



Our production capacity

- With the first-level manufacturing facilities made in Italy and France;
- With the skilled production team and the High efficiency work;
- Our production capacity is 6 million pcs per year ;

- 拥有意大利和法国的高精尖加工设备
- 拥有专业成熟的生产团队和高效的生产规划;
- 拥有PU盘年产能六百万片





Product Features



ISO9001:2000 Certificates



获得ISO9001-2000认证

ISO9001-2000 certificate



Product Features



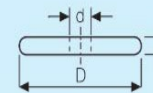
Wide range of Applications

机型应用广泛

AINY PU disc can be widely applied to all kinds of DTY machines, such as:

AINY的PU盘可以广泛地使用在所有的DTY设备上，例如：

- **OERLIKON,**
- **RIETER,**
- **TMT,**
- **ALIDHRA TEXTOOL,**
- **BHAGAT MACHINES**
- **HIMSION.**



AINY PU Discs	Disc Thickness	AINY Recommendations for friction discs combination							Disc combination
		Yarn D'tex							
		33	44	50	78	110	150	167	
6mm									3/3/1
									3/4/1
									3/5/1
9mm									1/4/1
									1/5/1
									1/6/1
									3/4/1

个性化的产品

① 爱尼摩擦盘可以广泛的应用于各种类型的加弹机

Individualization for our customers

① AINY's discs can be widely applied to all kinds of the DTY machines.
e.g. BARMAG, ICBT, SCRAGG, RIETER, RPR, TMT, ALIDHRA TEXTOOL, BHAGAT MACHINES AND HIMSON MACHINES.

Out diameter ΦD (mm)	Bore diameter Φd (mm)	Thickness (mm)	Type of Unit	Center spacing (mm)
45	12	6	FTS4712	33.77
51.2	12	6	Barmag T6/T7	38
52	14.45	9	FTS522	36
52	12	6	Barmag T8	37
58	12	9	Teijing Seiki	42
49.7	12	6	Barmag T6/T7	38
46.5	12	6	positorq M2A	34.45
46.5	16	6	positorq M2	34.45
47.5	12	6	positorq M2A	34.45
49.7	12	6	Barmag T6/T7	38
49.7	14.45	6	FTS522	37
52.5	14.45	9	FTS52	37
58	14.45	9	TMT	42
48.5	12	9	FTS4461	32.83
52.5	12	9	Barmag T8	37
53.5	12	9	Barmag FK6-900	38
53.5	14.45	9	FTS52	37
56	14	9	Scragg M6	40
54.5	12	9	Alidhra	37
54.5	12	9	Himson	37
58/59	12	9	Himson	





Product Features



Wide range of Hardness

邵氏硬度范围广泛

- AINY PU disc can designed and produced according to customer's specific requirements .
- AINY PU disc shore hardness could be ranged from **83 shore to 97 shore**
- AINY PU盘可以根据用户不同的要求进行设计和生产
- AINY PU盘的邵氏硬度可以从 **83 shore to 97 shore**



Type	Hardness (Shore-A)	Application
Soft type	83	0.3-0.5 dpf
	85	0.5-1 dpf
Standard type	88	0.5-3 dpf
	90 (High Abrasion Proof)	Total 200-300 Denier

个性化的产品

- ② 爱尼摩擦盘可以按照客户要求的规格进行个别设计加工生产
- ③ 爱尼的摩擦盘加工的硬度范围从83° 到97°

Individualization for our customers

- ② AINY discs can be designed and produced according to customer's specific requirements
- ③ AINY PU-disc Shore Hardness could be ranged from 83 Shore to 97 Shore





Product advantages 产品优势

AINY has been committed to developing PU discs suitable for different types of yarns and production processes for more than 30 years since the company was founded.

AINY在公司创始至今的三十多年来一直致力于研发适合不同种类的纱线和生产工艺的PU盘。

AINY can not only provide PU discs of various shapes and sizes, but also PU discs with different processing techniques and formulas to meet the different product needs of different customers.

AINY不但可以提供各种外形尺寸的PU盘，还可以提供不同加工工艺和配方的PU盘，以满足不同客户的不同产品需求。

AINY has developed and put into the market the following PU disc products:

目前，AINY已经开发并投入市场中的PU盘产品有以下几种：

- ◆ **XZ8 (Injection molding 注塑工艺)、ZD8 (Injection molding 注塑工艺) Series 系列**
- ◆ **TF30 Series (Injection molding 注塑工艺) 系列**
- ◆ **D88 Series 系列**
- ◆ **D150 Series 系列**
- ◆ **D300/400/500 Series 系列**
- ◆ **FA30 Series 系列**

(Those not marked with "Injection molding" are "casting" PU discs)
(未标记“注塑工艺”的为“浇注工艺”PU盘)



Product advantages 产品优势

◆ In addition to providing PU discs of different sizes and processing technologies, AINY can also provide PU discs of different hardnesses according to the types of silk threads produced by customers. The commonly used hardness in the market are 86 Shore / 88 Shore / 92 Shore.

◆ The hardness of the PU discs currently released by AINY.

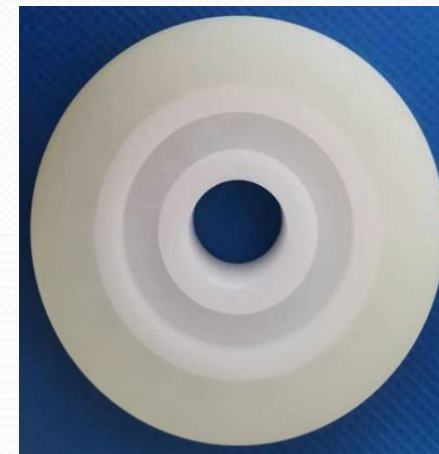
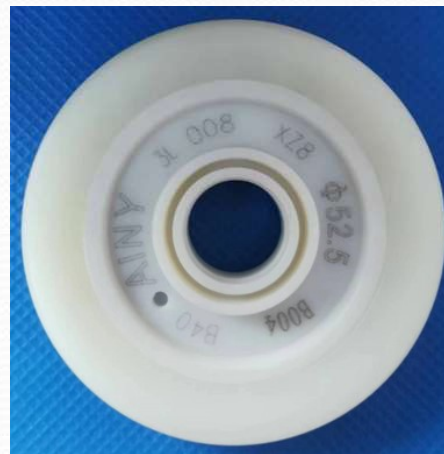
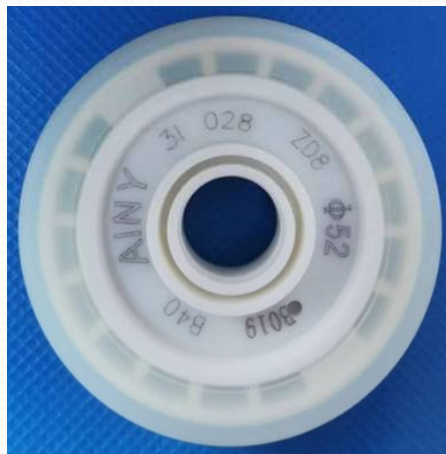
➤ **AINY** 除了能提供不同尺寸和加工工艺的**PU**盘之外，还可以根据客户生产的丝线品种提供不同硬度的**PU** 盘，目前市场上常用硬度为 **86 Shore / 88 Shore / 92 Shore**.

➤ 目前 **AINY** 投放市场中的**PU**盘硬度明细：

Shore Hardness: 可选硬度	82±2	90±2	92±2	93±2	94±2	96±2
AINY PU Series: 盘系列名称	TF30	XZ8 ZD8 D88	FA30 D150	D300	D400	D500



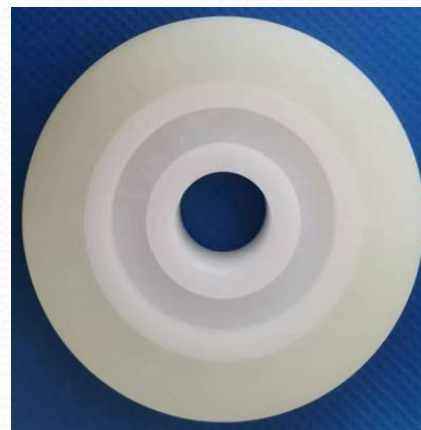
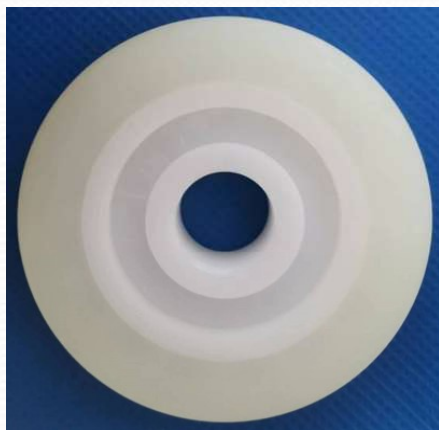
Product advantages 产品优势



Series 型号	Application 推荐应用	Advantages 优势
Manufacturer process: Injection Molding 注塑工艺		
XZ8 ZD8	H 90±2 For fine yarns 适细旦丝用 75D—150D	As the mainstream variety in the market, it can not only ensure the physical indicators of the fiber, but also ensure the service life of the PU disc. 为市场中的主流品种，既能保证纤维的物理指标，还能保证PU盘的使用寿命。 ZD8 Series : Good elasticity, alternative for TEMCO PU disc 弹性好，TEMCO “平替” XZ8 Series: Good wear- resisting, long service life 抗磨损，使用寿命长
Manufacturer process : Casting (AINY Special know-how) 浇注工艺		
D88	H 90±2 For fine yarns 适细旦丝用 75D—150D	As the mainstream variety in the market, it can not only ensure the physical indicators of the fiber, but also ensure the service life of the PU disc. 为市场中的主流品种，既能保证纤维的物理指标，还能保证PU盘的使用寿命。



Product advantages 产品优势



Series 型号	Application 推荐应用	Advantages 优势
Manufacturer process : Casting (AINY Special know-how)		
D150	H 92 ± 2 For cotton-like fiber and 150D 适用仿棉纤维和 150D	In view of the shortcomings of adding different fibers to imitation cotton, which causes damage and shorter service life to PU discs, AINY developed D150 series are currently used by many customers on the market and have received satisfactory feedback. D150 is also the only PU disc on the market that serve for cotton-like fibers. 针对仿棉中加入不同纤维，对PU盘使用伤害比较大、寿命短的缺点，AINY开发的D150系列产品，现市场上使用的客户比较多，反馈满意。D150也是市场上唯一针对仿棉纤维的一款PU盘。
D300 D400 D500	H 93 ± 2/ 94 ± 2/ 96 ± 2 For thick yarn 适用粗旦丝 200D and above The gap between spindle group discs shall not be less than 0.75mm 锭组盘间隙不得小于0.75mm	Because the tension is high during processing of fibers that above 200 D, which will correspondingly reduce the service life of the PU disc. AINY's D300/400/500series can not only meet the physical indicators of the fiber, but also increase the service life. Compared with ordinary 52 or 52.5 cm discs, the working parameter DY ratio will be lower accordingly. 因为200d以上纤维加工过程中，张力比较大，会相应减少PU盘的使用寿命。AINY的D300/400/500系列盘，既能满足纤维的物理指标，也能增加PU盘的使用寿命。比普通52或52.5的盘，工作参数DY比也会相应降低一些。



Cutting-edge Products 前沿产品—TF30



- The softest disc: Shore hardness can reach 82 ± 2
- Shore The finest yarn: Suitable for $\text{dpf} < 0.3$ ultra-fine denier yarn
- Oerlikon verification
- China Textile Academy Kaitai Special Fiber: Produces island type superfine filament yarn (Previously, the customer used TEMCO's disc, and the "skin" of the island type yarn was damaged during the texturing process)
- XIN FENG MING Group: Produces 20D/96F ultra-fine denier varieties

✓ 最软盘：邵氏硬度可达 82 ± 2 ✓ 最细丝：适用于 $\text{dpf} < 0.3$ 超细旦丝 ✓ Oerlikon验证

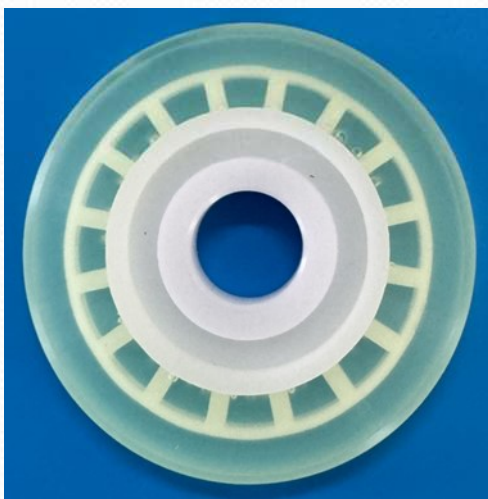
✓ 中国纺织科学院凯泰特种纤维：生产高岛海岛丝（之前客户使用TEMCO的盘，在加弹过程中出现海岛丝“皮”部分损害的问题）

✓ 新凤鸣集团：生产20D/96F超细旦品种

Series 型号	Application 推荐应用	Advantages 优势
	Manufacturer process: Injection Molding 注塑工艺	
TF30	H 82 ± 2 Suitable for ultra-fine yarns (such as: porous fine denier 40/34 varieties) 适用超细旦丝（例如：多孔细旦的40/34品种）	The TF30 series PU discs developed for the characteristics of high difficulty in microfiber processing and difficult quality control make the T2 tension of the yarn lower, indicating that soft PU has a better holding effect on the yarn; the strength of the yarn and elongation indicators are better; the data of strength cv, elongation cv, and fineness cv are low, and the uniformity of the fiber is correspondingly improved. 针对超细纤维加工难度高、品质难把控的特点开发的F30系列PU盘，使纱线的T2张力更低，说明软质的PU对于纱线有更好的握持效果；纱线的强度和伸长指标更优；强度cv、伸长cv、纤度cv的数据低，纤维的均匀度相应提高。



Cutting-edge Products 前沿产品—FA锦纶PU DISC



- Shore hardness 92 ± 2 : It can not only improve the physical index of the fiber, but also increase the service life of the PU disc.
 - The polyurethane formula is particularly suitable for nylon spin finish.
 - The PU disc makes the nylon production process more stable and improves the running speed of the texturing machine greatly.
 - Verified by the well-known domestic nylon manufacturer
- ✓ 邵氏硬度 92 ± 2 : 既能提升纤维的物理指标,也能增加PU盘的使用寿命
 - ✓ 聚氨酯配方特别适用于锦纶油剂
 - ✓ PU盘使锦纶生产工艺稳定性好, 大大提升加弹机的运行速度
 - ✓ 国内知名锦纶生产商验证

Series 型号	Application 推荐应用	Advantages 优势
Manufacturer process : Casting (AINY Special know-how)		
FA30	H 92 ± 2 For PA6 yarn <70D 适用低于70D锦纶 丝	Most of PA6 yarn factories use ceramic disc. AINY specially developed the FA30 series PU disc for PA6. The formulation of PU is suitable for the PA6 spin finish. AINY's FA30 series can not only meet the physical indicators of the yarn, but also increase the service life., futher more it can increase the speed of DTY machines 大多数锦纶生产中使用陶瓷盘。爱尼专门为锦纶而研发的摩擦盘，聚氨酯配方适用于锦纶6油剂。既能满足纤维的物理指标，也能增加PU盘的使用寿命,更能提高DTY 设备速度



Cutting-edge Products 前沿产品—FA锦纶PU DISC



Experimental conclusion:

- The formula of AINY FA nylon PU disc has a lower swelling rate for spin finish in nylon production !
- FA nylon PU disc is more suitable for nylon yarn !

实验结论:

- ✓ AINY FA锦纶PU盘的配方对于锦纶生产中的油剂溶胀率更低!
- ✓ FA锦纶PU盘更适合锦纶丝!

Comparison of swelling of nylon friction disc with spin finish

锦纶用油剂摩擦盘溶胀对比

Brand 品牌	Experimental conditions 实验条件	Volume change rate 体积变化率 (%)	Quality change rate 质量变化率 (%)	Thickness change rate 厚度变化率 (%)	Diameter change rate 直径变化率 (%)
TEMCO	Nylon spin finish A208/Water/500 min 锦纶油剂A208/水/500 小时	9.2	6.3	5.6	2
AINY FA/49.7		8.2	5.3	4.1	1.5



Cutting-edge Products 前沿产品—FA锦纶PU盘



- Well-known domestic nylon manufacturers have tried Model:
Barmag eFK-PA 384 spindles
Hongyuan HY-6 (J) 384 spindles
- The dyeing of nylon yarn is more uniform and the fluffiness is higher;
- The speed of the texturing machine can be increased by 20%-40%;
- At present, the operating speed of the customer's DTY equipment has increased from the original 640M to 800M, an increase of 25%, and has been running stably;
- Used AINY FA nylon PU disc:

100 units of texturing machine which using FA disc == 125 units of texturing machine which using ceramic disc

- ✓ 国内知名锦纶生产商已经试用：
机型：Barmag eFK-PA 384锭
宏源 HY-6(J) 384锭



- ✓ 锦纶丝的染色更均一、蓬松度更高；
- ✓ 加弹机的速度可以提升20%--40%；
- ✓ 目前客户DTY设备的运行速度从原来的640M提升到 800M，提升25%，并且一直稳定运行；
- ✓ 用了AINY FA锦纶PU盘：

100台用FA盘加弹机 == 125台用陶瓷盘加弹机！



Purchase Order from Oerlikon

- Besides Temco, AINY disc is the only Chinese PU disc supplier who is authenticated by Oerlikon to be equipped with their new DTY machines to the customers.
- Oerlikon (Barmag) has been purchasing from AINY since 2015.
- The PO sample dated in 2023 from Oerlikon (Barmag)

oerlikon

Oerlikon (China)
Technology Co. Ltd.
No. 9 Changyang Street
Suzhou Industrial Park
Suzhou, 215024, Jiangsu
P. R. China

采购订单 Purchase order

天津爱尼机电有限公司
Tianjin Ainy Ele-Mechanical Co., Ltd
天津

订单编号/日期 PO number/date
4500374009 / 2024.05.07
联系人/电话 Contact person/Telephone
Sherry, Zhao/051281885322
传真 Our fax number
0512-8188 5952

运输至 Please deliver to
Oerlikon (China) Technology Co., Ltd.
欧瑞康(中国)科技有限公司
苏州工业园区长阳街9号
215024 Suzhou Jiangsu 江苏苏州

供应商编号 Your vendor number with us
2300457 Fax: 022-25324667
Tel.: 022-25324664
最后报价期限 Quotation deadl.:
Binding period:
生效自 Valid from:

运输方式 Terms of delivery: CIF Suzhou
付款方式 Terms of payment: 60 天之内 到期净值

Currency 币种: RMB

项目 Item	原材料 Material	Order qty. 订单数量	Unit 单位	说明 Desc.	Price per unit 单价	Net value 净值
001	BG-1-054-7472	PU工作盘(AINY, ZD88, 52, 5X12X9)				
		21,504 Piece				
	到货时间	Arrival date	Day	2024.05.23		
002	BG-1-054-7472	PU工作盘(AINY, ZD88, 52, 5X12X9)				
		21,504 Piece				
	到货时间	Arrival date	Day	2024.06.20		
003	BG-1-054-7472	PU工作盘(AINY, ZD88, 52, 5X12X9)				
		6,992 Piece				
	到货时间	Arrival date	Day	2024.07.10		

总价值(除税净价) Total net value excl. tax RMB

订单将按照Oerlikon Group GTC (产品及服务采购的通用条款)执行。如果您的组织不了解这些通用条款, 请与我们联系, 我们将发给您一份副本。
The order will be executed according to the OERLIKON GROUP GTC "General Terms and Conditions for Purchase and Ordering of Products and Services." If these GTC are not known in your organization, please give us a note and we will send you a copy.
请在三天内签字回传以确认订单。Please send back after your's signature as order confirmation within 3 working days.
订单号须注明在送货单, 发票等相关资料上。P.O. Number should be shown on P/L & Invoice.

Oerlikon (China) Technology Co. Ltd.
No. 9 Chang Yang Street
Suzhou Industrial Park
Suzhou, 215024, Jiangsu
P. R. China
phone: +86-512 8188 59 59
fax: +86-512 8188 59 99





AINY's key customers in China Mainland-1



桐昆集团股份有限公司
TONGKUN GROUP

The 1st largest PET supplier in China:
10,800,000 TPY



浙江恒逸集团有限公司
ZHEJIANG HENGYI GROUP CO.,LTD.

The 2nd largest PET supplier in China:
4,000,000 TPY



浙江荣盛控股集团
ZHEJIANG RONGSHENG HOLDING GROUP

The 10th Annual capacity of PET
2,000,000T/D



新凤鸣集团股份有限公司
XINFENGMING GROUP CO.,LTD.

Top 10 DTY yarn producer in China:
500 DTY machines



百宏实业控股有限公司
BILLION INDUSTRIAL HOLDINGS LIMITED

No. 1 DTY yarn producer in Fujian province China ,
more than 500 DTY machines



AINY's key customers in China Mainland-2



A famous DTY yarn producer :
500 DTY machines



A famous DTY yarn producer:
450 DTY machines



DTY producer in China:
450 DTY machines



DTY producer in China:
385 DTY machines



AINY's business with famous DTY machinery manufacturers of China



无锡宏源机电科技股份有限公司

WUXI HONGYUAN ELECTROMECHANICAL TECHNOLOGY CO., LTD.



浙江越剑智能装备股份有限公司

Zhejiang Yuejian Intelligent Equipment Co., Ltd.



JINGGONG
TECHNOLOGY

DTY Machinery
Manufacturers



山西经纬化纤机械股份有限公司

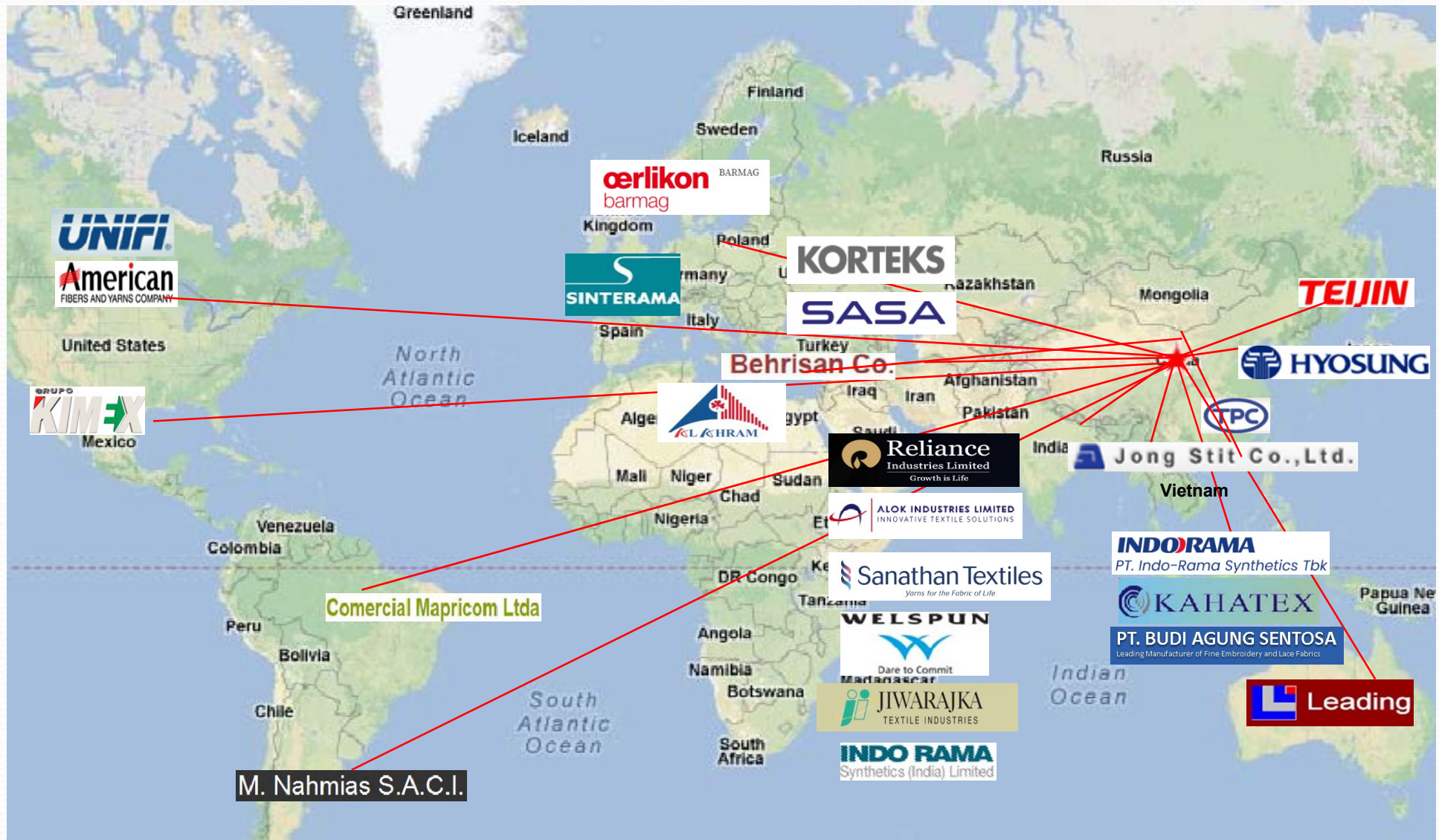
SHANXI JINGWEI CHEMICAL FIBER MACHINERY CO., LTD.

oerlikon
barmag

We also have business with the DTY machinery manufacturers and they equip our PU disc when they sell their DTY machines to their customers.



AINY's overseas customers from 15 countries





QC 质量控制

Procedure 检验流程

Testing instruments and methods 检验仪器和方法

Testing Regulations PU盘成品检验操作规程



Inspection of
finished products
待检成品检验

Ambient temperature 18°C-22°C, constant temperature 24 hours
环境温度18°C-22°C,恒温24小时

Hardness 硬度

LX-A Shore Rubber Hardness Tester: Hardness A±2
LX-A 型邵尔橡胶硬度计: 硬度 A ± 2

Outer diameter
外径尺寸

OMT-1800H video microscope, lens magnification set to 0.7
OMT-1800H视频显微镜, 镜头倍数设置为0.7

Inner hole 内
孔

Ø12 H7 pass and stop gauge (0-0.018mm) calibrated size
+0.018 Ø12 H7通止规 (0-0.018mm) 标定尺寸 +0.018

Thickness 厚度

(0-25)mm lever micrometer 0.001mm, calibrated size ±0.15
(0-25)mm 杠杆千分尺 0.001mm, 标定尺寸 ±0.15

Roughness
粗糙度

MMD-PG100S roughness profile meter Parallel direction: Ra
(µm) ≤ 2.0; Rz (µm) ≤ 10.0 / MMD-PG100S粗糙度轮廓仪
平行方向: Ra (µm) ≤ 2.0; Rz (µm) ≤ 10.0

End face, radial,
run out, symmetry
端面、径向、跳动、
对称度

Deflection meter telescopic lever dial indicator, universal
magnetic meter base; End face run out tolerance 0.1mm; R
arc radial run out tolerance 0.03mm; symmetry tolerance
0.025mm
偏摆仪伸缩杠杆千分表、万向磁性表座; 端面跳动公差
0.1mm; R弧径向跳动公差0.03mm; 对称度公差0.025mm

Exterior 外观

JVB300 image measuring instrument, calibration size
+0.03JVB300 / 影像测量仪, 标定尺寸 +0.03

Qualified
合格



The Introduction To

NIP Roller-皮辊

Application

应用场景

Applicable to all texturing machines, such as Barmag, Hongyuan, Jinggong, Jingwei, Rongteng, Yuejian, etc.

适用于所有加弹机，如巴马格，宏源，精功，经纬，荣腾，越剑等

1. Using SKF bearings, the vibration is small, the operation is smooth, and no lubrication is required.

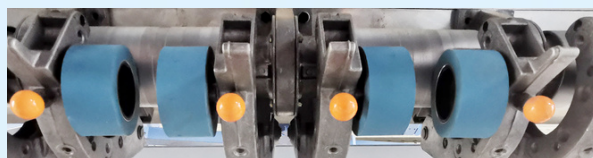
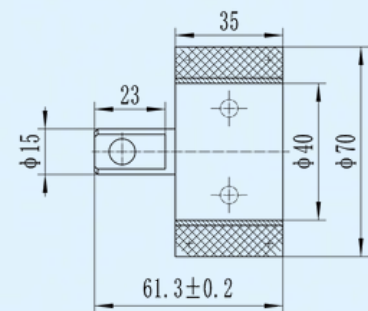
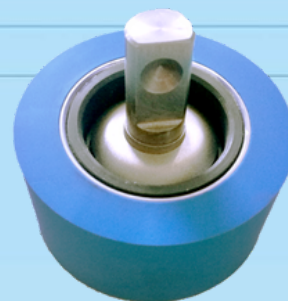
使用SKF轴承，振动小，运转平稳，无需润滑

2. Made of high-quality rubber with a wide hardness range, it is suitable for processing fibers of different specifications, so that the yarn can be held firmly without falling off

采用优质橡胶，硬度范围宽，适用于加工不同规格的纤维，使纱线握紧牢固，无脱落

3. Excellent product quality, long service life, and more energy-saving than other processes

卓越的产品质量，超长的使用寿命，比其它工艺更加节能



Applied DTY Machine		
适用的加弹机		
Brand		Type
Barmag/巴马格		FK6-1000
Hongyuan/宏源		HY-7
Jinggong/精功		JGT1000
Jingwei/经纬		JWK 2608
Honor/荣腾		RTII (V)
Yuejian/越剑		YJ1000V



A*dvantages in technology*
I*ndividualization for our customers*
N*onstop after-sales service*
Y*our choice, our credit*

Thank you !