



# ZHAOFLON

## 金屬網聚四氟乙烯襯裏防腐產品

ANTICORROSIVE PRODUCTS  
LINED WITH METAL MESHED-PTFE

國內外獨家生產專利產品  
Exclusive patent products

最具國際競爭力化工品牌  
The most int'l competitive brand



- 中國、美國與歐洲十六國發明專利
- 中國國家發明獎
- 國家級新產品與國家級火炬計劃項目
- 國際防腐技術博覽會特等大獎
- 紐約國際發明博覽會金質獎
- 尤里卡世界發明博覽會金質獎

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## 简介

聚四氟乙烯（简称 PTFE 或 F4）是当今世界最耐腐蚀的材料之一，可它存在有热胀冷缩比钢铁大 13 倍的严重缺陷，致使各国生产的钢衬 PTFE 管道、设备，在使用过程中，PTFE 衬里层极易损。当温度升高时，PTFE 衬里层膨胀过多无处延伸，而产生鼓包或内瘪现象，阻塞了介质流通。当温度下降时，PTFE 衬里层会收缩过大，被拉裂而泄漏，从而影响了它的广泛应用。本公司经长期研究，采用特殊技术，将金属网引入 PTFE 薄层内部，使 PTFE 衬里层的热胀冷缩降低到与钢外壳相一致。同时还增加了强度，提高了耐正、负压性能。其使用寿命超过无网产品数百倍以上，使老产品更新换代，而成为世界之最。它可在 250℃ 以下，乃至骤冷骤热或冷热交替的任何强腐蚀性生产系统中长期稳定使用。

本发明或中国、美国与欧洲多项专利，并获中国国家发明奖，国际防腐蚀技术与产品博览会“特等大奖”，纽约第 14 届国际发明博览会“金奖”，第 38 届尤里卡世界发明博览会“金奖”，比利时国王颁发了“骑士勋章”。

国家科委将此高新技术产品评为国家级新产品，列入国家级火炬计划项目，并向全国发出通知，要求各有关单位大力推广应用。十余年来，新产品已在国内外化工、石化、冶金与核能等领域 300 多家企业得到广泛应用，效果显著，深受广大客户的信赖与好评。

本公司技术力量雄厚，生产装备精良，测试手段完善，制造能力颇强，是目前我国最强的氟塑料防腐产品研究制造的专业厂家之一。金属网 PTFE 专利产品目前在国际上仅本公司独家生产，欢迎国内外客户前来参观考察、惠顾利用。

## BRIEF INTRODUCTION

Polytetrafluoroethylene(or PTFE,F4 in short)is one of the top anticorrosive materian in the word ,but it has aserious defect that it's coefficient of heat expansion and cold shrink is 13 times of the steel's,so the PTFE liners of the PTFE lined pipes,equipments etc.produced by various countries are very easy to be damaged while being used.While the temperature rise,PTFEliner expand in the limited inner of the pipes and equipment,this results that the PTFE liner curled or distorted,so the media inside be blocked.Whiletemperature fall, PTFEliner shrink,so it'd easy be broken which results in leaking.All of these influence the PTFE's application.We company,after year's of research,adopt special technology,plant metal mesh into the PTFE layer,by this means,the coefficient of PTFE's heat expansion and cold shrink is reduced to be same as the steel's,meanwhile,the PTFE liner's strength,and the performance to resist positive or negative pressure are increased largely.This metal-meshed PTFE products' working life is hundreds of the normal products without the metal mesh,so it's in the leading place in the world.It can be steadily used under the condition of 250℃,or even the temperature alternate rising and falling instantly for long term.

This in vention has got the patents of Chinese, USA and Europe,and the award of Chinese national invention,Gold award of international anticorrosion technology and products expo, Gold Award of New York 14<sup>th</sup> international invention expo ,Gold Award of Eureka 38<sup>th</sup>worldwide invention expo.The King of Belgium rewarded us the “knight medal”

Chinese national Science Committee listed this high-tech prodrt as new product of National Level ,as well as Porch-Plan project of National level. And noticws were distributed all over the country calling for every reative unit to use this new products widely.Over 10 tearsm this new kind of product had been used widely in over 300enterprise or units in Chemical,Petrochemical, Metallurty, Nuclear plant etc.fields both in domestic and abroad, and got user's trust and praise because of it's excellent performance.

With strong technology,fine production facilities, complete test means,and great manufacturing capability, we are one of the biggest professional manufacturers of PTFE(FEP,PFA,etc)anticorrosive products in China.Metal meshed PTFE—our patent product,only being manufactured in our company in the world. Customers from China and abroad are warm welcome to visit out company and use our products.

## 业绩 OUTSTANDING ACHIEVEMENT

本公司（所）创建于 80 年代初，在赵永镐教授的领导下，从小到大，从国内走向国外，技术不断创新，规模日益壮大。现有员工百余名，年生产能力达亿元。公司制造的 PTFE 防腐产品，在质量与使用性能上，已超越各国，达到国际一流的顶尖水平，在多次国际公开竞标中，均以质量可靠，性能优异，价格低廉击败对手而中标。用户已遍及世界各国化工、石油、冶金与核能等行业，为世界防腐事业作出重要的贡献。

Our company is established in early 80's. Directed by Prof. Zhao Yonggao, it developed at a very quick speed, with the innovation of technique and enlarging of scale, its business expanded abroad. It now has a group of about a hundred employees, the production capacity per year achieves 100 million yuan, The PTFE anti-corrosive product, which is produced by the company, has already reached the first scale level in the world both in quality and using characteristics. For many times in international public bids, it won for the reason of reliable quality, good characteristics and low price. Its user has been around the world in industries like chemical, oil, metallurgy and nucleus. The company has made great contribution to the world's anti-corrosion enterprise.

## 品种规格 MAIN PRODUCTS

品种 KINDS		规格系列 SPECIFICATIONS SERIES	
塔、釜、罐、槽等大型设备 Columns, caldrons, vessels etc.		Φ 300-3000 系列	
换热器 Heat exchanger	管壳式 Shall-tube	换热面积	≤100m <sup>2</sup>
	盘管式 Coiled	Area of heat transfer	按用户要求
管子与管配件(弯头、三通、四通、异径管等) Pipes & fittings(ell, tee, cross, reducer etc.)		DN20-3000 系列	
补偿器(普通膨胀节、大径膨胀节、不锈钢板增强膨胀节、不锈钢丝编织增强膨胀节等) Compensators		DN20-3000 系列	
波纹软管(普通式、铁装式、不锈钢丝编织增强) Soft bellows pipes		DN20-400	
垫圈(中国标准, 美, 日, 法, 德等国标准) Washers		DN20-3000	
离心泵 Centrifugal pump		80FF <sub>4</sub> -60, 65 FF <sub>4</sub> -50, 50 FF <sub>4</sub> -32, 40 FF <sub>4</sub> -32	
喷射泵(文丘里) Jet pump		内衬 F4 或整体式 Lined with PTFE or all PTFE	
阀门(截止阀、旋塞阀、球阀、隔膜阀、止回阀、蝶阀) Valves(stop valve, cock, ball valve, diaphragm valve, check valve, butterfly valve)		蝶阀 Butterfly valve DN20-1200	
		其它阀门 Other valves DN20-250	
其它非标准产品(45°弯头、异径三通、异径四通、偏心异径管、渐缩法兰、盲板法兰、各种通气管、搅拌架、栅板、填料环等) Other non-standard products		按用户要求加工 According to demands	

## 适用范围 RANGE OF APPLICATION

行业 Industry	化工、石化、炼油、氯碱、制酸、磷肥、制药、农药、化纤、染化、焦化、煤碳、有机合成、有色冶炼、钢铁、原子能及高纯产品生产(如离子膜电解), 粘稠物料输送与操作, 卫生要求高度严格的食品、饮料等加工能力生产部门。 They are widely used any where, such as in chemical, petroleum, oil refining, pesticide, metallurgical, military industries etc.
介质 Media	氢氟酸、磷酸、硫酸、硝酸、盐酸、各种有机酸、有机溶剂、强氧化剂以及其它各种强腐蚀性化学介质。 They can be used in a acid, alkali of any density of concentration, salt, strong oxidant, or-organic solvent and other strong corrosive media.
温度 Temperature	-20~250℃, 允许骤冷骤热, 或冷热交替。 -20~250℃, (-4~+482° F)
压力 Pressure	-0.1~6.4MPa, (全负压至 64Kgf / cm <sup>2</sup> )。 -0.1~6.4MPa, (Full vacuum to 64Kgf / cm <sup>2</sup> )。

管道類產品 PIPES & PIPE FITTINGS



設備、封頭及配件類產品 EQUIPMENT, HEAD & FITTINGS



換熱器 HEAT EXCHANGER

膨脹節、波紋管類 COMPENSATORS & BELLOWS



管殼式 shell-tube type



膨脹節 expansion joint



不銹鋼絲網增強膨脹節  
S.S.meshed-PTFE Compensator



盤管式 Coiled type



金屬增強膨脹節  
metal-PTFE compensator



波紋軟管 bellows

離心泵、噴射泵類 PUMPS



離心泵 centrifugal pump



文丘裏管 VENTURI



整體F4噴射泵 PTFE jet pump

閥門類 VALVES



截止閥 stop valve



旋塞閥 cock



球閥 ball valve



隔膜閥 diaphragm valve



升降式止回閥  
Vertical lift check valve



對夾式蝶閥 butterfly valve



旋啟式全偏氟止回閥 PVDF check valve



國際榮譽 INTERNATIONAL HONORS



比利時國王向趙永鎬頒發騎士勳章  
Prize-giving ceremony in  
BRUSSELS EUREKA Expo



尤裏卡金獎證書  
BRUSSELS EUREKA  
gold medal



尤裏卡騎士勳章證書  
BRUSSELS EUREKA  
knight medal



尤裏卡金質獎章  
EUREKA gold medal



法國國家實驗室試驗報告  
France national laboratory report



紐約國際金質獎章  
NEW YORK internat. Gold medal

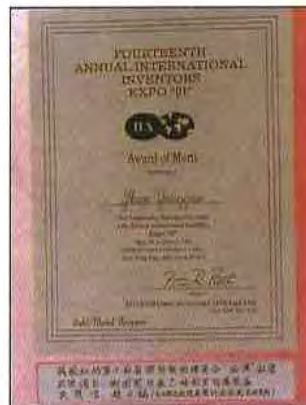
尤裏卡騎士勳章  
EUREKA knight medal



美國發明專利證書  
United States patent



紐約國際發明金質獎杯  
NEW YORK  
international gold medal



紐約國際發明金獎證書  
NEW YORK  
international gold medal



歐洲16國發明專利  
Europe patent

# 定點證書 APPOINTED CERTIFICATES



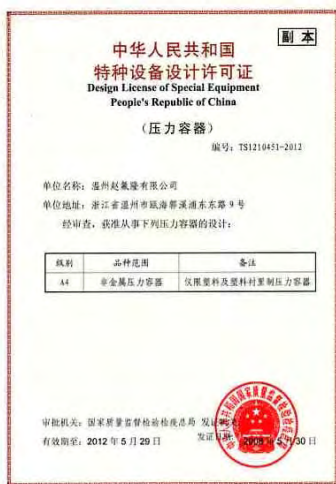
國家級新產品證書  
National new product



國家級火炬計劃項目  
驗收合格證  
National "Torch-Plan Item"  
浙江省科學技術委員會  
一九九四



國家科委向全國推薦產品文件  
Papers of National science Comm



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