

ARRIGO GABBIONI ITALIA S.r.l.

**SOIL
STABILIZATION
AND
REINFORCEMENT**



**SLOPE EROSION
PROTECTION**



**DRAINAGE AND
HYDRAULIC
PROTECTION
WORKS**



**AGROFORESTRY
PROTECTION**



ARRIGO GABBIONI ITALIA S.r.l.

Since its foundation in 1950, **Arrigo Gabbioni Italia** has dedicated itself to the production of systems aimed at solving geo-hydrological problems, from the stabilization of slopes, to the protection of hydraulic areas, roads and railways.

In particular, recently, through Research & Development paths, with a view to continuous improvement in the creation of innovative geotechnical systems for the environmental, roads, rail and civil sectors and with a particular focus on environmental protection and safety for workers, Arrigo Gabbioni Italia has developed and made available to operators in the sector (designers, companies and organizations) effective solutions for the geo-hydrological protection of our territory and infrastructures.

At the same time, a dedicated sector of environmental protection of the agroforestry, considerably important for the Italian economy, but often-exposed to geo-hydrological risks, was developed.

For over 70 years, Arrigo Gabbioni Italia has maintained with pride and passion its entire production and technical chain in Italy, the country where solutions with double twisted wire mesh were born: a wealth of knowledge and production capacity that must be protected, respected and improved day by day, and not lost



DRENAR - PREFABRICATED DRAINING PANELS FOR DRAINING TRENCHES

The prefabricated drainage panels Drenar, Drenar T (already internally equipped with corrugated pipe) or Drenar Forte (specific for drainage of aggressive liquids), allow to create draining trenches being able to obtain various technical advantages compared to traditional methods:

- Reduction of excavations, backfills, transports and disposals; in consideration of the laying in forced section and of the great speed of handling;
- Greater safety for the workers as the laying takes place from the outside;
- Lightening of the areas, being able to replace soil with lighter material;
- Reduction of CO2 emissions;
- Being an industrial product, it allows for homogeneous performance;
- Greater durability, as the porometry of the geotextile can be modified according to the grain size curve;
- Possibility to increase the draining section with the technique of draining chimneys;
- The modularity of the system allows an easier design;
- The predefined dimensions allow a rapid insertion in both concrete and prefabricated manholes, which will have both the function of collecting the drained water and the inspection of the drainage function as well as to quickly overcome the height differences.



Easy lifting and handling even on landslide bodies - Val Pusteria (BZ)



Draining trench with forced section on the ski slope - Veneto



Drenar foundation protection in confined spaces with draining chimney and sheath - Tresana (MS)



The main areas of application for Drenar drainage panels can be found in:

- Drainage in landslide bodies;
- Drainage to protect roadways, railways, tunnels;
- Drainage in foundations;
- Drainage on the back of structural works (for example: reinforced soil, gabion, double piling, concrete walls, etc. etc.);
- Drainage on ski slopes, in support of ski lifts or sports areas;
- Drainage in prestigious agricultural areas;
- Drainage in wooded areas, steeply sloping areas, areas with reduced accessibility;
- Drainage in confined spaces.



Laying of the drainage section - Tortoreto (TE)



Drain in restoration of riverbed landslide, in detail the elevated one flexibility of modules - Cesena



*Drenar is installed continuously in pushing soils
Vulturara Appula photovoltaic field (FG)*



*Graft Drenar with sheath and draining chimneys in
prefabricated well outside excavation - Tortoreto (TE)*



*Backwater drainage for protection
of road surface - Ottone (PC)*

PRE-COUPLED ANTIEROSION GEOCOMPOSITES ARR FOR SLOPES STABILIZATION

As part of the safety measures of slopes in loose soils, in altered or mixed rocks, that suffer from erosion, the pre-coupled geocomposites AR, thanks to the simultaneous presence of double-twisted metal mesh combined with bio-meshes or geo-meshes, allow to dispose in a single solution of the mechanical protection provided by the metal mesh and of the anti-erosion and renaturalizing action provided by the bio-mesh and geo-mesh.

Main application advantages of ARR geocomposites are:

- Contextual realization of an anti-erosion control surface (thanks to the action of the bio-mesh and geomesh) and cortical consolidation (thanks to the mechanical stiffening action of the system exerted by the rockfall net);
- The pre-coupling allows for greater installation effectiveness, as well as reducing installation times and risks for the workers by approximately 50%;
- Choice of the type of bio / geo-mesh on the basis of geotechnical needs;
- Low environmental impact;
- The characteristics in terms of openness and weight of the bio and geo-mesh allow to achieve the right coverage of the land, insolation, retention, renaturation and suitable water release;
- They are a suitable support for the retention and protection of hydroseeding (where provided);
- The coupling methodology allows the possibility of having a correct adherence of the bio-mesh and Geo-mesh to the slopes, reducing the risk of erosive runoff below;



ArrPet, stabilization of the railway slope with very fine soil - Orte area (VT)



Arco, A7 motorway side in Vignole Borbera land (AL)



Arco installation phase - Valle Castellana (TE)



ArrMet for slope strengthening in fractured rock - Genoa



ArrPet fine matrix retention detail and renaturation



ArrMat brown cortical strengthening on mixed slope



The main types of AR preassembled erosion control geocomposites and the related application fields are:

- ARCO geocomposite, consisting of a double-twisted metal mesh, pre-coupled with 100% coconut fiber bio-mesh. Its use is suggested in the stabilization and renaturation of slopes in soil, in altered or mixed rocks, up to a maximum inclination of 65-70°; indicated for most interventions with the presence and / or carryover of organic substance on the slope;
- ARRMAT geocomposite, consisting of a double-twisted metal mesh, pre-coupled with a variable color crimping geo-mesh, in polypropylene with a high alveolar index with anti-erosion and crimping function . Recommended use on slopes with low inclination and with a regular profile (for example basins and landfills), where friction is particularly low;
- ARRPET geocomposite, consisting of a double-twisted metal mesh, pre-coupled with UV stabilized polyethylene geotextile, dark green color. Use suggested in the stabilization of slopes with fine or very fine material, suitable to counteract possible phenomena of surface debris flows of small entity; in fact, ARRPET allows the solid part to be retained and the liquid part to come out, producing a defluidification of the mass and thus limiting its mobility; the opening of the mesh is designed not to hinder the development of pioneer vegetation, favored by the retention of the finer earthy accumulations in the geocomposite;
- ARRMET geocomposite, made of double-twisted wire mesh, pre-coupled with triple twisted tightly woven mesh. Particularly suitable in the protection and strengthening of slopes in fractured rock, or strongly altered with the presence of lithoid minors; in particular of embankments in counter-bank for roads, railways and in general in anthropized areas While the rockfall network stabilizes the larger lithoid parts, the presence of the triple-torsion dense mesh network allows the retention of breccias and lithoids, even of small dimensions, avoiding the spillage of gravel beyond the foot of the slope;
- Triple layer ARCOMET geocomposite, made of double-twisted wire mesh, pre-coupled with 100% coconut fiber bio- mesh and triple twisted tightly woven wire mesh; particularly suitable for stabilizing slopes characterized by small-sized lithoid material and loose soil. ARCOMET allows to perform the mechanical strengthening, the retention of the earthy matrix and the retention of the minor lithoid matrix with a single pose.



Pre-intervention underslope Ferriere situation



Arco system, road under-slope stabilization in loose ground, with gabion at the foot - Ferriere (PC)

ARRFORT100 FALLING ROCK PROTECTION KITS / ENHANCED GEOCOMPOSITE

Arrigo Gabbioni Italia provides operators in the slope consolidation sector with a new type of double twist rock fall net protection kits, equipped with CE marking, with enhanced performance compared to traditional falling rock protection kits.

The ARRFORT 100 system, both in the classic falling rock protection kits application for the consolidation of rock slopes and in the function of anti-erosion geocomposite on slopes with an altered lithoid matrix, allows to achieve performance up to 50% higher than the classic double twist rock fall net protection kits.

ArrFort 100 grant punching resistance more than 100 kN/m.

The ARRFORT 100 system therefore allows the designer to be able to use systems with simple double twist meshes, also for solving problems with energies higher than those of the standard double twisted meshes used up to now.

The ARRFORT 100 system can be combined with cortical strengthening systems such as bars, anchor nails, ropes and other accessories.



Pre-intervention unstable rocky slope - Fopla di Solignano (PR)



ArrFort Pet geocomposite laying phases



Reinforcement completed with ArrFort Pet - Fopla of Solignano (PR)



ArrFort strengthened rock fall net protection - Val d'Ossola (VB)

ROCK FALL NET PROTECTION

It is generally used for cortical strengthening of fractured rock slopes, in order to avoid the detachment and rolling of lithoid elements towards the valley, in particular for risk mitigation in anthropogenic areas (inhabited centers, infrastructures, roads and railways).

The falling rock protection kit can be used as a simple covering on the slopes, or be combined with cortical reinforcement systems such as bars, anchor nails, ropes and other accessories.

Arrigo Gabbioni Italia manufactures various types of falling rock protection kits with double-twisted hexagonal mesh, with diameters and anti - erosion coating of the wire and of the meshes in compliance with the Superior Council Guideline LL.PP. 69/2013 and accompanied by CE marking.

Being a direct manufacturer, Arrigo Gabbioni Italia can customize the roll sizes according to project needs.



Rock fall net protection net laid in Croatia



Rock fall net protection net laid in Sogno (BG)



Rock fall net protection net laid in Sogno (BG)



Rock fall net protection net laid in Croatia

ARRTERR PRE-ASSEMBLED SYSTEM FOR REINFORCED GROUNDS WITH INCLINED REVERSIBLE PARAMENT

Reinforced soils are a geotechnical system often used in the construction of soil embankments, for stabilization and containment works of counter-bank and under-rock on slopes, in roads, railways and hydraulic areas.

Compared to the traditional elements of a reinforced soil artifact, which provide for the separate laying of the constituent elements such as the front facing, the fine retainer and the planar reinforcements, the ARRTERR system is already pre-assembled, with an inclined facing between 50° and 70°, joining together already:

- The structural planar reinforcements in hexagonal double-twist polymer wire mesh;
- The retainer up in biomes anti-erosion 100% natural, biodegradable open mesh;
- The front face and the base are in electro-welded mesh in Zn-Al alloy, edged and hinged by points, so as to form a rigid and articulated front element.



New road embankment for access to the Fermo hospital



Completed and greened work



Pre-assembled ARRTERR reinforced soil system allows to obtain several advantages compared to traditional elements:

- The planar reinforcements in double-twisted wire mesh guarantee high standards of rigidity and at the same time the absence of deformations due to creep;
- The front faces being coated in Zn-Al alloy have high durability and a good visual impact;
- ARRTERR is pre-assembled and designed in "safety", to avoid injuries or cuts to the workers on site;
- The retentor of up to in bio -mesh with open mesh allows an effective anti-erosion retention and at the same time is effective in allowing the hydro-seeding or other soaking techniques to take root;
- The ARRTERR system is supplied pre-shaped and made according to the design specifications, with predetermined angles to project through the insertion of triangular brackets;
- Being pre-assembled, the ARRTERR system allows you to reduce processing times, costs and risks;
- The predetermined geometric modularity makes ARRTERR also suitable for the construction of works mixed with other techniques (for example together with gabions in hexagonal mesh);
- ARRTERR reinforced soils are made in compliance with the provisions of the Cons. Sup . LL.PP. 69/2013 and are equipped with CE marking.



Road widening and slope consolidation - Pontremoli (MS)



Embankment for new ski under slope - Sestola (MO)

ARRSYSTEM - PRE-ASSEMBLED SYSTEM FOR REINFORCED GROUND WITH VERTICAL FACING

ARRSYSTEM is a preassembled system of “mixed” reinforced soils, which combines the characteristics of hexagonal wire mesh gabions and ARRTERR reinforced soils. It is a modular system for the stabilization of slopes, embankments and / or ballast, externally covered with stones.

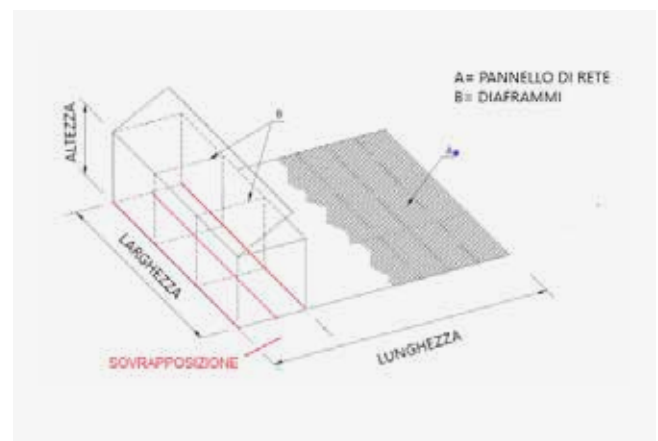
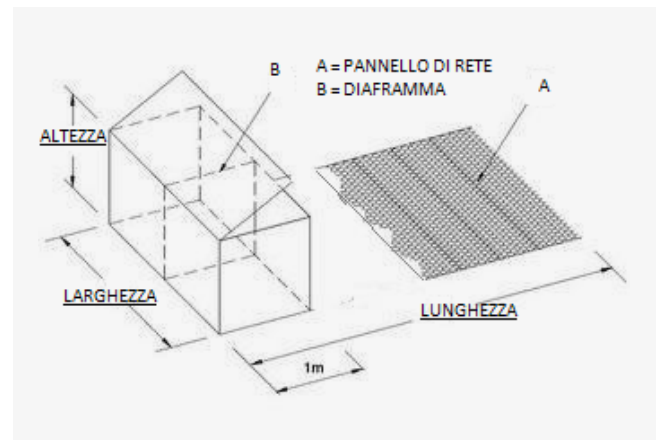
The system consists of a front gabion structure with vertical facing in double-twisted metal mesh, preassembled with a planar reinforcement element having the same characteristics. The gabion structure will be filled with stones during the application phases, while the planar reinforcement structure will be covered and compacted with suitable soil.

The main fields of application of ARRSYSTEM reinforced soils can be found in:

- Construction of walls, embankments, containment and stabilization embankments for geohydrological protection and structural works (roads, bridge pillars, railway embankments), in particular in those interventions where it is essential to reduce spaces by exploiting verticality and have a drainage system effective.



ArrSystem system, road under-slope consolidation -Podenzana (MS)





The main application advantages of ARRSYSTEM reinforced soil with vertical facing are:

- The verticality of the front gabion allows to reduce the overall dimensions of the work compared to a classic reinforced soil with an inclined face;
- The front gabion allows to carry out a good drainage action thanks to the presence of stones;
- The presence of the front gabion allows to retain the soil placed on the back as filling of the embankment, without the need for hydroseeding or greening of the work (in case it is possible to insert vegetative pockets or cuttings in the gabion);
- Since it is a pre-assembled and modular system, installation times, costs and risks will be reduced;
- ARRSYSTEM comes pre-shaped and produced according to the design specifications;
- The predetermined geometric modularity makes the ARRSYSTEM system also suitable for the realization of mixed works with other techniques;
- ARRSYSTEM reinforced soils are CE marked.



Podenzana (MS)



Detail - Podenzana (Ms)

GABIONS AND GREEN GABIONS - SUPPORTING WALLS AND HYDRAULIC PROTECTION WORKS

The double-twisted hexagonal wire mesh gabions are box structures filled with stones, which act as gravity support structures, with high water drainage capacity, exploiting the cohesion between stones and wire mesh.

The main fields of application of gabion structures in hexagonal wire mesh can be found in:

- Construction of support walls in counter-bank and under-shoe for the consolidation of landslide slopes, roads, railways and architectural;
- Realization of both longitudinal and transversal hydraulic protections (for example hydraulic bridles);
- Realization of low impact engineering works.



Hydraulic arrangement and slopes stabilization of low impact gabions and geocomposite Arco - Genoa



Mixed work with gabion base and top in soil reinforcement -Acerenza (PZ)



The main application advantages of the gabion in double-twisted wire mesh, compared to other types of works, are:

- They are able to accept even important deformations and displacements without compromising their static functionality;
- Thanks to the porosity, they perform an effective draining action and do not hinder the groundwater circulation, thus avoiding the formation of hydraulic pressures on the back of the embankment;
- Being modular works, they can be integrated with other types of low impact artefacts for the realization of naturalistic engineering works;
- They can be easily revived with insertions of cuttings and / or vegetative pockets (green gabions).

The gabions produced by Arrigo Gabbioni Italia comply with the Cons. Sup . LL.PP. 69/2013 and with CE marking.



Road bank work-Travo (PC)



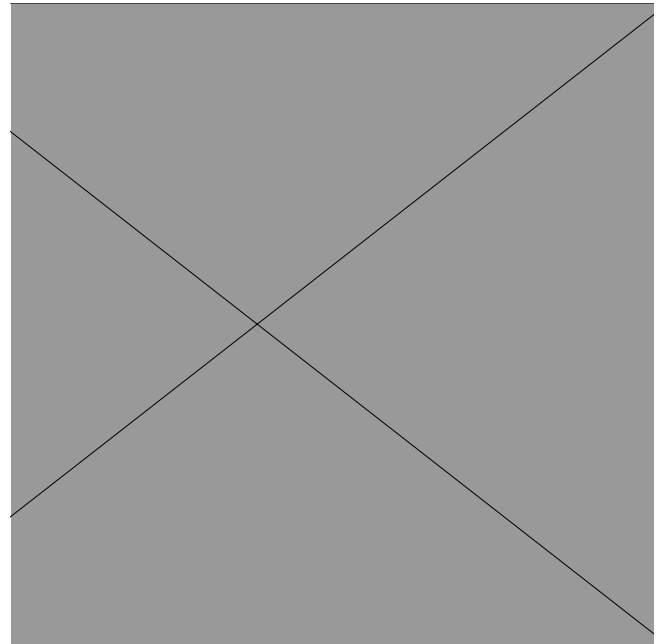
Greening gabions with vegetative pockets - Pavia

ARRIDRO - HYDRAULIC ANTIEROSIVE LOW IMPACT GEOCOMPOSITE

The geocomposite ARRIDRO, consisting of double twist wire mesh 6x8, pre-coupled with bionet 100% coconut fiber has been specifically designed for applications in the hydraulic field, in particular in the stabilization of embankments in eroding earth and / or with excavation activities of wildlife (eg coypus).

Main application areas of ARRIDRO erosion control geocomposite are:

- Erosion protection, stabilization and greening of earthen river slopes;
- Protection of river slopes and embankments against erosion caused by excavation fauna (coypus, porcupines, foxes and others);
- Consolidation and grassing of embankments in hydraulic works such as embankments, dams in frodo, expansion tanks, embankment revetments and rounding, lamination tanks and spillways;
- Construction of low impact engineering works;
- Use as hydraulic cover in the greening of mattresses, for the retention of the fine earthy matrix used to clog the voids in the stone fill.



Anti-erosion coating mixed with Arridro and mattresses of railway underslope - Domodossola (VB)



Low impact embankment and anti-coypus coating - Mantua

ANTI-COYPUS AND ANTI-SHAMBER MESH - GEOCOMPOSITE FOR THE ARGINAL PROTECTION FROM FAUNA EXCAVATORS

To protect the embankments from erosion by medium-sized burrowing fauna such as coypus and porcupines, but also from small animals such as the Louisiana shrimp, Arrigo Gabbioni Italia has studied two specific low impact solutions, each aimed at a specific problem:

- Double twisted metal 6x8 mesh against the intrusion of coypus and porcupine;
- Pre-coupled geocomposite consisting of a double twisted metal 6x8 mesh pre-assembled to a high tenacity pet- woven geomesh and narrow mesh, against intrusion from both coypus and shrimps.

These two systems have a very low environmental impact: in fact, they have been specifically designed to prevent damages caused by the fauna on embankments and / or sensitive areas, without (at the same time) causing damage to the fauna, simply pushing it to change habits.

The main application fields of anti-coypus mesh and the anti-shamber geocomposite are:

- anti-intrusive protection against excavation fauna, even small ones, and stabilization and greening of river embankments;
- erosion protection (in the case of use of the anti-shamber geocomposite);
- realization of low impact engineering works.



Laying anti-coypus nets in the riverbed - Castell'Arquato (PC)



Anti-coypus net coating with scotic ground



The main application advantages of the ARRIDRO anti-erosion geocomposite are:

- Low environmental impact: in fact the volumes of excavation of soil and its handling for the installation of the arridro system are much lower than those of interventions with loose stones, resulting in lower co2 emissions;
- The excavated soil is in a great part reused for the coverage of the anticoypus or antishamber geocomposite;
- No risk of tears, breaks or injuries due to machinery during mowing operations, using the soil to cover the geocomposite ;
- The permeability of the systems allows the hydraulic circulation, without creating hydraulic pressures on the back of the work;
- The use of the 6x8 mesh prevents the passage of even the smallest coypus;
- High installation speed and consequent reduction of risks for workers;
- Cost reduction compared to other techniques;
- The combined presence of the double twisted net and pet geomesh favors the retention and stabilization of the embankment soil, with consequent acceleration of the renaturation of the embankment.



Embankment laying of the anti-shamber and anti-erosion net - Rottofreno (PC)



Anti-erosion and anti-shamber net to embankment protection

METAL MATTRESSES FOR HYDRAULIC PROTECTION

The metal mattresses are made of a parallelepiped shaped 6x8 hexagonal metal mesh, filled with stones, generally with a wide base and reduced thickness, divided into several reinforcement pockets.

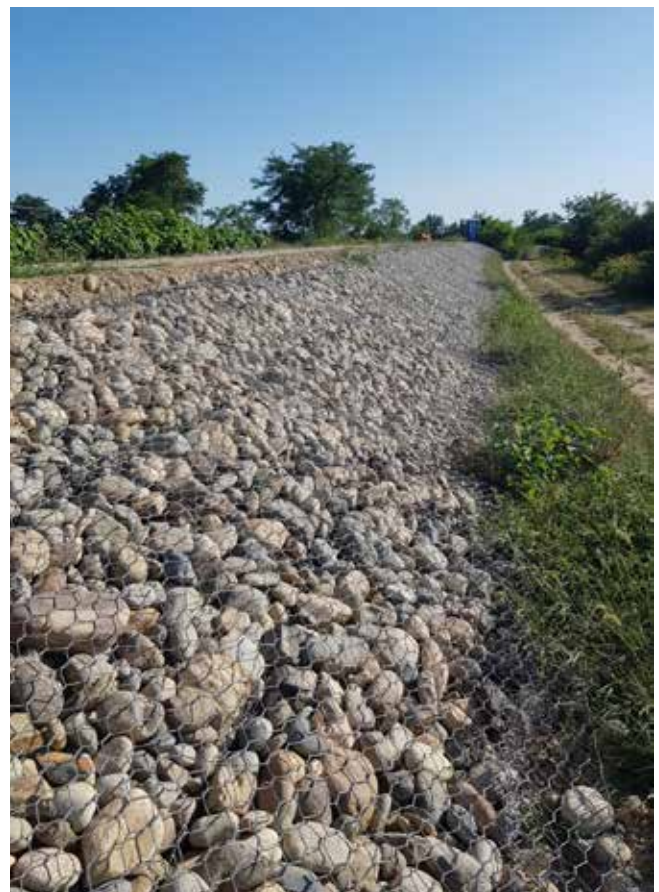
They have the function of hydraulic anti-erosion coverage to protect river embankments against the erosive action of currents and, thanks to their high flexibility and versatility, they are suitable for different uses, allowing, compared to the techniques with loose stones, to get several technical advantages and a significantly more content environmental impact.

The main applications of metal mattress structures are:

- Anti-erosion protection of rivers and canals;
- Environmental and naturalistic restoration of hydraulic structures both natural and artificial (drainage canals, retention basins, dams and soil dams, wetlands, areas subject to environmental protection);
- Lining of artificial basins for snow-making, irrigation or capping in landfills, as, in addition to the antierosion action of the surface, they are suitable for use in combination with waterproofing technologies;
- Realization of anti-slip toes to protect hydraulic works in gabions or loose stones.



Railway under-slope coating - Domodossola (VB)



Embankment coating - Balocco (VC)

CYLINDRICAL GABIONS FOR HYDRAULIC PROTECTION

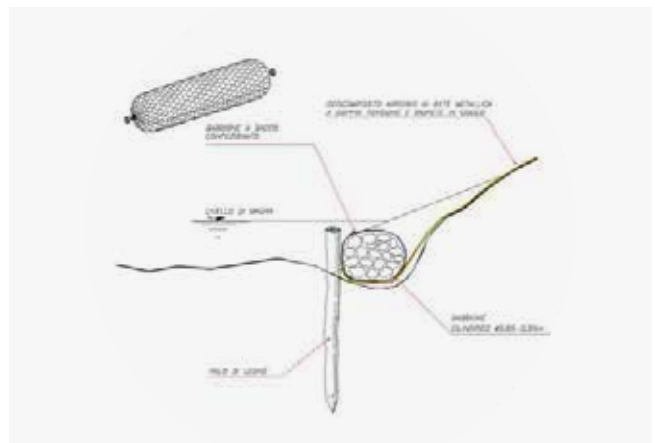
The cylindrical gabions are structures reinforced with hexagonal double-twisted wire mesh, inserted with two closing metal bars (if bars are not present, they are called "burghe"), filled directly on site with stones, with the aim of quickly creating flexible and permeable structural works, both longitudinal and transversal (hydraulic groynes). The technical and application characteristics of the cylindrical sack gabions make them extremely useful in various application areas.

The main application areas of cylindrical gabions are:

- covering and reinforcement of rivers and canals embankments;
- creation of foundations for bank structures in mattresses, gabions or loose stones;
- construction of emergency embankment works, such as embankments, control of embankment piping and fountains;
- realization of hydraulic groynes.



Bank defense in sack gabions - River PO Torre d'Oglio



Laying of sack gabions from barge - River PO Torre d'Oglio



The main application advantages of cylindrical gabions are:

- Being connected and extremely flexible, structures made of cylindrical gabions allow significant displacements and deformations, without losing their hydraulic functionality and without disjoining;
- Thanks to their porosity, they perform an effective draining action and do not hinder the groundwater circulation, thus avoiding the formation of hydraulic pressures on the back of the embankments;
- As they are assembled directly on site, they allow to carry out extremely fast works, and to intervene very quickly in emergencies;
- Thanks to their flexibility, the cylindrical

gabions can also be installed from the riverbed towards the embankment, by placing them directly on the bottom of the river by suitable boats, to reinforce the embankments or to make hydraulic groynes;

- Reduction of installation and processing times;
- Thanks to their modular structure and high capacity of retention of silty soil, plant cuttings can be integrated for the realization of naturalistic works, mitigating the environmental impact and improving the hydro-geotechnical functionality over time (increasing the resistance to drag stress, thanks to the widespread coverage and reinforcement of the root systems).



Bank defense in cylindrical gabions - Lugagnano (PC)



Paintbrush in sack gabions - River PO Torre d'Oglio

DRENAR - DRAINING TRENCHS FOR AGROFORESTAL AREAS

The prefabricated drainage panels Drenar and Drenar T have been widely used for years in the mitigation of instability in the agroforestry sector, as their small size, lightness and speed of installation make them the ideal solution in particular in valuable crops (vineyards , olive groves, orchards), as well as in wooded or difficult to access areas or on ski slopes, all areas in which the reduction of soil movements, the possibility of accessing and operating with small vehicles, the reduction of transiting loads and disposal, safety for the operators, are fundamental elements.

The main applications of Drenar and Drenar T drainage panels in agroforestry areas are :

- Drainage and stabilization of vineyards, orchards and olive groves, and, in general, of all valuable crops, where it is essential to intervene by minimizing movements and excavations;
- Drainage and stabilization of ski slopes or areas serving ski lifts and snow basins;
- Drainage and stabilization in wooded and mountain pasture areas;
- Drainage in areas of difficult access and steep slopes.



Section drainage in the vineyard - Loc. Boschi di Acqui Terme (AT)



Installation in a forest area that is difficult to access - Selva di Cadore (BI)



In the AgroForestry field, DRENAR draining panels allow to obtain several technical advantages compared to traditional methods:

- Minimal impact on crops, on the access road and on the profiles, reducing excavations, refillings, transports and disposals, in consideration of the reduced section of installation and high speed of movement;
- Greater safety for the workers as the installation takes place from the outside of the excavations;
- Lightening of the areas, being able to replace the ground with lighter material;
- Being an industrial product, it allows for homogeneous performance;
- Greater durability, as the porometry of the geotextile can be modified on the basis of the grain size curve;
- Possibility of increasing the draining section with the “draining chimney” technique (photo 9);
- The modularity of the system allows greater ease of design;
- The predefined dimensions allow a quick insertion into the wells both in concrete and prefabricated (photos 10 and 11), which will have both the function of collecting the drained water and inspecting the drainage function as well as to quickly overcome jumps in height;
- Reduction of time and costs of works.



Installation with forced section in the vineyard - Ronco Scrivia (GE)



Drainage in agricultural ground - Loc. Costa Rustigazzo (PC)

HIGH RESISTANCE FAUNISTIC AND PASTORAL MESHES

To help agro-forestry companies, designers and organizations who always more often have to protect cultivated areas and farms against damage caused by particular types of wild animals, which are increasingly popular in recent years, in particular ungulates (wild boar, roe deer, fallow deer), but also wolves, Arrigo Gabbioni Italia srl has developed some systems of high resistance faunistic and pastoral meshes, both in hexagonal double twisted wire mesh and in knotted square mesh, capable of guaranteeing high mechanical performance, ease of installation (thanks to the possibility of producing with “ad hoc” dimensions based on the needs of the applicant) and long life, thanks to the types of construction materials and anti-erosion coating used, as well as low impact. The main application fields of faunistic and pastoral meshworks, produced by Arrigo Gabbioni Italia, are:

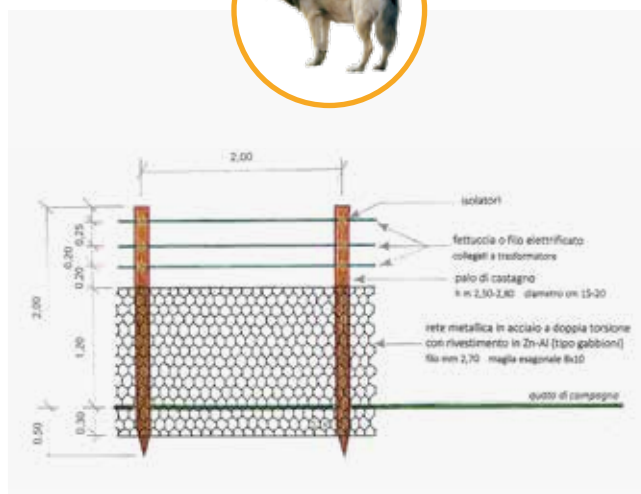
- Fences for the protection of houses and private buildings;
- Fences to protect farms and crops;
- Protection of roads, railways, airports against wildlife intrusions;
- Fencing of sports areas, public gardens and leisure areas.

The faunal meshes in double hexagonal twisted wire mesh or high resistance knotted square mesh guarantee:

- Functionality even in case of accidental or voluntary cutting of one of the wires;
- Durability against erosion thanks to zn-al, zn-al and polymer and zn alloy coatings;
- Accessibility even in uncomfortable areas: in fact, rolls of length and height can be produced according to the needs of the applicant;
- Modularity of the mesh, based on the type of fauna to be shielded by;
- Low impact, thanks to the great visual permeability and to the binding carried out on debarked chestnut poles;
- Speed of installation



Anti-boar and anti-wolf net - Ponte Ceno (PR)



Section of anti-fungal and anti-wolf net thanks to Dr. Agronomo Botti - Bedonia (PR)

BIONETS, GEOGRILS AND ANTIEROSIVE FABRICS

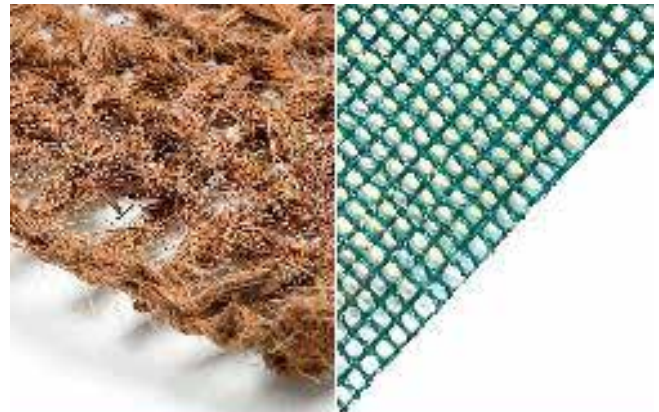
For light protection of slopes, embankments and road areas from erosion, or to integrate and complete more voluminous structural works (for example gabions, reinforced soil, metal mattresses, landfill capping, basin and canal coverings), Arrigo Gabbioni Italia produces bio and geosynthetic anti-erosion reinforcements, with different characteristics, performances and application fields, according to the needs of the operators in the sector.

In particular, the types proposed and the related application fields are:

- HIGH TENACITY GEOGRILS, mainly used as a reinforcement element for soilworks with high low-impact slopes, in roads and railways support works and to improve the safety of landslide slopes;
- GRIPPING GEONETS WITH HIGH ALVEOLAR INDEX, used as anti-erosion agents mainly in landfills, on canal banks and on slopes;
- BIONETS IN NATURAL FIBER OF COCONUT OR JUTE, generally used for the retention of silty soil and / or as support for hydroseeding, on natural or artificial slopes, or on embankments outside the normal hydraulic circulation and for low impact works;
- GEOTEXTILES, in synthetic fiber, normally used as an anti-erosion agent, separation or draining filter, between the substrate and the foundation layer at the base of roads, railways embankments and in hydraulic works.



Geogrids



Biomats



Geomats



Geotextiles



ARRIGO GABBIONI ITALIA S.r.l.



Via Lago Vecchio, 6
23801 Calolziocorte (LC) ITALIA



Tel.: +39 0341 634776
Fax: +39 0341 633484



www.arrigogabbioni.com
info@arrigogabbioni.com

