

Kop-Flex plant blossoms in Slovakia

U.S. COUPLING COMPANY WANTS TO BE CLOSE TO EMERGING GAS MARKETS

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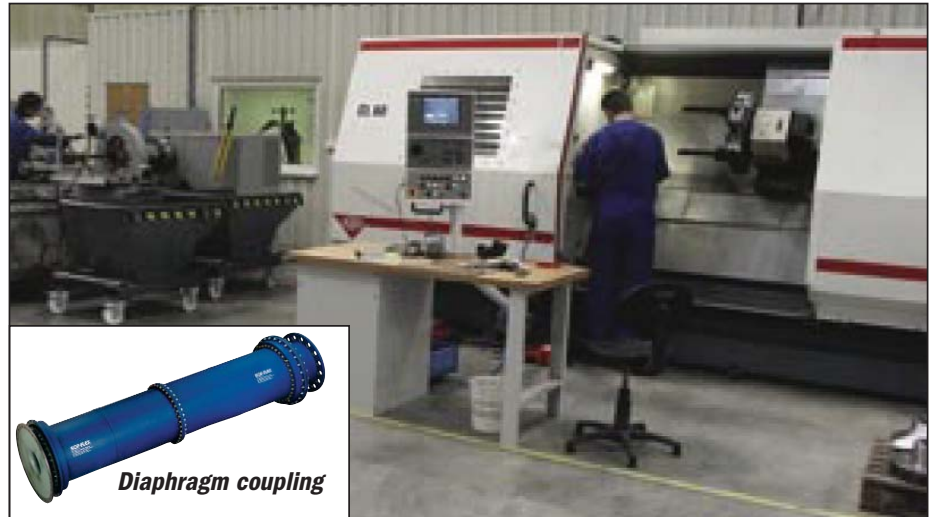
The growing use of large compressors and turbines as mechanical drives in gas and Liquefied Natural Gas facilities has created a demand for couplings. To cater to this demand, Kop-Flex, a division of Emerson Power Transmission Corporation based in the U.S., has set up a plant in Slovakia to manufacture couplings.

The company is the first North American coupling manufacturer to open a turbomachinery coupling plant in Europe. The Slovakia plant's primary targets are customers in Europe and Middle East. "Target customers and applications are turbomachinery OEMs, petrochemical plants, refineries, power generation, LNG, gas compression trains, energy storage and marine propulsion," says Parthiv Amin, vice president of marketing at Kop-Flex. The production facility is at Nove Mesto, about 120 km northeast of Bratislava.

As one drives into Nove Mesto, one sees a large grey building with the Emerson name on it. Kop-Flex is here in a reserved section of the workshops of another Emerson subsidiary, Branson Industrial Automation, the principal occupant of the new factory building.

Slovakia, part of the former Czechoslovakia in communist times, has low labor costs and a well educated professional population. These are factors which have attracted many U.S. and Western European companies to set up plants in that country. A fast, lightly loaded motorway connects Nove Mesto to the capital, Bratislava. The Danube port facilitates shipments to the Middle East, and the Vienna international airport is about 100 km further on.

In the new workshop, Kop-Flex, which has just received ISO 9000 accreditation, is concentrating on two dry coupling products, the Flexible Disc coupling



Flexible Disc and Diaphragm couplings are produced at the new Slovakia plant

and the Diaphragm coupling, for ambient and high temperature applications.

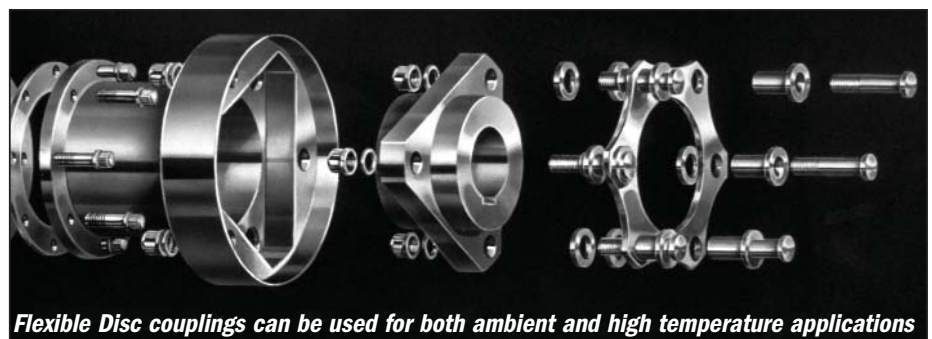
The Nove Mesto plant can manufacture couplings up to 500 mm in diameter, three meters long, and for power output up to 50,000 KW. "It provides the convenience to OEMs and end-users alike to inspect their couplings or witness balance or have discussion with our staff on repair and service in Europe," says Lubomir Lachky, division manager of the Slovakia plant.

The Slovakia plant has state-of-the-art balance machine, magnetic particle inspection, and other non-destructive testing required by American Petroleum Institute and ISO standards. Lachky says, "Key current customers for the plant include Siemens, Man Turbo, GE,

Nuovo Pignone, Dresser Rand (Europe), Aramco and MHI."

Dry couplings are made in two sections, male (hub) and female (sleeve) bore. On the male member, there is a taper or slight step bore with a fine oil groove which is used to hydraulically separate the hub from the shaft. Each is bolted to the driver and the driven unit, with a loose fit between the two halves. The bolts are then tightened and the male is drawn in to make a solid coupling.

When the couplings are to be separated, the bolts are loosened, the oil is injected into the groove to force separation. This process does not involve any heating of the coupling. Also, there is no risk of damage due to mechanical force during uncoupling. **TI**



Flexible Disc couplings can be used for both ambient and high temperature applications