

PEINER SMAG focuses on bioenergy

BIOMASS — A GLOBAL BUSINESS

Biomass has quickly become a global business due to the worldwide interest in modern energy. PEINER SMAG Lifting Technologies GmbH (PEINER SMAG) is already well prepared for this greater demand in renewable energy sources. The major manufacturer of lifting equipment offers individual solutions for the handling of biomass by providing the right grab for almost all lifting devices. All of the PEINER SMAG grabs have been designed with sustainable and ecological construction. The company has recently implemented an integrated management system (IMS) which combines the individual areas of quality, environment, protection of employment and energy into one grab unit. This new system was successfully certified by TÜV Süd in accordance with ISO 9001, 14001, 50001 and OHSAS 18001.

BETTER EQUIPMENT MEANS BETTER RESULTS

The technical and economical growth potential of renewable energy for the production of power, heat and fuels is substantial, with biomass covering over 10% of the world's energy demand. The transshipment of biomass volume in ports and terminals, waste-to-energy plants, timber mills and co-generation plants is ever increasing. Apart from agricultural goods such as corn, sugar cane, canola and other food crops, biomass products such as timber, bark, saw mill waste, wood chips and pellets are handled. In addition, organic waste from household rubbish and residual products from the food industry also play an important role in the handling of biomass.

With its wide range of applications, PEINER grabs can handle all kinds of biomass materials, with certain grabs tailored towards the special needs and requirements of particular industries. In the timber handling industries the use of hydraulic and electro-hydraulic timber grabs are primarily common place, with operators benefit from their high-load capacity, high closing force and special shaped tongs for the handling of timber logs. These key features enable the grab to handle logs in any variety, whether round timber, bundled and even single logs safely and efficiently.

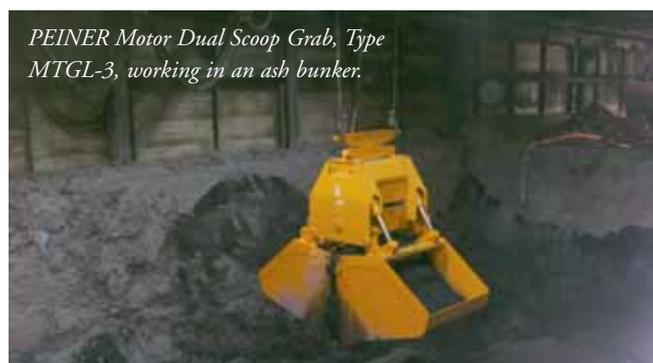
When handling bulk materials such as wood chips and wood pellets, crop or organic waste, motor grabs or four-rope grabs are generally used. Due to their technical features PEINER motor grabs offer numerous advantages, especially for their use



PEINER Motor Orange Peel Grab, Type MMGL-4, handling domestic waste.



PEINER Motor Orange Peel Grab, Type MMGL-4, handling rubbish at a waste-to-energy plant.



PEINER Motor Dual Scoop Grab, Type MTGL-3, working in an ash bunker.

in incinerator plants. The PEINER MMG/MMGL series of motor 'orange peel' grabs is already successfully established within the incineration market. Its specially designed construction allows for fast operation and is highly energy efficient. The optimal installation height, low centre of gravity and robust design ensures the flexible use of the MMG/MMGL series. Thanks to individually driven shell segments, the motor 'orange peel' grab adapts to suit the materials being handled. The shell segment design and the number of shell segments on the grab can easily be adapted to meet customer requirements. Hydraulic pipes, wiring and connections as well as the cylinder barrel and piston rod are fully protected from external elements.

Depending on the field of application, PEINER SMAG offers

customers the option of mechanically operated rope crabs which are available in clamshell or orange peel grab design. Both types are considered solid and reliable. The balance ratio between the dead weight and grab volume or crane capacity respectively; provides a good level of penetration into the bulk material supporting higher throughput rates.

CONCLUSION

PEINER SMAG discerns a positive trend in the handling of biomass and continues to expand its efforts in providing high quality reliable grabs in this market, particularly in the waste incineration industry. An existing framework agreement with a major client for the delivery of motor grabs to operate in the incineration plant has been highly successful with incoming waste and the bi-product of ashes handled by the MMGL/MMTGL series PEINER motor 'orange peel' grabs. From PEINER's excellent track record and successful implementation of biomass grabs, further orders from this market segment are expected.

ABOUT PEINER SMAG LIFTING TECHNOLOGIES GMBH

PEINER SMAG Lifting Technologies GmbH (PEINER SMAG), a subsidiary of SMAG, leads the world in manufacturing grabs and other lifting accessories for cargo handling. Based in Salzgitter,



PEINER Four-Rope Orange Peel Grab, Type VMG, handling wood chips.

Germany, PEINER SMAG runs manufacturing sites in Germany,

China, India and Singapore. On the basis of the proven PEINER product design, the special-purpose machinery manufacturer develops, manufactures and services lifting equipment for various industries, e.g. ports, ships, steel mills, waste-to-energy plants and recycling/scrap handling businesses.

ABOUT SALZGITTER MASCHINENBAU AG

Salzgitter Maschinenbau AG (SMAG) is the holding company of a German group of mechanical engineering companies with factories in Germany, China, India, Singapore and Slovakia where grabs for loading and unloading seagoing cargo vessels, spreaders for container handling, fully equipped driver cabins, automated drilling technology for the open-pit and underground mining industry, special-purpose vehicles for the process industry as well as mechanic and hydraulic telescopic antenna masts are developed and manufactured.



PEINER Motor Dual Scoop Grab, Type MZGL, handling wood chips.