

KRÖGER Hydraulic grabs for dry cargo in harbours: fast and efficient

LEADING-EDGE GRABS 'MADE IN GERMANY'

Last year, when KRÖGER Greifertechnik supplied a hydraulic grab with a newly designed sprocket to the company FORSEN for the Turkish harbour at Izmir, no one had anticipated the momentousness of this test-supply.

FORSEN was so thrilled by this hydraulic sprocket that it requested KRÖGER to retrofit an 'old' grab, which still had the conventional hydraulic rotorator, with this highly robust system. Using only an 8m³ hydraulic multi-jaw grab, type KMH, an average of 40,000 tonnes of bulk goods is handled in one day — and that too working 24 hours a day, 7 days a week.

There is a reason why FORSEN, along with the major mobile crane manufacturer SENNEBOGEN, loves to work with KRÖGER: for over 50 years, KRÖGER has been manufacturing innovative cable, motor-powered and hydraulic grabs and, hence, completely and uncompromisingly relies on a combination of quality and high tech. By now, KRÖGER has made its way into almost all harbours in Europe and many harbours all over the world. Wherever there are high demands in terms of materials and technology, grabs from the house of KRÖGER are indispensable: grabs, made in Germany. The numerous innovations and the absolute zero-maintenance of many models have made the company a market favourite in many countries.

KRÖGER has earned its international reputation primarily through its hydraulic grabs. There is an ever-increasing demand in inland harbours and seaports for grabs of this type, which are basically equipped with an end-of-stroke damping at the time of opening the jaws to avoid hard impacts that spread to the entire crane. More recently, it has become the company's trademark to apply the principle of zero-maintenance to its large grabs as well. This feature has become the specialist company's USP the world over. More and more large handling machines and mobile cranes are now fitted with hydraulic clamshell and multi-jaw grabs of types KZH and KMH from Germany.

And, as always, efficiency remains the key word in the world of bulk goods handling. KRÖGER grabs with hydraulic technology contribute manifoldly to this requirement in handling machines: speed, along with extremely long service life, are the important and by now globally recognized factors. Optimal utilization of the load bearing capacity of the machine through weight-optimized design of the hydraulic grab and, hence, the ability to handle maximum possible bulk loads is another factor. Also, the wide range of requirement-specific grab types and sizes — from the smallest hydraulic series grabs to customized large grabs — has a bearing on profitability and efficiency in 'every lift'.

What began as an experiment at the innovative grab



The new, extremely robust sprocket by KRÖGER.



manufacturer KRÖGER in Turkey is now installed in almost all KRÖGER hydraulic grabs: an in fact conventional but newly designed and improved, rather oversized sprocket technology, which is so safe and robust that it can now sustain the highest possible loads. Through this 'simpler' technology, it became possible to more than double the axial load-carrying capacity.

Another advantage of this robust component: the new KRÖGER sprocket is extremely user-friendly, as it has been designed using commercially available parts that can be easily



replaced (on one's own), e.g. the hydraulic motor.

What is different in the new system? As a result of this sprocket technology, the sealing elements are now separated from the bearing, that is the load bearing capacity is now delinked from the hydraulic circuit. This mainly benefits the impact loading of a grab and, thus, significantly increases the service life. At the same time,

through this system the torque is distributed to several points, which makes movement a lot safer.

The result: a 'tank-like' robustness owing to reduced hydraulics without any compromise in terms of performing highly challenging tasks for longer durations and with no complaints so far. And the experiment at FORSEN has clearly shown: what works in Turkey, works everywhere.