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SEWAGE TREATMENT

Shining a light on sludge

GIS & Telemetry

**New software for desalination
and water supply systems**

Geothermal Energy

**Generation potential
across the MENA**

Photo by: Severn Trent Services

Add-on gearbox for flangeless hand-wheel valves



Dutch valve safety specialist **Netherlocks B.V** has designed a direct-mounting, add-on gearbox to reduce torque for hand-wheel operated valves. The Nethergear unit fixes onto valves without modifying them in any way, and can be fitted on-site without taking the valve offline.

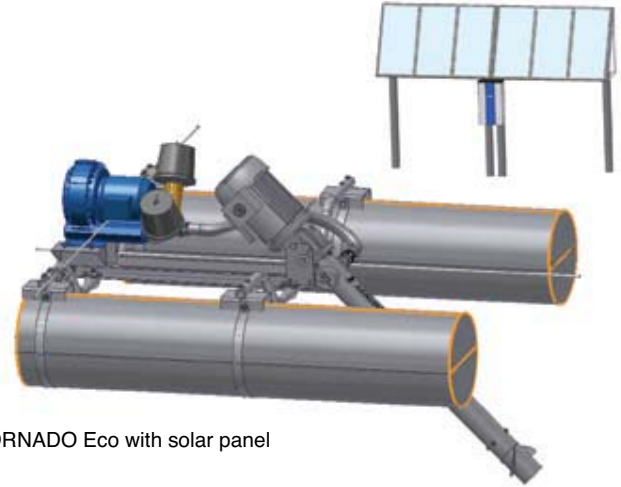
It is well known that valves can wear, fatigue, and tighten over time. For manually operated valves, this leads to increased strain on the operator, which can be both dangerous and inefficient. The obvious solution to this is a gearbox mounted onto the valve, allowing adjustable torque for the handwheel – but most standard hand-operated gate or globe valves have no mounting flange. The stainless steel AISI 316 Nethergear unit mounts directly onto the valve stem without altering the actual valve itself. The adaptor is based on the company's interlock design that has been used as a safety system for over 15 years. It can be fitted without stopping production, the valve itself remaining untouched. Once attached, the handwheel can be simply fitted onto the unit in one of two positions. One of these will provide the torque reduction benefits of the gear mechanism; the other lets it function as it would have originally. A Netherlocks pneumatic drive unit can also be attached for automatic valve operation that can be up to 25 times faster than doing it by hand, without any physical stress or strain.

Netherlocks is a leading supplier of safety and valve control systems for major industrial operations as well as smaller firms. The company's mechanically enforced procedures minimize the risk of human error in production and maintenance processes which could otherwise be dangerous and costly. Due to their simplicity, ease of operation and sturdy design, Netherlocks' products are guaranteed to operate effectively even in extreme conditions. ■

قامت شركة Netherlocks B.V الهولندية، المتخصصة بتقنيات أمان الصمامات، بتصميم علبة تروس خاصة لتخفيف نسبة دوران الصمامات المجهزة بعجلات يدوية. تُضاف هذه الوحدات إلى الصمامات من دون تعديلها بأي شكل أو توقيف عملها في الموقع.

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Introducing the World's first GREEN aeration system



TORNADO Eco with solar panel

AEROMIX Systems, Inc. in Minneapolis, Minnesota, USA has designed the first and only GREEN aeration system on the market. It saves energy, reduces greenhouse gases, and is 100% recyclable. The TORNADO Eco™ Aeration System was introduced and showcased at the WEF (Water Environmental Federation) Annual Trade Show held in Chicago, Illinois, U.S.A. October 19-22, 2008. The TORNADO Eco™ boasts greater efficiency than a conventional aerator. The propeller, which was carefully researched by the University of Minnesota, contributes to its unmatched oxygen transfer performance. Tests show that its oxygen transfer rate is 26% higher than a standard aerator. Partially or completely powered by solar panels and/or wind generators, the TORNADO Eco™ will cut electricity consumption and possibly earn you energy credits through your local utility. The TORNADO Eco™ is also made 100% of stainless steel and other recyclable materials. Unlike other aerators, no plastic, fiberglass, or ceramics are used. The floats are also foam and plastic-free. Laser etched labels are used on both the equipment and packaging as an environmentally-friendly alternative to vinyl labels with adhesives.

AEROMIX Systems, Incorporated manufactures a complete line of specialized aeration and mixing equipment for treating water and wastewater in industrial, municipal, and freshwater markets. The company's packaged wastewater treatment plants treat wastewater at military installations, commercial buildings, and institutions around the world. The compact water treatment plants produce drinking water for thousands of people. AEROMIX's heavy duty water fountains and aerators are used for pond and lake aeration, river aeration, and to beautify and rejuvenate aquatic life. The company hires a group of applications engineers devoted exclusively to help treatment plants, consulting engineers, and contractors. Armed with the company's internally developed computer software and years of experience, they can help you find the right solution for your unique application. ■

قامت شركة AEROMIX Systems الأمريكية بتصميم نظام التهوية المراعي للبيئة الأول والوحيد في الأسواق حالياً. يُساعد هذا النظام بتوفير الطاقة وتخفيض نسبة الإصدارات المسببة للإحتباس الحراري، والنظام قابل لإعادة التدوير بأكمله. أطلق على النظام اسم TORNADO Eco وقد عُرض في معرض WEFTEC الذي أقيم في مدينة شيكاغو الأميركية من ١٩ إلى ٢٢ تشرين الأول (أكتوبر) الماضي.

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