler crane with hydraulic slurry wall grab HSG 5-18 is designed for a long service life and delivers an unbeatable performance even under extreme conditions.

Slurry Wall Grab HSG 5-18

Slurry wall thicknesses:	500 – 1800 mm
Bite lengths:	2500 – 3600 mm
Optional:	additional weight (7 t), semi-Kelly guide, vertical assistant

HS 8100 HD

Max. capacity:	100 t
Max. line pull:	2 × 275 kN
Engine power:	390 kW / 523 hp