

XZJ5313TFCTB(XTF1203) Asphalt Chip Synchronous Sealer

Technical Specification



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XZJ5313TFCTB (XTF1203) Asphalt Chip Synchronous Sealer Technical Specification

XZJ5313TFCTB(XTF1203)沥青碎石同步封层车 技术规格书

1. Overview

XZJ5313TFCTB (XTF1203) asphalt synchronous chip sealer can realize the synchronous spreading of asphalt and gravel, improve the quality of pavement seal coat; It can be used to spread rubber asphalt, matrix asphalt, modified asphalt and emulsified asphalt; It is applicable to the construction of lower and upper seal coat, wearing course construction for new and old road surface, layer spread method of asphalt pavement, the separate spreading of asphalt and gravel in special case, etc.; It can be used for the interlayer treatment and medium maintenance construction of high-grade highway.

1 概述

XZJ5313TFCTB(XTF1203)沥青碎石同步封层车可实现沥青和碎石的同步洒布,改善者和提高路面封层质量;可喷洒橡胶沥青、基质沥青、改性沥青、乳化沥青等多种沥青;适用于公路表面、桥面的下封层、上封层施工,新旧路面加铺磨耗层施工,沥青路面的层铺法施工,沥青碎石特殊情况下的分别洒布等;可用于高等级公路的层间处理和中期养护施工。

2. Executive Laws, Rules, Safety Standards and Product Standards

In the process of product design, strictly abide by the "Standardization Law", "Product Quality Law", "Measurement Law", "Standardized Review and Management Methods for New Mechanical and Electrical Product", "Enterprise Standardization Management Method" and "Environmental Protection Law" and other laws and regulations.

This product executes and complies with the following relative standards:

GB 7258 Safe Specification for Motor Vehicles Operating on Roads

GB/T28393 Road construction and road maintenance machinery and equipment — Synchronous chips seal truck

GB 16735 Road Vehicle - Vehicle Identification Number (VIN)



- GB 4785 Prescription for Installation of External Lighting and Light-Signaling Devices for Motor Vehicles and Trailers
 - GB 11567 Motor vehicles and trailers-lateral and rear underrun protection requirements
- GB 15084 Performance and Installation Requirements of Motor Vehicles-Rear View Mirrors
 - GB1589 Limits of dimensions, axle load and masses for road vehicles
 - GB 23254 Retro-reflective Markings for Vehicles and Trailers
 - GB 15741 License Plates (Brackets) And Its Position on Motor Vehicles and Trailer
 - GB 25990 Rear-Marking Plates for Vehicles and Trailers

2 产品执行的法律、法规、安全标准和产品标准

在产品的设计过程中,严格遵守《标准化法》、《产品质量法》、《计量法》、《机电新产品标准化审查管理办法》、《企业标准化管理办法》和《环境保护法》等法律法规。

本产品执行并符合以下相关标准:

- GB 7258《机动车运行安全技术条件》
- GB/T 28393《道路施工与养护机械设备 沥青碎石同步封层车》
- GB 16735《道路车辆车辆识别代号(VIN)》
- GB 4785《汽车及挂车外部照明和信号装置的安装规定》
- GB 11567 《汽车及挂车侧面和后下部防护要求》
- GB 15084《机动车辆后视镜的性能和安装要求》
- GB 1589《道路汽车外轮廓尺寸、轴荷及质量限值》
- GB 23254《货车及挂车车身反光标识》
- GB 15741《汽车和挂车号牌板(架)及其位置》
- GB 25990《车辆尾部标志板》

3. Main performance and characteristics

- ◆ The belt conveyance silo, the vehicle center of gravity is low, good adaptability to the bridge culvert, ramp construction.
- ◆ The conveyor belt is designed for draw-out type, with rollers under the conveyor belt, which can slide on the track of the frame, and easy to replace.
- ◆ The hydraulic telescopic gravel spreader, the stone material is falling vertically, the distribution homogeneity is good.



- ◆ Hydraulic motor drive automatic folding asphalt spraying beam, easy to operate.
- Dual diesel burner asphalt tank, fast heating speed, good insulation performance; Paddle mixer, mix well and effectively solve the precipitation and segregation problem of rubber asphalt.
- ◆ Equipped with up-mounted engine, high stability for plateau and mountain road construction.
- ◆ Imported Belgian JOHNSON asphalt pump, imported hydraulic system, high reliability.
- ◆ Intelligent control system, just set distributing amount of asphalt spraying per square meter, automatic spraying can be achieved
- ◆ The touch screen in driver's cab displays construction parameters and monitor picture in real time
- ◆ Strong spraying at start control technology realizes zero-start spraying of asphalt
- ◆ Automatic and manual operation systems, convenient and reliable
- ◆ The asphalt pipeline is controlled by pneumatic valve, air pressure cleaning function, fast and easy to operate.
- ◆ SINOTRUCK HOWO 8×4 heavy load chassis, strong power and comfortable driving

3 主要性能与特点

- ◆ 皮带输送式料仓,整车重心低,桥涵、坡道施工适应性好
- ◆ 输料带为抽屉式设计,输料带下方有滚轮,可在车架轨道上滑动,输料带更换方便
- ◆ 液压伸缩碎石撒布器,石料垂直下落,撒布均匀性好
- ◆ 采用液压马达驱动自动折叠式沥青喷洒梁,操作方便
- ◆ 双柴油燃烧器沥青罐体,加热速度快,保温性能好,桨叶式搅拌装置,搅拌均匀,可 有效解决橡胶沥青沉淀、离析问题
- ◆ 配置上装发动机,高原及山区道路施工稳定性好
- ◆ 进口比利时 JOHNSON 沥青泵,进口液压系统,可靠性高
- ◆ 智能控制系统,只需设定每平方米沥青洒布量,即可实现自动喷洒
- ◆ 驾驶室内触屏显示器,实时显示施工参数及监视画面
- ◆ 起步强喷控制技术,实现沥青的零起步喷洒
- ◆ 自动和手动两套操作系统,操作方便可靠
- ◆ 沥青管道全程气动阀门控制,气压清洗系统,操作方便快捷



- ◆ 中国汽车 HOWO 8×4 重载底盘,动力强劲,驾驶舒适
- 4. Main technical parameters
- 4.1 Technical parameters table

Item	Unit	Parameters	
Product model	-	XZJ5313TFCTB (XTF1203)	
♦ Working performanc	e parameter		
Maximum seal width	m	4	
Asphalt spraying amount	kg/m ²	0.2 -3.0	
Gravel quantity	L/m^2	3 -22	
Distributing accuracy	%	±1.5	
Capacity of asphalt tank	m³	6	
Gravel silo volume	m³	14	
Gravel diameter	mm	3 -25	
Working speed	km/h	3 -10	
♦ Chassis performance	parameter	,	
Chassis model	-	HOWOZZ1317N4667E1H (China Stage V)	
Engine type	-	D10.34 -50	
Engine power	kW/r/min	249 / 1900	
Driving mode	-	8×4	
Maximum traveling speed	km/h	90	
Diesel tank volume (chassis)	L	300	
Diesel tank volume (work device)	L	200	
Curb weight	kg	25300	
Total mass	kg	31000	
◆ Up-mounted engine p	gine parameter		
Туре	-	Shanghai diesel SC4H100G3	
Power	kW/r/min	73.5/2200	
Overall dimension parameter			
Minimum ground clearance	mm	243	
Approach Angle/Departure Angle	0	14 / 12	



Overall dimension	mm	11980×2500×3890
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4.2 List of main parts and components

No.	System name	Parts name	Brand
1	Chassis system	Chassis	HOWO SINOTRUCK
2	Power system	Engine	Shangchai
3	A1 - 14	Asphalt pump	JOHNSON
4	Asphalt conveying system	Heat conducting pump	Hebei Zhaohong
5	Asphalt tank	Burner	BECKETT America
6	Aggregate conveying system	Reducer	Changzhou Guomao
7	Spraying beam	Nozzle cylinder	Ningbo EMC (kai pu)
8	8 9 Gas circuit system 10	Hopper cylinder	Ningbo EMC (kai pu)
9		Lifting cylinder	Ningbo EMC (kai pu)
10		Solenoid valve	Ningbo EMC (kai pu)
11		Constant pressure variable pump	Danfoss
12		Gear pump	Danfoss
13	Hydraulic system	Hydraulic motor	Danfoss
14		Hydraulic motor	Eaton
15		Solenoid valve	Argo-Hytos
16	Electrical system	Display	Shanghai Hongying
17	Electrical system	Controller	Shanghai Hongying

4.3 Optional parts and components

No.	Parts name	Brand	Purpose
1	Manual spray gun and hose	XCMG	Manual asphalt spraying device
2	Asphalt suction pipe	XCMG	Asphalt pump
3	One set of fogging sealing nozzles	XCMG	Used for the construction of fog sealing layer



4 主要技术参数

4.1 技术参数表

项 目	单 位	参 数		
产品型号	-	XZJ5313TFCTB (XTF1203)		
◆ 作业性能参数				
最大封层宽度	m	4		
沥青洒布量	kg/ m ²	0.2-3.0		
碎石撒布量	L/ m ²	3-22		
沥青洒布精度	%	±1.5		
沥青罐体容积	m³	6		
碎石料仓容积	m³	14		
碎石粒径	mm	3-25		
工作速度	km/h	3-10		
◆ 底盘性能参数				
底盘型号	-	重汽豪沃 ZZ1317N4667E1H(国V)		
发动机型号	-	D10.34-50		
发动机功率	kW/r/min	249/1900		
驱动方式	-	8×4		
最高行驶速度	km/h	90		
燃油箱容积 (底盘)	L	300		
燃油箱容积 (工作装置)	L	200		
整备质量	kg	25300		
总质量	kg	31000		
◆ 上装发动机参数				
型号	-	上柴 SC4H100G3		
功率	kW/r/min	73.5/2200		
整机尺寸参数				
最小离地间隙	mm	243		
接近角/离去角	0	14/12		
外形尺寸	mm	11980×2500×3890		

4.2 主要配套件明细

序号	系统名称	零部件名称	品牌
1	底盘系统	底盘	中国重汽豪沃
2	动力系统	发动机	上柴



3	- 沥青输送系统	沥青泵	比利时 JOHNSON
4		导热油泵	河北兆宏
5	沥青罐	燃烧器	美国贝克特 Beckett
6	骨料输送系统	减速机	常州国茂
7	喷洒梁	喷头气缸	宁波亿太诺(锴濮)
8		料门气缸	宁波亿太诺(锴濮)
9	气路系统	提升气缸	宁波亿太诺(锴濮)
10		电磁阀	宁波亿太诺(锴濮)
11		恒压变量泵	美国丹佛斯 Danfoss
12		齿轮泵	美国丹佛斯 Danfoss
13	液压系统	液压马达	美国丹佛斯 Danfoss
14		液压马达	美国伊顿 Eaton
15		电磁阀	德国雅歌 Argo-hytos
16	电气系统	显示器	上海宏英
17		控制器	上海宏英

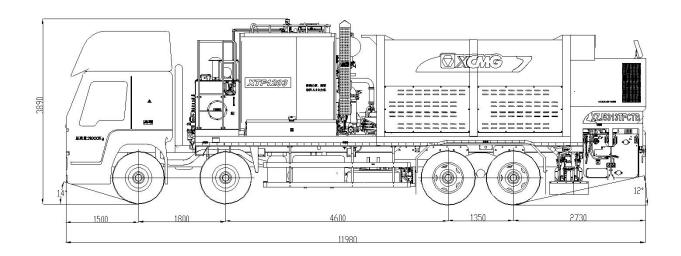
4.3 可选配套件

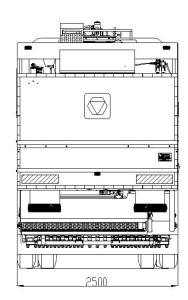
序号	零部件名称	品牌	用途
1	手动喷枪及软管	徐工	沥青手动喷洒装置
2	沥青抽吸管	徐工	沥青抽吸
3	雾封层喷嘴一套	徐工	用于雾封层施工



4.4 Shape and dimension

4.4 外形及外形尺寸





5. Features of main structure(system)

XZJ5313TFCTB (XTF1203) Synchronous asphalt chip sealer is mainly composed of chassis, frame assembly, aggregate conveying system, power system, asphalt tank, asphalt conveying system, spraying beam, spraying device, hydraulic pneumatic system and control system, etc.

5 主要结构(系统)特点

XZJ5313TFCTB(XTF1203)型沥青碎石同步封层车主要由底盘系统、车架总成、骨料输送系统、动力系统、沥青罐、沥青输送系统、喷洒梁、撒布器、液压气动系统、控制系统等组成。



5.1 Chassis system

- ◆ SINOTRUCK HOWO 8×4 CN-V emission chassis and engine power of 249/1900 kW/r/min, the vehicle has strong power, equipped with deluxe twin cab and is safe, reliable and comfortable
- ◆ Equipped with air conditioning, imported ABS anti-lock system.
- Vehicle traveling data recorder is equipped to record the information in traveling process in real time

5.1 底盘系统

- ◆ 选用中国重汽 HOWO 8×4 国 V 排放的载货式底盘,发动机功率为 249/1900kW/r/min,动力强劲,配置豪华双卧驾驶室,安全可靠,操作舒适
- ◆ 配置冷暖空调,进口 ABS 防抱死系统
- ◆ 配置行驶记录仪,实时记录行驶过程信息

5.2 Aggregate conveying system

- ◆ In the silo is equipped with screen, which can effectively prevent large stone plugging the charging door.
- ◆ The conveyor belt is designed for draw-out type, with rollers under the conveyor belt, which can slide on the track of the frame, and easy to replace.
- ◆ Gravel is belt conveyor into the spraying machine, spraying device of screw propeller will automatically push to cloth of rubber on both sides, the construction process is not increasing the height of the equipment, convenient culverts, Bridges, curve, ramp and rural road construction.

5.2 骨料输送系统

- ◆ 料仓内配置有筛网,可有效防止大石料堵塞料门
- ◆ 输料带为抽屉式设计,输料带下方有滚轮,可在车架轨道上滑动,输料带更换方便
- ◆ 碎石采用皮带输送进入撒布器内,撒布器内的螺旋推进器将碎石自动推到撒布器两侧, 施工过程不增加设备的高度,方便涵洞、桥下、弯道、坡道以及乡村道路施工

5.3 Power system

◆ Adopts up-mounted engine to supply power for the working part, resolve the spray accuracy unstable problem affected by chassis engine, construction performance is stable, economic and beautiful



5.3 动力系统

◆ 采用上装发动机为工作部分提供动力,解决了沥青喷洒精度受底盘发动机转速影响而不 稳定的问题,施工性能稳定,使用经济型好

5.4 Asphalt tank

- ◆ The asphalt tank is equipped with America 24V Beckett diesel burner, and fuel consumption is 8 l/h, quick heating; the top part of the asphalt tank is equipped with a paddle mixing attachment, can mix well and effectively solve the precipitation and segregation problem of rubber asphalt.
- ◆ Heat transfer fluid heating system can heat the tank, pipeline and spraying device in the whole course, meet the construction requirements of rubber asphalt; the operation of burner can be automatically controlled depending on setting temperature of asphalt and heat transfer fluid

5.4 沥青罐

- ◆ 沥青罐体配置美国进口 24V 贝克特柴油燃烧器,油耗为 8L/h,加热速度快;沥青罐 顶部配有桨叶式强力搅拌装置,搅拌均匀,可有效解决橡胶沥青沉淀、离析问题
- ◆ 导热油加热系统可对罐体、管路、喷洒装置全程加热,满足橡胶沥青施工要求;可根据设定的沥青和导热油温度,自动控制燃烧器工作

5.5 Asphalt conveying system

- ◆ Imported Belgian JOHNSON thermal insulation pump; High viscosity asphalt pump can adapt to various asphalt spraying
- ◆ The asphalt pipeline is controlled by pneumatic butterfly valve, which can automatically realize the large, small circulation and spraying function of asphalt; automatic cleaning function, easy to operate.
- ◆ It has the function of self-priming and discharging function, improves the working efficiency.
- Flexible hand-hold spraying system can spray asphalt to special parts of the road.

5.5 沥青输送系统

- ◆ 采用比利时进口 JOHNSON 保温夹套高粘度沥青泵,可以适应各种沥青的洒布
- ◆ 沥青管路采用气动蝶阀控制,可自动实现沥青的大、小循环及喷洒功能;自动清洗功能, 操作方便快捷



- ◆ 具有自吸外排功能,可进行自加自排沥青,提高工作效率
- ◆ 备有灵活的沥青手持喷洒系统,可对路面特殊部位喷洒沥青

5.6 Spray beam

- ◆ Hydraulic motor drive automatic folding asphalt spraying beam, easy to operate.
- ◆ The upturned spraying beam is driven by hydraulic cylinder, easy to operate, and can achieve three overlapping spraying; the spray beam is equipped with a thermal oil heating tube, reduces the construction preparation time; The removable nozzle cylinder is adopted for easy maintenance and replacement.

5.6 喷洒梁

- ◆ 采用液压马达驱动自动折叠式沥青喷洒梁,操作方便
- ◆ 喷洒梁可实现三重叠喷洒;喷洒梁内设有导热油加热管,施工准备时间短;采用可拆卸式喷头气缸,便于维修更换

5.7 Spreader

- ◆ The maximum width of the stone spreading is 4m, which is suitable for all kinds of highway construction requirements.
- ◆ The gravel is dropped vertically to ensure the uniformity of the gravel.
- ◆ Unique antiskid design of roller solves the problem of stones in the roller skidding and not falling.
- ◆ The distributor doors are all equipped with fine tuning mechanism, the gravel is evenly distributed.
- ◆ Additional scraper device in the rear of the mixer, effectively prevent the clogging of wet powder.

5.7 撒布器

- ◆ 石料撒布最大宽度达 4m, 适应各等级公路施工要求
- ◆ 碎石经滚筒拨料后垂直下落,保证了碎石撒布的均匀性
- ◆ 独特的滚筒防滑设计,解决了石料在滚筒上打滑不下落的难题
- ◆ 撒布器各料门均设有微调机构,碎石撒布更加均匀
- ◆ 滚筒后方增加刮料装置,有效防止湿粉料卡死滚筒

5.8 Pneumatic system

◆ The hydraulic and pneumatic elements all adopt international famous brands with reliable



quality and stable performance

◆ With electro-hydraulic proportional closed-loop control system, the amount of asphalt spraying is not affected by the change of travel speed

5.8 液压气动系统

- ◆ 液压、气动元件采用国际知名品牌,质量可靠,性能稳定
- ◆ 电液比例闭环控制系统,沥青洒布量不受车速变化影响

5.9 Electrical control system

- ◆ Automatic and manual operation systems, automatic operation system is used in driver's cab, just set distributing amount of asphalt spraying per square meter, the controller can detect current speed of spraying width in real time and automatically adjust rotation speed of asphalt pump to ensure the spraying amount of unit area unchanged; manual operation can be achieved at rear control console
- ◆ The touch screen in driver's cab displays construction parameters in real time, the construction effect can be observed on camera monitoring screen
- ◆ Strong spraying at start control technology realizes zero-start spraying of asphalt
- ◆ Asphalt and heat transfer fluid level monitoring technology prevents dry burning of burner and ensures personnel and equipment safety
- ◆ The nozzle and cylinder is one-to-one controlled, the good adjustment continuity of spray width; The opening and close of nozzle and material door is pneumatic, the computer can control each door and nozzle independently.
- In the distributing (spraying) process the width can be adjusted according to requirements.
- ◆ The computer RIMS platform is based on GPS remote control, important construction data, positioning and driving trajectory of the vehicle in real time.
- Vehicle traveling data recorder is equipped to record the information in traveling process in real time

5.9 电气控制系统

- ◆ 配备有自动和手动两套操作系统,在驾驶室内通过自动操作系统,只需设定每平方米沥 青洒布量,控制器根据洒布宽度实时检测当前车速,自动调整沥青泵转速,保证单位面 积洒布量不变:在后操作台可以实现手动操作
- ◆ 驾驶室内触摸屏实时显示施工参数,摄像头监视画面实时观察施工效果



- ◆ 起步强喷控制技术,实现沥青的零起步喷洒
- ◆ 沥青和导热油低液位监测技术,防止燃烧器干烧,保证人员及设备安全
- ◆ 喷头气缸一控一,喷洒宽度调节连续性好;电脑可对每个料门和喷嘴进行单独控制
- ◆ 洒(撒)布过程中随时可对洒(撒)布宽度任意调节
- ◆ RIMS 平台基于 GPS 远程监控整车重要施工信息及定位,用户登陆手机 APP 可实时监控整车重要施工数据、定位和行驶轨迹
- ◆ 配置行驶记录仪,实时记录行驶过程信息

6 Transport safety requirements

Users or organizations shall ensure when transferring:

- ◆ Check main parts such as the fasteners of asphalt tank, sub-frame, spraying beam and belt support for looseness, if there is, tighten them
- ◆ Hang up the fastening chain of the spreading device, to prevent the falling off of the spreading device;
- ◆ Lift the spraying beam to the highest position, hang up the safety chain, and fix the spraying beam with fastening tape
- ◆ Turn off the main valve of working devices at chassis air pocket
- ◆ Turn off all valves of asphalt pipeline and heat transfer fluid pipeline
- It is strictly forbidden to stand on rear control console during transportation
- ◆ Try to reduce high-speed bumpy driving and emergency brake
- ◆ Do not use burner for heating during transportation

6 运输安全要求

用户或使用单位在车辆转场时应确保:

- ◆ 检查主要部件如沥青罐、副车架、喷洒梁、输料带架的紧固件是否松动,如松动须紧固
- ◆ 撒布器的固定链应挂上,防止撒布器脱落
- ◆ 将喷洒梁提升至最高处,并挂上安全挂链,使用紧固带将喷洒梁固定
- ◆ 将底盘气包处的工作装置总阀门关闭
- ◆ 将沥青管路、导热油管路的所有阀门关闭
- ◆ 运输过程中后操作平台严禁站人
- ◆ 尽量减少高速颠簸行驶和紧急刹车
- ◆ 运输过程中禁止使用燃烧器进行加热



7 Disclaimers

The Company follows the principles of sustainable development, and reserves the right to continuously improve our products without prior notice. We will perform continuous improvement of relevant contents without notice.

7 声明

本公司遵循可持续发展的原则,因此,我们保留在不预先通知的情况下,对产品进行持续改进的权力。相关内容的持续改进,恕不另行通知。