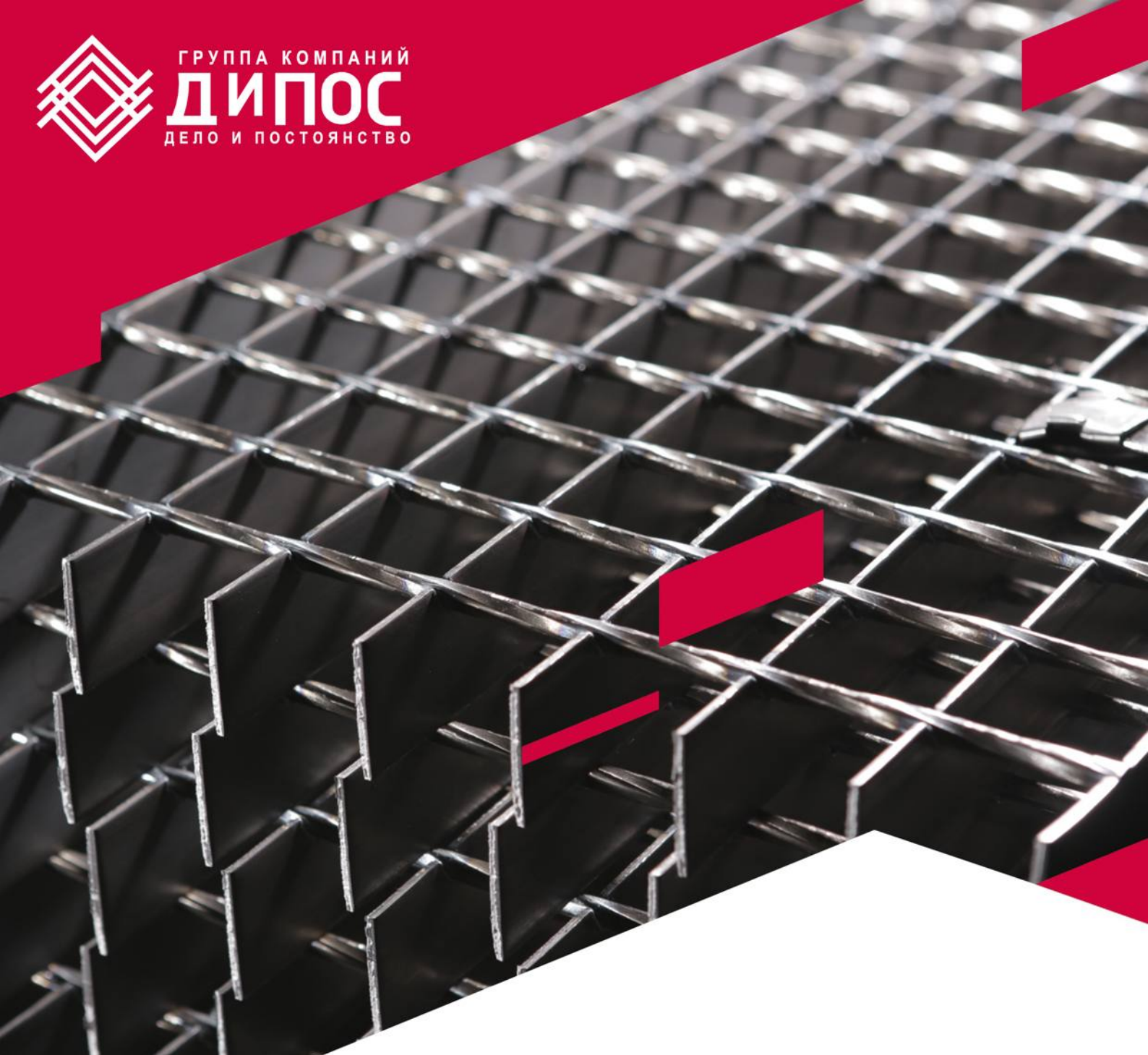




ГРУППА КОМПАНИЙ
ДИПОС
ДЕЛО И ПОСТОЯНСТВО



FLOORINGS

WELDED FLOOR GRATING
PRESSED FLOORING
CORRUGATED PROFILED FLOORING
FLOOR GRATING STEPS
FLOOR GRATING STEPS

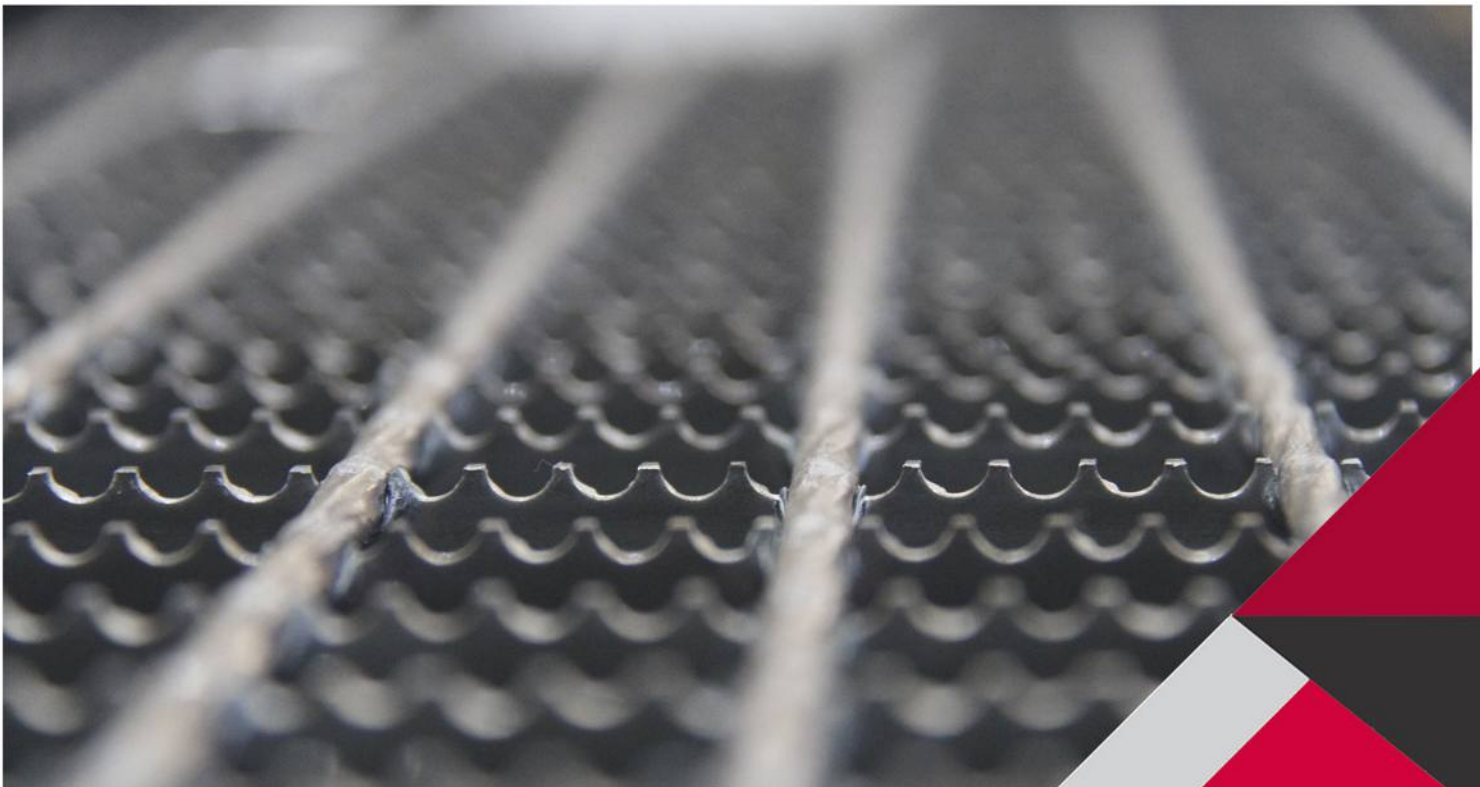
2020

WELDED FLOOR GRATING

DiPOS manufactures WELDED FLOOR GRATING, an innovative product that is widely used in modern industrial and civil construction. It represents a grating consisting of load-bearing steel strips and bracing bars connected together at a right angle using contact welding.

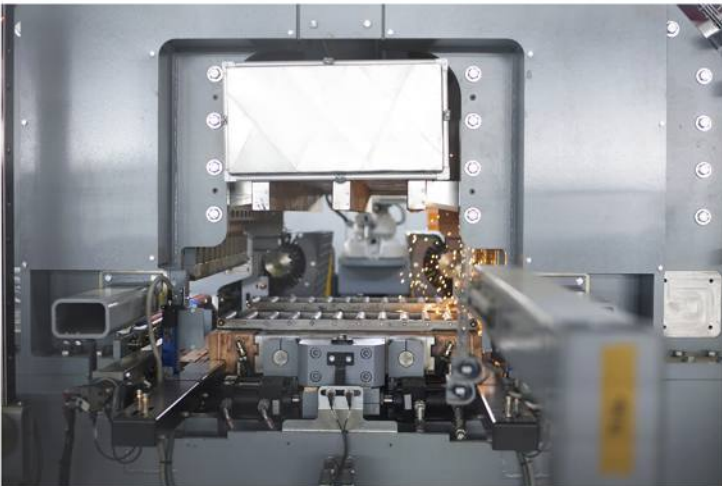
ADVANTAGES OF WELDED FLOOR GRATING

- High load-bearing capacity, enabling the movement of loading equipment and optimized lightweight at uniformly distributed load (when compared to solid metal and expanded steel sheets);
- A convenient and quick method of assembling and disassembling structures without welding and by using only bench work tools;
- Aesthetic appearance, no projections or burrs on the working surface and the anti-slip edges of bracing bars ensure safe passage for people and secure handling of materials;
- Ventilation and light conductivity of multilevel premises (saving on additional lighting, air conditioning and ventilation of premises);
- Grating can be manufactured according to individual drawings.



HIGH-TECH EUROPEAN EQUIPMENT

DIPOS manufactures welded floor grating using high-tech European equipment.



- **Design of detail steel structures**

During the design stage, DiPOS specialists provide services on laying the floor grating on top of the supporting steel structures in accordance with the customer's sets of drawings.

- **Cutting based on specified dimensions, cut-outs**

We provide services on cutting the flooring based on specified dimensions and making technological cut-outs following the customer's drawings prior to the installation stage.

- **Edging**

We edge the flooring both along the end surface of the bearing bars and the bracing elements using strips and various types of profiles including angle bars, tubes, and anti-slip edges.

- **Physical-and-mechanical testing**

The product is subjected to flexural testing under axial concentrated and distributed static load at the in-house laboratory.

- **Labeling**

We offer a wide range of labeling options for flooring. Labeling can be applied not only to bearing bars and edging strips but also to separate welded elements.

- **Packaging**

We offer numerous different packaging designs to choose from depending on the product delivery region, transportation method, and storage mode.

- **Protective coating**

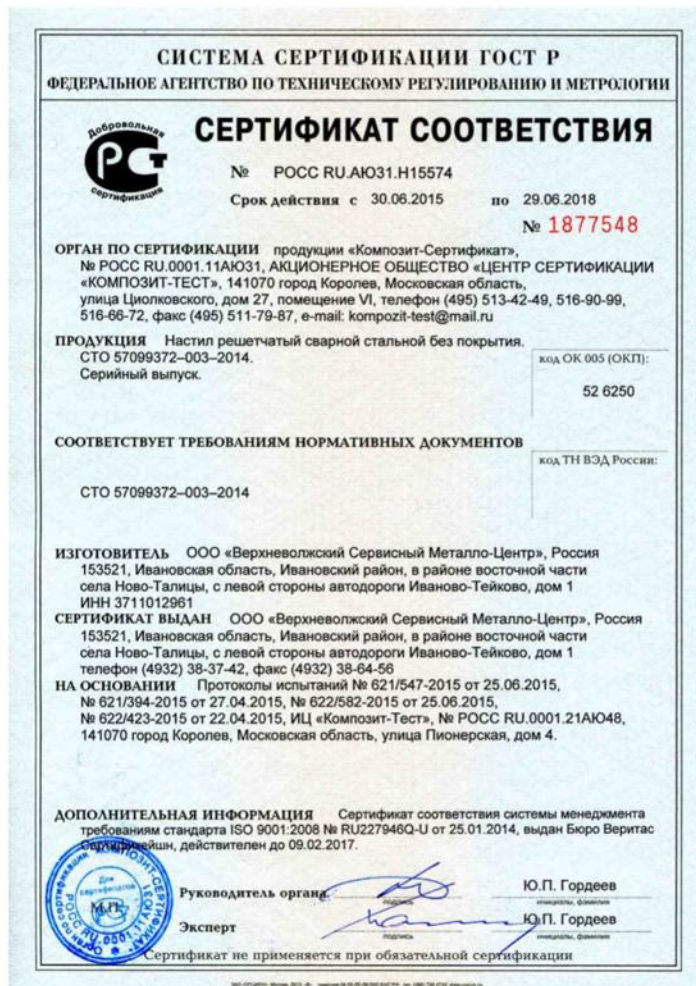
We provide services on the protection of flooring surface against corrosion using the following methods: hot-dip galvanizing, polymer powder coating, and combined method.

- **Delivery**

We provide delivery to any Russian region using our own vehicles or by railway.



Welded floor grating manufactured by DiPOS is certified in the GOST R system, which proves that the product complies with requirements of the regulatory document STO 57099372-003.



APPLICATION OF WELDED FLOOR GRATING

The broad range of product applications is driven by the easy maintenance of the flooring and the reliability of structures manufactured from it during the entire period of operation.

Hot-dip galvanizing applied to the finished product protects the structure against the corrosion and the aggressive influence of the environment including sudden temperature changes and the abundance of natural precipitations.

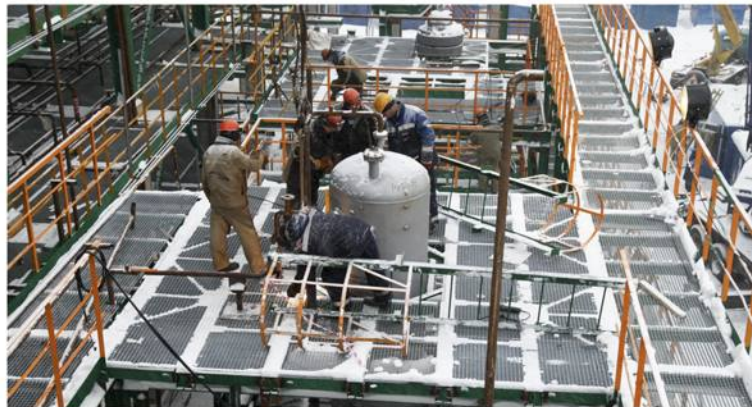
Structures can be installed by means of various fastening options and the possibility to manufacture flooring of nonstandard dimensions without using any cutting or welding tools and without taking any special measures as far as fire hazardous sites are concerned.

OUR PRODUCTS CAN BE USED AS THE FOLLOWING:

- Coatings applied at production sites
- Fencing
- Stairs
- Penthouse sections supplied as rack type structures
- Decor elements

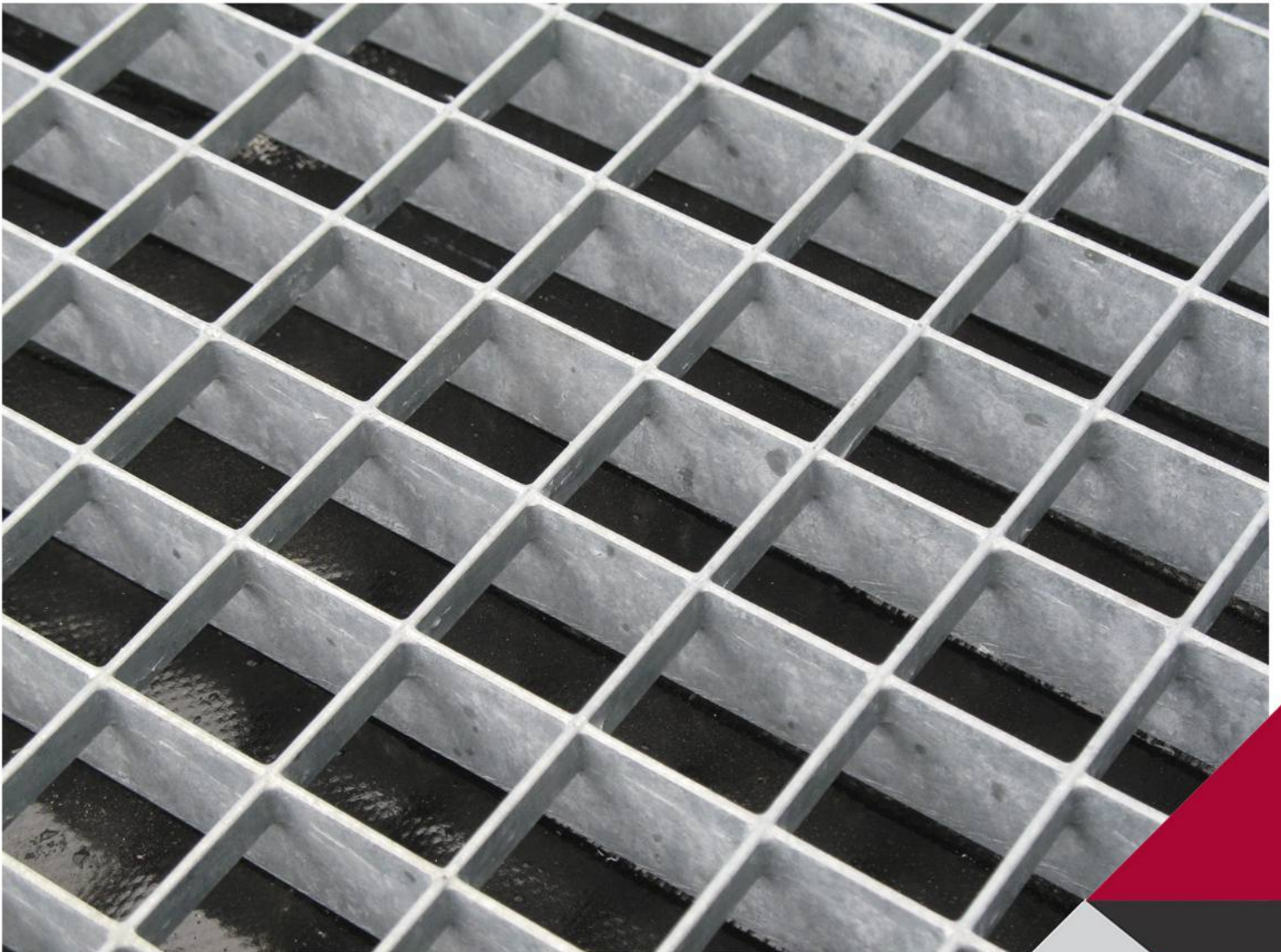


APPLICATION OF WELDED FLOOR GRATING



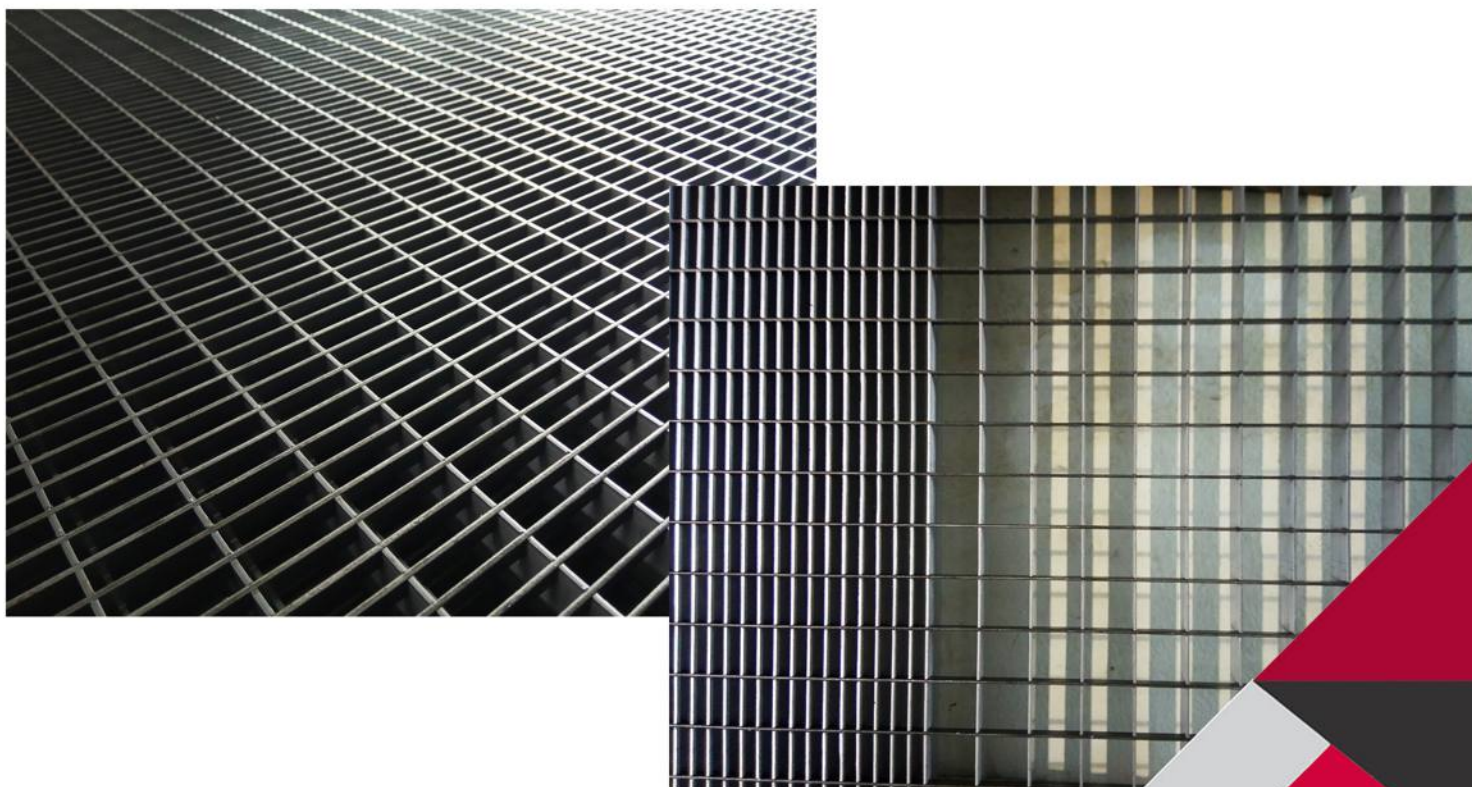
Pressed flooring is a multipurpose product applied in construction, shipbuilding, refurbishment of shopping centers, and other facilities as well as in other sectors and fields.

Pressed flooring represents a grating structure manufactured using the technology where bracing bars are cold-pressed into load-bearing bars under more than 100 tons of pressure. Pressed grating can be manufactured from hot-rolled, cold-rolled and stainless steel.



ADVANTAGES OF PRESSED FLOORING

- The flooring can withstand high dynamic and static loads, and is resistant to deformations and mechanical damages;
- It maintains its properties and characteristics for at least 10 years without needing any special service throughout its lifetime;
- Grating can be manufactured in accordance with the dimensions specified by the customer;
- Wide range of design styles;
- High anti-slip performance: a special solution is applied to the pressed surface to prevent slippage. This feature allows to use the material for fabricating stairs;
- Flexibility in application;
- Quick installation;
- Aesthetic appearance;
- Ecological safety: the flooring does not emit any substances that are dangerous to health and the environment;
- High fire resistance performance.



- The flooring can withstand high dynamic and static loads, and is resistant to deformations and mechanical damages;
- It maintains its properties and characteristics for at least 10 years without needing any special service throughout its lifetime;
- Grating can be manufactured in accordance with the dimensions specified by the customer;
- Wide range of design styles;
- High anti-slip performance: a special solution is applied to the pressed surface to prevent slippage. This feature allows to use the material for fabricating stairs;
- Flexibility in application;
- Quick installation;
- Aesthetic appearance;
- Ecological safety: the flooring does not emit any substances that are dangerous to health and the environment;
- High fire resistance performance.



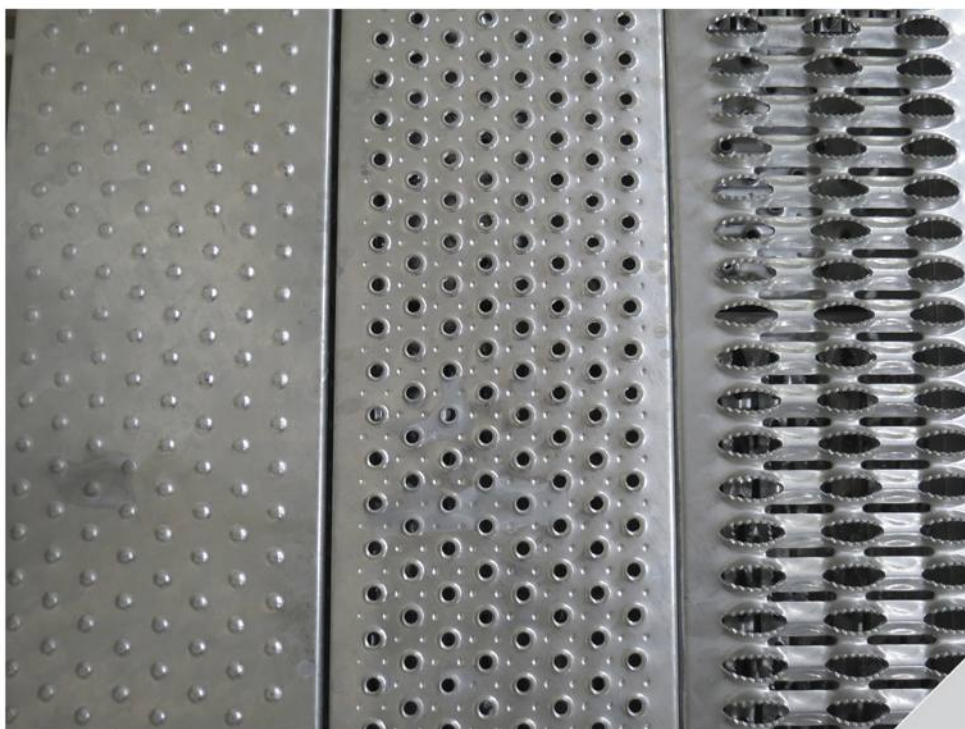
CORRUGATED PROFILED FLOORING

Corrugated profiled flooring (CPF) represents floor grating that has a unique anti-slip surface and features a strong ability to maintain its qualities even under highly adverse operating conditions.

ADVANTAGES OF CORRUGATED PROFILED FLOORING

The following advantages of corrugated profiled flooring were discovered during the operation:

- Anti-slipping that is ensured by openings with different configurations and edge types;
- The holes in the flooring prevent liquids and natural precipitation from being retained on its surface;
- The aesthetic surface appearance of corrugated profiled flooring allows to use it in urban infrastructure and civil construction;
- Numerous holes reduce the flooring weight, thereby ensuring the lightness of the finished structure;
- The flooring structures are multipurpose and can be applied under different temperature conditions, humidity levels and external chemical influences;
- Corrugated profiled gratings are manufactured from various materials, which makes them highly resistant to corrosion and durable.

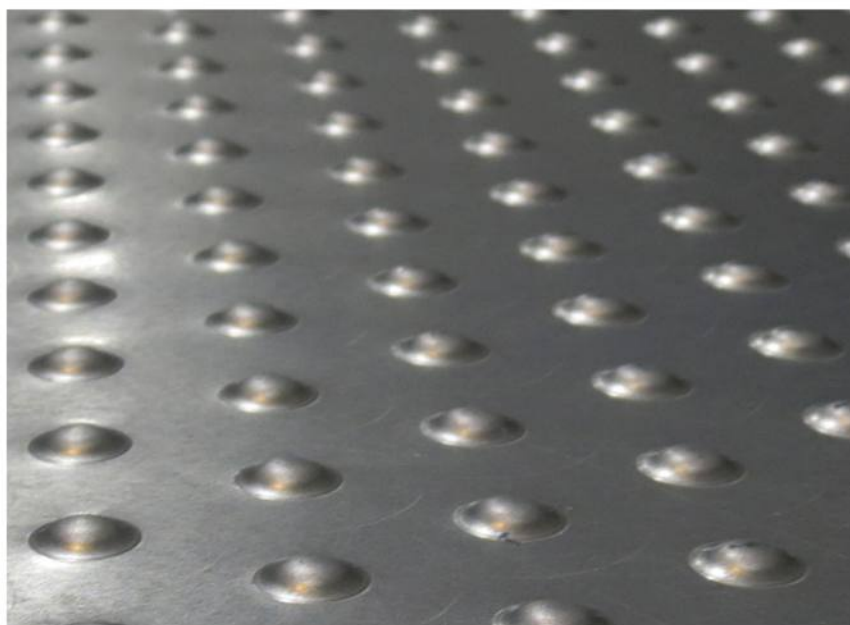


The name "Covered" of this type of corrugated profiled flooring itself means that such flooring has no through holes across the entire working surface of individual elements.

Its key advantage includes safety and forming a surface with minimal "grater" effect, which is particularly important at places that can be attended by children and where an anti-slip surface must be ensured under the low density of pollution.

Due to the protruding punched blind holes, the ingress of sand, for example, on such surface does not reduce the friction and retains good adhesion to the surface.

Application: passages and circulation areas at outdoor courts, facades.



This type of corrugated profiled flooring has punched oval-shaped holes with rough edges across the entire working surface. Due to such sawtooth configuration of the protruding edges of the working grate surface, they feature the highest anti-slip performance when compared with other types.

This type of flooring is typically used as platforms to ensure uniform route coherence. The additionally punched holes on the working surface reduce the potentially unclean area and the protruding edges contribute to breaking and disintegration of large waste elements.

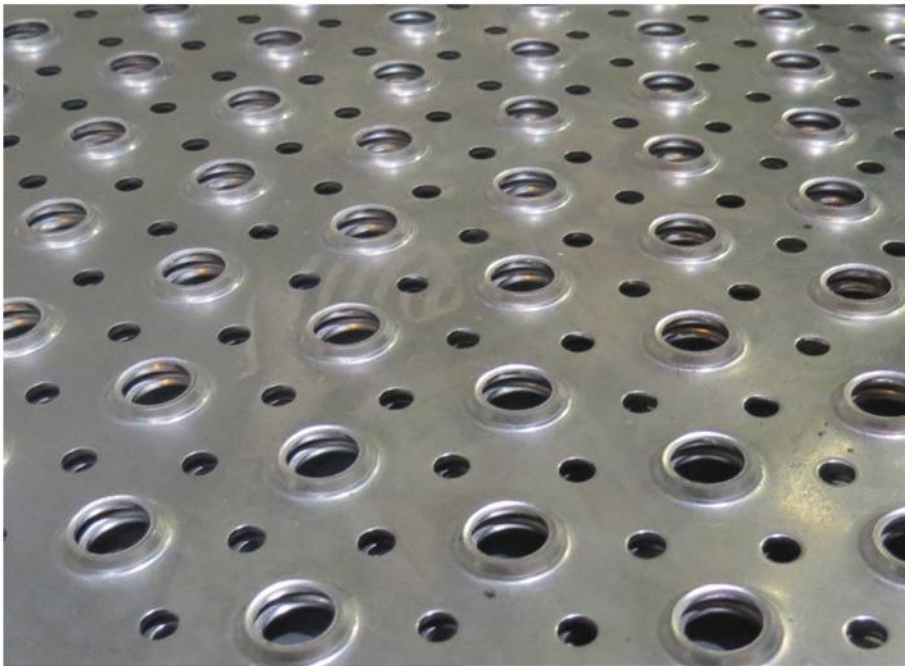
Toothed flooring is perfectly suitable for applications with potentially higher pollution or adhesion of large particles such as clay and snow.



This type of flooring features averaged pollution resistance performance and anti-slip properties. Protruding elements alternate with punched holes both along and across the sheet.

Due to the averaged performance, it can be used at industrial and civil facilities with an average density of liquid and granular pollutants.

Application: walkways, steps, scaffolds.



Punched oval-shaped holes with involute edges across the entire width of the grating represent a specific feature of this type of corrugated profiled flooring. They alternate with circular holes across the flooring.

Large through "windows" for relatively large particles of waste products or natural precipitations can be referred to the special features of this type.

This type of flooring can be used at woodworking shops where the size of chips and waste products is quite big and the flooring surface remains free from foreign particles due to the large transverse holes.

"Ramp" CPF has a less "aggressive" working surface compared to "Toothed" CPF.

Application: production sites, ramps, rainwater drainage ducts.



Floor grating steps are manufactured at DiPOS's own production facilities in accordance with STO 57099372-003. The step is provided with an anti-slip edge and side plates with holes for fixing it to the strings or other structural elements of the stairs.

Steps are subject to higher requirements in terms of safe movement. Therefore, all the steps are always provided with an additional anti-slip edge.

Steps can be manufactured on an individual basis according to the project or the customer's specifications.

APPLICATIONS

Floor grating steps are a perfect solution for industrial facilities, enterprises of oil-and-gas and agro-industrial complexes, civil construction, and other industries where the risk of slipping exists. The provision of the anti-slip edge ensures higher safety during movement, reduces the risk of people falling, and improves the resistance of steps to bending.



CORRUGATED PROFILED FLOORING STEPS

Steps are fabricated from all types of profiled gratings. They are different from corrugated profiled flooring as they have mounting strips with holes along their edge for fastening to structural elements. The mounting strip can be bent, welded, or fixed to the flooring during the installation by means of the bolt connection.

The step length is recommended to be selected from the following standard range of sizes: 600, 700, 800, 900, 1000, 1100, and 1200 mm.

"COVERED" CPF STEPS

The "Covered" type profiled grating steps are used to cover passages and circulation areas at outdoor courts where an anti-slip surface must be ensured under low density of pollution.



"TOOTHED" CPF STEPS

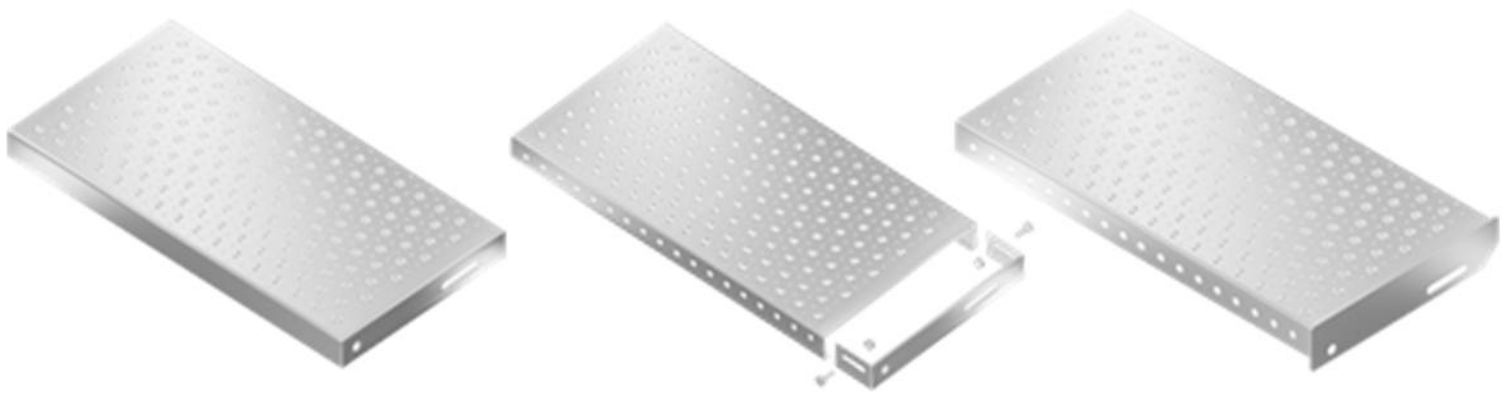
The most common type of corrugated profiled grating steps. They are used at construction sites, walkways and overhead crossings where the adhesion of large particles such as clay and snow is possible.



CORRUGATED PROFILED FLOORING STEPS

"ROUND" CPF STEPS

This type of corrugated profiled grating steps is applied at various walkways, scaffolds, and other facilities with low density of granular pollutants.



"RAMP" CPF STEPS

It is used to fabricate steps for production sites, ramps, and other facilities where the size of pollutants falling on the step can be quite big and the large transverse holes in the flooring allow to keep the structure clean from foreign particles.



The main purpose of the protective floor coating is to protect structures against corrosion. The exposure of metal to the environment results in corrosion, which has a negative impact not only on the appearance but also on the service life of steel products.

DiPOS provides the following own-produced protective coatings for flooring and stairs: hot-dip galvanizing, powder coating, and the combined method that involves coating the flooring with hot zinc and painting.

HOT-DIP GALVANIZING

Under hot-dip galvanizing, the flooring is completely immersed inside a pot with molten zinc at a temperature of about 460 oC. When the product is removed, a layer of oxide and carbonate is formed on the zinc-coated surface, which represents a protective layer preventing any further oxidation.

According to GOST 9.307, the protective coating thickness is 40-200 microns.

ADVANTAGES OF HOT-DIP GALVANIZING

- Strong undivided coating that is resistant to mechanical stresses
- Minimal zinc thickness that does not make the structure heavier
- Finished product quality inspection at the in-house laboratory
- Ecological compatibility and absolute environmental safety of the structure



POLYMER POWDER COATING

This method prevents the corrosion of basic metal products manufactured at our production facilities. These include various profiles (angle, roll-formed channel, open profile), flooring (grating, pressed, corrugated profiled, expanded metal), laser parts (profiles, boxes), and other small welded metal structures.

SPECIAL FEATURES OF USING POWDER PAINT AND APPLYING HOT ZINC ON METAL SURFACE

Powder painting:

- 1. Environmental safety.** The paints contain no components or substances that can have a negative impact on the environment and human health.
- 2. Cost-effectiveness.** The powder is not expensive and a lot cheaper to use than hot-dip galvanizing, in general.
- 3. Attraction.** The market offers a wide range of powders always making it possible to select a suitable mix for treatment at the customer's request.

Hot-dip galvanizing process:

- 1. Reliability.** The workpiece is completely immersed into the zinc pot, which allows to galvanize every element of the structure regardless of its shape and size.
- 2. Durability.** Zinc coating can maintain its performance for more than 100 years.
- 3. Strength.** Zinc improves the strength of the finished product.
- 4. Multipurposness.** This method is suitable for treating different types of steel.

Among the above-listed comparative characteristics, the hot-dip galvanizing method is effective for complex civil steel structures and metal products and protects the surface against corrosion for a much longer period of time. Powder painting is effective for simple

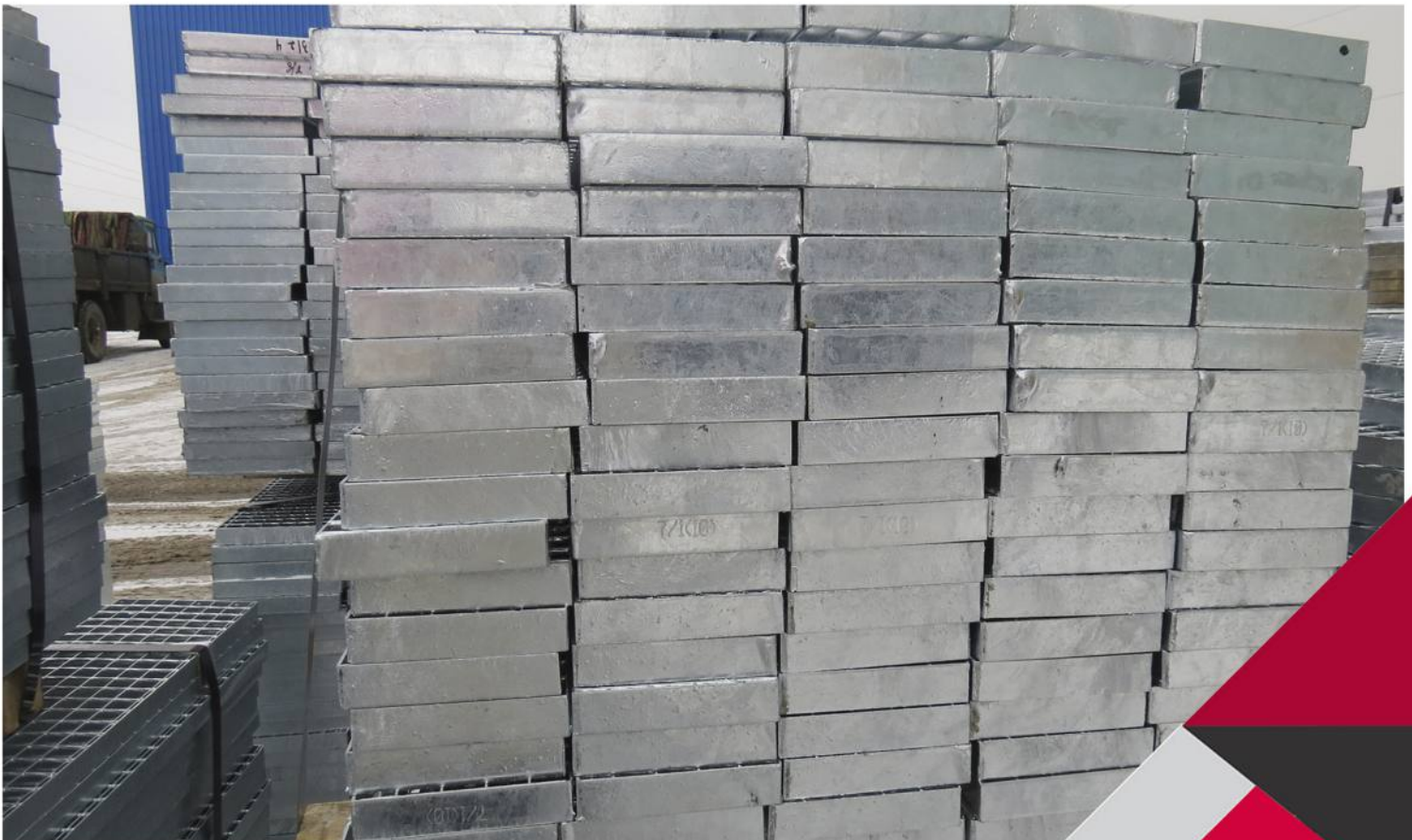


COMBINED COATING

DiPOS provides services on the application of combined "zinc-and-polymer" coating whose main advantage is increasing the useful life of the anti-corrosion coating when compared to traditional types of coating.

The combined coating is obtained by means of mutual interaction between hot-dip galvanizing and powder coating systems. This method is globally known as the duplex corrosion protection system, which has perfectly proven itself in the industries where the protection of metal against corrosion is particularly important.

This coating system features a synergetic effect, which lies in the fact that powder painting slows down the rate of zinc consumption. In its turn, when the polymer coating layer gets damaged, zinc still ensures the protection of metal. As a result, the metal structure is provided with protection whose effective period is 1.5 to 2.3 times longer than the aggregate effective period of protection provided by each individual anti-corrosion system.





ГРУППА КОМПАНИЙ

ДИПОС

ДЕЛО И ПОСТОЯНСТВО

CONTACTS

Tel.: 8-800-2000-120
E-mail: info@vv-metal.ru
www.dipos.ru