girders were installed on them and fastened them to the folds with the galvanized bolts. Then the tower structures were installed. Therefore earthworks were completely excluded. During the thawing of bogs, foundation settled but this processes stabilized gradually. Each of the folds was provided with special check valves, which inlet water and air under primary settling of foundation, but allowed to create the effect of "osculum" during the separation of foundation from the soil. Facilitated construction of such foundations can be delivered in off-road condition by helicopters and installed directly on the surface of bog. Therefore there is no need for special mechanisms of soil extraction or pile driving which require road transportation. This provides cheaper and faster construction solutions to bog soil areas. Existing versions of the folded-plate shell foundation technology are based on traditional methods of foundations installation. Thus, extra costs on reorganization of production process applying such foundations are not required.

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EFFECTIVE DESIGN – FOLDED-PLATE SHELL FOUNDATION

At the present stage of foundation engineering there is a need to develop advanced constructions of foundations, which will be more

economical, technologically enhanced, and able to be used in difficult geotechnical conditions.

Folded shell-footing constructions for transmission towers structures, was elaborated to be used on water-saturated, fen and soft soils.

The aim of folded shell foundation is to improve the operation of folded foundation for transmission towers by creating a hinged system of folds fastening with supporting beams, which allows redistribute the load and emerging forces evenly in every fold of the foundation. Thus, it ensures high efficiency of each element of folded foundation and the system of folds in general.

Folded foundation for transmission towers consists of thin reinforced folds which are interconnected on top by a steel or reinforced concrete beam. The first two folds are connected with a beam, while the third connects them with the same beam on the hinged joints, which is set over the first beam, forming a system of bearing beams with fixed hinges. The system of folded foundation consists of six prismatic folds; other three folds are interconnected symmetrically and in a similar manner to the first three folds.

For the foundation's proper operation under non-uniform base deformation, folded foundation for transmission towers can evenly redistribute the loads on the structural elements of the foundation system.

Due to the hinged joint of prismatic folds with the bearing beams more uniform distribution of external loads on the elements of the foundation system is achieved. The voids of the folds are of prismatic form to provide the formation of a compact core of a certain value and to redistribute base pressure on the foundation.

The foundation construction proposed responds to a number of requirements: minimum weight of prefabricated elements to be transmited to remote zones; minimum materials consumption; the possibility to use weak structural strength of the soil and of water buoyancy force; uniformity of prefabricated elements; voids formation in the bottom to create osculum effect in case of foundation separation; creation of porous lower surface to increase foundation resistance to horizontal displacement.

The construction design of folded-plate foundation for transmission towers is able to uniformly redistribute the loads on the structur-

al elements of the foundation system. In case of non-uniform base deformation, the redistribution of contact pressures occurs and the system comes into equilibrium under a constructive solution.

The folded foundation proposed can be used for transmission towers which are applied in water-saturated, fen and soft soils and the non-uniform base deformation.

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GOOGLE'S NEURAL TRANSLATION TECHNOLOGY

At the heart of all innovations is a change of some kind but this does not necessarily mean that the change always has to be radical and wholesale. Creating a translation machine has long been seen as one of the toughest challenges in artificial intelligence. For decades, computer scientists have tried using a *rules-based approach* — teaching the computer the linguistic rules of two languages and giving it the necessary dictionaries.

In the mid-1990s, researchers began favouring a so-called *statistical approach*. They found that if they fed the computer thousands or millions of passages and their human-generated translations, it could learn to make accurate guesses about how to translate new texts. It turns out that this technique, which requires huge amounts of data and much computing horsepower, is right up Google's alley. Google's infrastructure is well suited to this. People, who work there,