

## ENKA<sup>®</sup>SOLUTIONS COASTAL MANAGEMENT PRODUCT COLLECTION

### High Performance Geosynthetics

The Enka Solutions range of high performance geosynthetics offers multiple solutions for civil engineering and building projects. Enka Solutions efficiently answers challenges in the fields of erosion control, drainage, soil reinforcement, consolidation and separation and more. A large part of the product portfolio is perfectly suited to provide solutions for issues related to coastal management.

#### Enkamat<sup>®</sup>

Enkamat is a flexible three-dimensional mat for immediate, permanent erosion protection on many different slope types. Its unique structure creates an artificial root structure that prevents soil erosion from steep slopes, river banks, landfill containments and other

vulnerable areas. Enkamat has excellent soil retention, providing the perfect conditions for vegetative root systems to develop. Embedded with soil, it forms an integrated and fully vegetated system to control erosion.

#### Main application areas

- Slopes
- Riverbanks
- Steep and/or rocky slopes
- Grip layer on soil covered geomembranes

#### Enka<sup>®</sup>-Tex

Enka-Tex is Enka-Solutions' complete range of nonwoven and woven geotextiles. The nonwoven geotextiles are needle punched and can be thermally bonded. The Enka-Tex product range is extensive, each type having specific

properties of tensile strength, weight or flow capacity. Enka-Tex is ideal for projects where erosion control, filtration, protection, drainage, stress relief, reinforcement or separation are called for.

#### Main application areas

- Tunneling
- Riverbank protection
- Pipeline protection
- Retaining walls



Enkamat<sup>®</sup>



Enka<sup>®</sup>-Tex

## Enka®-Mattress

A concrete mattress is a two layer geotextile mattress filled with fine aggregate concrete after installation. Enka-Mattress acts as a shutter till the concrete is cured. The specific hydraulic characteristics of the fabric allow a slow evacuation from the concrete mixture water and limit

the fine cement particles from getting through the fabric. Both result in a concrete which gives high strength, density and abrasion resistance whether constructed above or below the water. The two layers are connected in order to control the thickness of the mattress.

### Main application areas

- River and canal slope protection
- Ponds en reservoirs
- Bypass sections at hydropower stations
- Scour aprons at berth areas
- Sealing and repairs of irrigation canals
- Repairs of piles
- Supporting and covering of pipelines

## Enka®-D-Tube

Enka-D-Tube dewatering tubes are fabricated from high strength geotextiles forming tubular structures with filling inlets which enable pumping of sand slurry. The highly permeable fabric allows rapid dissipation of water during filling whilst the small pore size

retains fines. They are available in a variety of sizes, depending on volume and space requirements. Volume reduction can be as much as 85%, this makes removal and disposal very easy and much more economic.

### Main application areas

- Waste Water Treatment Projects
- Agricultural ponds
- Aquaculture facilities
- Pulp and paper mills
- Industrial lagoons

## Enka®-Fix

Enka-Fix is a 3-dimensional woven fabric consisting of a tape woven polypropylene fabric which forms the base fabric and a large number of loops standing perpendicular on this base fabric.

Enka-Fix forms the base layer of a concrete block mattress. During the casting process the Enka-Fix loops

penetrate into the base on the fluidized (vibrated) concrete mix and, after adequate curing, provide the required bonding strength between the concrete blocks and the fabric base layer. Concrete block mattresses are mostly used for marine applications. Due to the nature of these applications, long-term durability is an essential requirement.

### Main application areas

- Coastal protection
- Shore protection
- River bank protection.

Our experienced product specialists throughout the world will quickly understand the needs of your projects and can advise on the best solutions. Enka Solutions geosynthetics are backed by extensive testing and appropriate certifications. All of our products are easy to install.

For a view on the full Enka Solutions range for all civil engineering applications, please visit our website.



Enka®-Mattress



Enka®-D-Tube



Enka®-Fix