



Oil - and Gas Industry







PERFORMANCE PLASTIC SOLUTIONS

EN 2.0

ZEDEX[®] in action



Multivalve in a cement pump



Non-return valve in a cement pump

OIL- AND GAS INDUSTRY



ZX-410 sealing balls in a cement pump. In this valve pump a sealing balls of brass was installed in the pump return valves and multivalves of a cement pump. It incurred in problems because of the too often necessary lubrication and its low chemical resistance. By the usage of our ZX-410 seals ball no lubrication is required, the wear was reduced, the chemical resistance was improved and the maintenance effort diminish.





ZX-100K bushings in pumps Formerly a brass bushing was used in a pump, which had to be lubricated in regular intervals. Our newly built ZX-100K runs dry, with the only exception of one lubrication during assembly. Through the improved tribological properties, i.e. friction and wear, the maintenance efforts and their associated costs were reduced.

ZX-324VMT face seals in pumps Once hard cast-iron face seals were used for the pumps, although these entailed many problems. The particles created by abrasive wear, due to rubbing of the surfaces of the seals, mingled with oil and created problems of wear to even other components. Today using ZX-324VMT, which does not necessarily require lubrication, the wear decreased and the customer has reached a significant cost savings.



ZX-530 replaces **PTFE** with gals fibre in fuel plants

In plants for the extraction of a special fuel, ball valves, which are sealed with two sealing rings, are used. Previously, these seals were made of PTFE with 30% glass fibre.

ZX-100K in biogas plants. The component of the material ZX-100K serves as centre bearing for impeller shaft in biogas plants.



ZX-324V2T track roller in pipeline inspection machine

ZEDEX[®] in action

In a pipeline inspection machine steel wheels were used, which had problem with abrasion wear and chemical resistance. At the working temperature of 80°C the track rollers could come in contact with these possible chemicals: sea water, natural gas, naphtha, rude oil, hydraulic oil, all oil & gas products. With the dimension stable ZX-324V2T we met all the requirements and the machine now uses ZX-324V2T as standard feature.





ZX-530 as replacement for PTFE.

In the alkylation columns of refineries, manifolds are used. Since these come into contact with acid, so far PTFE was used in order to guarantee the necessary chemical resistance. At about 120°C, the manifold must support its own weight and the weight of the acid. Due to the poor creep properties and the high density of PTFE it came to tear off and breakage of the manifolds. With the usage of distribution pipes and flanges of ZX-530 this problem has been solved thanks to its better mechanical properties in combination to an excellent chemical resistance.







ZX-100K seals in engines

In the gears of engines, a seal is used, which consists in a combination of gap seal and splash ring with return channels. In the context of an project upgrading, the currently used gap seals made of brass had to be replaced by an alternative because of its high wear (during start and stop of the motor). The oil temperature from 65° C up to a 80°C, and the shaft speed of 900m / min were not a issue for ZX-100K, which extended the working life enormously.



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