

Customer Value through Innovation



INFRASTRUCTURE Solution

Water Treatment





NORMA Group – Customer Value through Innovation

An international market and technology leader in engineered joining technology

The company manufactures a wide range of innovative joining technology solutions in three product categories (clamp, connect and fluid) and offers more than 35,000 high-quality products and solutions to more than 10,000 customers in 100 countries. NORMA Group joining products can be found in vehicles and trains, ships and aircraft, buildings and water management as well as in applications for the pharmaceutical and biotechnology industry.

The company generated sales of around EUR 695 million in 2014. With around 6,000 employees, NORMA Group operates a global network of 22 production facilities as well as numerous sales and distribution sites across Europe, the Americas, and Asia-Pacific. NORMA Group has its headquarters in Maintal, Germany. NORMA Group SE is listed on the German stock exchange (Prime Standard) and included in the MDAX index.

NORMA Group – Products for sewage treatment

The provision of clean water for domestic and industrial use, and the reduction of water pollution in rivers, lakes and oceans are major challenges of the 21st century.

The European Union's legislation in regards to water quality has become stricter, which has led to an increase of sewage treatment capacities and a higher percentage of households connected to sewage plants.

NORMA products like FGR pipe couplings, worm drive hose clamps, cable ties and retaining clips have been proven and tested over many years in the most modern European industrial and municipal sewage plants. They are used in mechanical, biological and chemical sewage treatment as well as in sludge treatment installations, in order to

safely connect or fix open-circuit and filtered water pipes, compressor lines, ventilation pipes or electrical lines.

Our wide range of NORMACONNECT pipe couplings makes it easy to connect pipes of various materials such as metal and plastic, and to choose between axial restraint and non-axial restraint couplings. There is no need to specially prepare pipe ends and no need to do any welding work. Our variety of material grades, including high-grade stainless steel, ensures a safe connection, even in adverse conditions. General building contractors, pipeline construction companies as well as operators of sewage plants have been customers of ours for many years.



NORMA FGR

Applications:
 - **Sludge Treatment:**
 composition lines, filtrate lines, sludge lines, water lines, compressor lines, biogas lines
 - **Biological Cleaning:**
 compressor lines, ventilation lines, air lines
 - **Mechanical Cleaning:**
 ventilation lines, floating lines, sludge lines, mixing water lines



NORMA Retaining Clamps HMK

Applications:
 - Cooling lines
 - Pressurized lines



NORMA TORRO

Applications:
 - Hydraulic lines
 - Pressurized lines



ABA Original SMO

Applications:
 - Process water lines
 - Chemical lines



NORMA RSGU

Applications:
 - Supply lines
 - Electrical wires



NORMA Cable Ties

Applications:
 - General fixing



ABA Low Profile Cable Ties

Applications:
 - General fixing

Infrastructure Connectors Pipe Couplings



FGR

Designed for all plain-ended pipes, FGR couplings connect pipe materials like steel, stainless steel, copper and plastic. Short assembly times without welding and without the necessity of prior treatment of pipe ends guarantee cost effectiveness. FGR couplings ensure saving of weight and space for axial restraint and non-axial restraint connections.

Sizes: 26.9 up to 2032 mm
Material: W2, W4, W5



Grip/Grip E



Plast Grip



Flex E



Retaining Clamps



HMK, standard design, single / two parts heavy duty, HMK K1

HMK retaining clamps with brackets when high mechanical force is needed for retaining containers or pipes on ceilings and walls.

Band width: 15, 20, 25 mm
Material: W1, W2, W4



HMK - single parts



Worm Drive Hose Clamps



TORRO

High clamping force and superior torque

Band width: 7.5, 9, 12 mm
Material: W1, W2, W3, W4, W5



TORRO



TORRO WF



Original SMO

A clamp able to withstand extreme environments where lower grade stainless steel or acid proof material is not enough.

Band width: 12 mm
Material: SMO 254 steel (SS2378/EN1.4547/S31254)



SMO - S60



Fixing Clips



RSGU

Retaining clips are suitable for retaining pipes, cables, cable harnesses, cable protection pipes, hoses and other lines.

Band width: 12, 15, 20 mm
Material: W1, W5



RSGU



Cable Ties



Standard Cable Ties

Quick securing and fastening of cables

Band width: 2.2, 2.5, 3.5, 4.5, 4.8, 7.5, 7.8, 9, 12.5 mm
Material: PA 6.6



Cable Ties



Low Profile Cable Ties

Very low required space and perfect round shape

Band width: 4.52, 7.62 mm
Material: PA 6.6



Low Profile Cable Ties



NORMA Group

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