



Beijing GreatDia Superhard Tools Co., Ltd

Professional grinding wheel and drill manufacturer in
automotive glass and solar glass processing.





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Why Choose us

1. Professional manufacturer of high quality tools in grinding wheels and drills for automotive glass and solar glass processing. With strong technique support: 22 years experience of R&D ability.
2. All raw material is imported, which guarantee the good and stable quality, replace imported brands completely, with competitive price.
3. 7*24 hour after sale service provided, to set up long business relationship with every customers.
4. We are not only a manufacturer, but also a problem solving expert in glass processing.
5. Our customers: FU YAO, SAINT GOBAIN, NSG, BOROSIL, ETC.

Grinding Wheels for automotive and solar glass.

Features:

1. high edge quality, fast line speed and long life while retaining the profile shape for greater yields.
2. Custom profiles can be designed for your specific application.
3. Our bonds hold the profile shape, giving you long, high-quality production runs. It increase the number of redress in each wheel and lower your cost significantly.
4. 22-year research and developing experience, stable quality, reliable, also offering OEM service for European and American customers

Available size:

Dia 150, Dia 200, PE, FA shape for laminated and tempered automotive glass, customization acceptable

Machines fitting with:

Bando, Bystronic, Bentler,



 Grinding Wheel

The test report from Tianjin Hong de Auto Glass Co., Ltd (One factory of FU YAO GROUP--the largest automotive glass manufacturer from China.)



福耀集团 天津泓德汽车玻璃有限公司
FUYAO GROUP TianjinHongdeAutoGlassCo.,Ltd.

工艺实验及改进措施记录

FYTJ-PE-BD-017

工厂：夹层厂

NO: 20190801

项目名称	极钻磨轮送样验证	实施日期	2019.08.01
负责人	李洪健	参与人员	李洪健, 刘伟, 磨轮厂家

调查原由：北京极钻磨轮送样天津实验，验证磨轮是否满足工艺要求

调查目的：

验证北京极钻磨轮是否满足天津的生产工艺要求

调查情况描述：

一、送样厂家：北京极钻磨轮

二、产品型号：

夹层 2.1mm 厚度

三、验证过程

生产线：夹层预处理 4#大片线

生产参数：电机转速：4500r/min，油石片修复频次 10±5 片/次；内速：F=30000，外速 90%，磨边水压 0.3Mpa，

生产条件满足工艺要求范围

产品特性介绍：极钻磨轮基面使用的为铝型材（其他厂家为钢材），磨轮整体重量为目前使用的磨轮的一半。

优点：电机负荷减小，理论上会节省能耗，电机转速可以提高；缺点：基体表面较软，容易破坏。

寿命记录：

磨轮型号	上机次数	磨边片数	单次寿命	累计寿命
B58039	第一次	3800	15960	15960
B58039	第二次	4310	17995	33955
B58039	第三次	3448	11732	45687
B58039	第四次	2742	11569	57256
B58039	第五次	3879	16482	73738

设备	材料	型号	供应商	累计寿命（单位 延米）
百超磨边机	磨轮	1.6*3.2mm	艾探寰宇	72000
坂东磨边机	磨轮	1.6*3.2mm	上海二和	70840
坂东磨边机	磨轮	1.6*3.2mm	艾探寰宇	74520
坂东磨边机	磨轮	1.6*3.2mm	道天	50000

目前夹层厂稳定使用两个厂家磨轮：道天和寰宇（道天适用于高磨边要求产品；寰宇适用于普通产品），目前送样的

极钻磨轮定位应用于普通产品，速度和寿命均能和寰宇持平，满足天津的工艺要求。

四、实验结论：

因产品未定价格，无法给出平均延米单耗对比，磨边速度，磨轮寿命，磨边质量均可满足我司要求，可进行小批采购，验证小批稳定性是否合格。

批准：

审核：李洪健

制表：李洪健

The test report from Tianjin Hong de Auto Glass Co., Ltd (One factory of FU YAO GROUP--the largest automotive glass manufacturer from China.)

Glass thickness: 2.1mm laminated line for BANDO machine from FU YAO.

Using Time	Glass qty of grinding	Life time of wheels	RPM
1(new using)	3800 pcs	15960 meters	4500
2(re profile)	4310 pcs	17995 meters	4500
3(re profile)	3448 pcs	11732 meters	4500
4(re profile)	2742 pcs	11569 meters	4500
5(re profile)	3879 pcs	16482 meters	4500

Feature:

Our wheel is made of aluminum, different from other steel material. Comparing the steel material, our wheels have more advantages: reduce motor load, energy saving and improve the RPM of motor.

The conclusion from Fu Yao for our grinding wheel: life time and speed are almost same with Super cut, can meet their processing requirement, and can carry out small-batch procurement

Grinding wheel life time data for bus glass from domestic customers

B587016				
No.	Qty(pcs)	Square meter	Feed speed(m)	RPM
1	9743	15588.8	16-18	6000
2	4372	7485.6	16-18	6000
3	5380	9695.5	16-18	6000
4	10693	17108.8	16-18	6000
Total	30188	49878.7		
B587015				
No.	Qty(pcs)	Square meter	Feed speed(m)	RPM
1	7855	12568	16-18	Around 6000
2	8862	14179	16-18	Around 6000
3	3273	5236.8	16-18	Around 6000
4	7457	13244.6	16-18	Around 6000
Total	27447	45228.4		


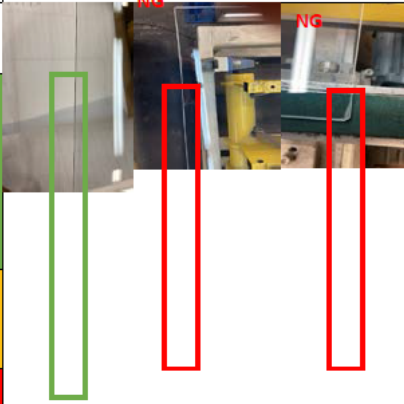

Remark: the circumference of each glass is around 5.6m, glass is based on 3.0mm thickness



Fuyao Glass Illinois Inc.

Grinding wheel for solar glass processing testing report

--Tao

purpose :	To test the availability of new grinding wheel from Beijing Greatdia Superhard tools Co.,ltd		 <p>there is grinding wheel model number on the surface</p>
grinding wheel grit :	1# (180#) · 2# (180#) · 3# (240#)		
initial state of grinding wheel :	groove width 2.2mm · groove depth 1.2mm		
wheel installation machine number :	B line number 1 machine (Model Bottero Gemini 306)		
glass thickness :	2.18~2.21mm		
quality judgment basis :	There is no burr and bursting edge when grinding, and the beveled edge is smooth. The life of the grinding wheel is more than 25000 meters.		
performance at each stage of the verification process :	The initial phase	The edging speed is 6.0m/min. The edging is basically free of burrs and edge bursts. OK	 <p style="text-align: center;">NG NG</p> <p style="text-align: center;">OVERGRINDING</p>
	40m→25000m	After 40m, the edging speed is increased to 9.5m/min, and the edging quality is excellent	
	about 30000m	The overall edging quality is good, and the corners have small beveled edges	
	about 45000m	The edging edge is wider, and the beveled edge of the corner is larger. Stop the machine and replace the grinding wheel.	
final state of grinding wheel:	1# (180#)	The groove shape is normal. The groove width is about 2.45mm, and the groove depth is about 1.5mm.	 <p>The number of meters for the three grooves to grinding the glass is: 45183m (excellent) 45815m (excellent) 44785m (excellent) The visual status of the trough type is as shown on the left, diamond is coarse</p>
	2# (180#)	The groove type is normal loss and deep. Slot width 2.22mm, slot depth 2.8~3.3mm	
	3# (240#)	The groove type is normal loss and deep. The groove width is 2.22mm, and the groove depth is about 3~3.4mm	
testing result:	The edging process is normal, and the final life of the grinding wheel is about 25000m beyond the expected value.		
efficiency performance	The grinding wheels purchased in batches have a life of about 30,000 meters per groove, and each groove can be used for 7 shifts in daily performance. The GREATDIA grinding wheel can effectively use 9.14 shifts, greatly improving the efficiency and reducing the frequency of mold changes. calculated by 35000m of single groove, <u>each gring wheel (four grooves) Compared with the grinding wheels purchased earlier, it can produce about 10,000 more pieces of glass. Save 1.5 times of mold change per month and increase output by 120 pieces.</u>		
verification conclusion	Excellet		

Other brand wheel	
Production shifts per month	78
Cut rice per shift	3828.5
Available shifts per groove	7.835967089
Number of mold changes per month	9.9541
The number of glass can be grinding per groove	14888.33747
GreatDia brand	
Production shifts per month	78
Cut rice per shift	3828.5
Available shifts per groove	9.141961604
Number of mold changes per month	8.532085714
The number of glass can be grinding per groove	17369.72705
each wheel (calculated by 4 grooves) Can produce more glass quantities	9925

Products- Drills for automotive

Features:

Our core drills offer good performance and amazing life, in sizes from 4mm to 100 mm OD. Our drills can fit any drilling machine on the market. Shank design will be customized to fit your equipment.

Our diamond core drills and seamers have been developed for use on high-performance CNC glass drilling machines with long series batch production. A complete range of our designs and specifications is available to fit each machine while meeting the automotive industry's exacting requirements.

Shanks are available for any glass drilling machine: Bystronic, Bando, Forvet, c Schiatti, ADA, Intermac and more.



Integrated
drills

We are not only a tools manufacturer, but also a problem-solving expert. Meanwhile, we offer good after-sale service aiming to serve our customers better.

Contact us

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