Application of concrete construction technology in municipal road and bridge construction

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Abstract: with the development of our society and Economy, in the course of our country's road and bridge construction, Concrete technology has been greatly developed and applied. But traditional concrete construction technology there are a lot of problems in the construction of municipal road and bridge in our country, resulting in the construction of the bridge there are Issues, affects Public security. accordingly requires Effective analysis and discussion of existing problems in traditional concrete technology, and some improvements to traditional concrete technology, So that it can be better in the construction of municipal Road and bridge can be effectively implemented and applied.

Keywords: Concrete Technology; Municipal Road and Bridge construction; Apply

In recent years, with the development of China's social economy and the construction of urbanization not break forward, related Road traffic also needs to be improved and updated effectively, especially municipal road bridge construction. in view of the current development in our country, Our country's Road construction mainly uses concrete technology, not only in the process of construction enough for simple, convenient Operation, the project is of higher quality, used Live longer. But nowadays in the construction process of many municipal road and bridge, are always Because of the quality of related engineering construction, people's lives and health properties caused a certain impact. The accordingly requires an analysis of The problems that occur with the effect, Effective research on traditional concrete technology and materials, to improve concrete technology for the differences between them, and then increase effectively Quality of strong concrete construction technology.

1. Application of concrete technology in municipal road and bridge construction

1.1. Road deck cracking

Today, in the construction process of our municipal Road and Road bridge, Road Deck cracking is now is very common. as shown in 1., the main reason for this occurs with the is the poor tensile strength of the concrete technology used by the,. because concrete is a Man-made material,. Its main constituent material is cement, sand ,broken stones and water, by blending and stirring these materials in a certain proportion and hardening them after the. and in concrete, final component is gravel,. Quality of the gravel The has a direct relationship to the shrinkage resistance of the concrete being produced. this,. Cement paste in concrete can play a certain lubrication effect. This form of the concrete has extremely strong rigidity in the construction process,. But the associated anti-Pull Poor,. Easy to cause the construction of municipal road and Bridge after receiving a certain pressure deformation, causing pavement cracking.

1.2. Road surface deformation

Municipal Road and Bridge construction process,. The concrete used by has thermal expansion and

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timely , Effective maintenance , to effectively guarantee engineering construction quality . so , in the process of curing the need for concrete technology in engineering apply The problems that exist in the process of working to take effective measures to improve it . due to " concrete with hydraulic characteristics , so , concrete in curing process , the hardness of the its is also enhanced .based on , need to be tightened in the curing process to Road with timed watering , Keep it to a certain degree of wetness , to Prevent road Surface cracks due to lack of water and so on . also , due to concrete template also has a certain amount of bleeding , so you need to be in time for the gas generated by the road deck bubble to make timely fixes , do road cleaning and so on .

2. Use high-performance concrete technology

for today's municipal road and bridge construction , Traditional Concrete Technology has been unable to guarantee the quality of road and bridge construction , for People's health cause a great shadow threat . hereby , on Traditional concrete technology enforce and improve , to Improve performance of concrete , increase the stability of road construction with durable performance . addition to , can also effectively improve road construction efficiency , Shrink Short construction time , lower construction cost and so on .

When working with high-performance concrete , requires a path based on the actual conditions for comprehensive consideration . General , High performance concrete mainly used for Bridge main girder and pier construction process , can effectively enhance project stability qualitative , lifting Road and bridge construction quality , increases the life span of the road and bridge . at the same time , also

Discussion on key technology of Cast-in-place pile in bridge construction

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Summary Drilling Cast-in-place Pile Construction technology is a new technology of Highway bridge construction , before and during construction , This technology has varying degrees of technical defects , to our national Highway The long-term development of the bridge cause has a very adverse effect . . This paper first introduces the construction technology of cast-in-place bored pile , On the basis of this, the problems of cast-in-place bored pile construction are analyzed easily . , Finally, an effective strategy to improve the construction technology of cast-in-place bored pile is analyzed. , want to benefit the person concerned .

keyword Bridge Construction ; Impact drilled Cast-in-place pile ; Key Technologies

along with the development of China's engineering construction cause of the continuous improvement , The pile base should be for multiple domains , such as high-rise building , bridge , port and so on . on road bridge construction process , use of drilled cast-in-place piles has been widely applied , This technology's features simple construction , low cost , can reduce engineering expenses , But this technique There are many hidden abuses and pitfalls to exclude , Drilling Perfusion pile Construction is a concealed construction method , Therefore constructors must have a high responsibility , strict with yourself , Spec Action , Select Advanced Construction Equipment ,recognize completes each operation . The first thing to do when using bored pile construction technology is to do the good work before construction , maximum removal of safety and quality hazards in construction . enforce site construction during use , Strive for the use and financing of technology distribution of sources can reach a relatively complete level , Ensure construction overall quality elevation . The is discussed in this article , I want to be able to promote highway construction. action .

3. Theoretical Overview of Cast-in-place pile technology

At this stage , The most commonly used pile foundation construction in the bridge construction process technology is bored pile technology , The technology has become a bridge building in China the necessary technology for construction_. This technology compared to traditional technology , from multi-party surface Optimized Pile Foundation Technology , can guarantee construction progress at the same time construction The quality , also , The technology can also be used for the foundation construction of ordinary buildings. , down noise nuisance caused by low
traditional construction, construction piles are longer in diameter, is currently the most obvious advantage of the pile Foundation construction Technology. Use of drilled cast-in-place piles first first popularized in ordinary building construction, worker to zones The geology of the domain carries on the rigorous measurement and control after, to position the pile Foundation, Drilling, To form A After the holes should be in the pipe work, the whole construction process has been strictly Maintenance, and detects the construction process of other pile foundations. Although a drilled cast-in-place pile has The advantages of " very obvious benefits, but also prone to technical challenges, as drilling down collapse, blocked issues, These issues are especially true in bridge construction works show, The construction of the pile foundation of the bridge construction is quite normal, with the obvious stealth feature, affected by many unknown factors during construction, In the drilling construction workers must be calm in the process of construction. To handle the positive attitude problems, only through this method can we guarantee the smooth construction, drilling cast-in-place Pile Construction Technical Flow chart 1.

4. Construction technology flow of bored pile for bridge Pile Foundation

Construction Technology of bored pile of bridge pile Foundation in concrete project implementation main to include confirmation of construction schemes, Preparation of construction facilities and venues, to make with, drilling, fixed and other specific processes, under description:

Concrete Bridge engineering implementation, field trips before and corresponding The Determination of drawings plays a very important role. For cast-in-place piles before construction, construction

There is a need to strengthen effective monitoring of the quality of materials used in high-performance concrete with admin, Ensure quality of raw materials, to improve the quality and sex of concrete can, Increase the strength of the concrete, Avoid related cracks resulting in road and bridge sends unsafe accidents.

5. Epilogue

in the process of municipal road and bridge construction, Concrete Technology is its construction of the The key to is to ensure quality of construction. on this, for traditional mixed the deficiencies in the geotechnical technology for effective analysis and research, with this to effectively promote concrete technology in the construction of municipal road and bridge, Promote entire Project Construction quality. also, along with the progress and development of science and technology, Concrete Construction technology has also been improved with effective, related performance and quality to a certain extent development. so that during construction of the municipal Road and Bridge works With this high-performance concrete technology can increase the stability of road and bridge construction, construction quality of related road and bridge works. to Promote our municipal road and bridge works more Good construction and development, for sustainable development, effectively elevate people's lives Live level and quality.

References: