

Not All Oil is Same!



"Steel Shield 神盾" 讓世人知道不是所有潤滑油都是雙胞胎

Steel Shield Technologies



since 1985

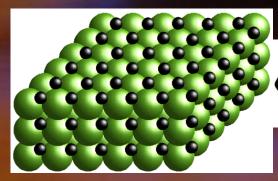
美國神盾

What makes the Difference?

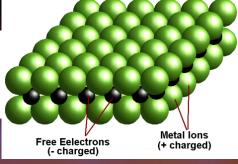
無可取締的潤滑不靠油?

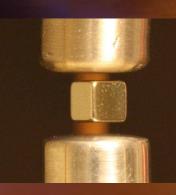


- The Ionic-Waglev ABF Technology !
- 。神盾技術-獨家ABF離子轉移磁浮態









"Reliability is our first concern... there is no room for system Dysfunction when customers have chosen Steel Shield." 神盾 竭盡全力確保系統無故障



此油非等閒... 實是一絕密科技!



Company Background 公司背景

Steel Shield Technologies Inc 美國神盾的前身是MPC, 創辦於1985年, 父親Richard Fennell是董事長兼首席執行官,兄長Jay Fennell是總裁和營銷經理,George 本人是執行副總 裁兼技術總監。2006年George及其家族退出了MPC並且創辦了Steel Shield, 自始ABF產品正 名為Steel Shield美國神盾。

In 1985 Dr. George C Fennell in the research and development of high-end specialty lubricants invented the unique ABF Formula – Ionic Levitation. In the same year Muscle Product Corporation trading as MPC was founded by George Fennell, his brother Jay Fennell and father, Richard Fennell in Pennsylvania USA. In 2006 George resigned all his duty from MPC and incorporated STEEL SHIELD TECHNOLOGIES INC. As of then, ABF products have been renamed "Steel Shield"; and products of MPC received no further endorsement from George being the same product as it supposed to be.











Richard Fennell

Jay Fennell

Carol Fennell

Business Meeting - 1986







美國廠房擁最先進的製造技術和配套設施,全自動電腦監控和整合,設備精鋼打造,100%美國原料生產。

Steel Shield's blending and manufacturing capabilities are state of the art and the equipment is all stainless steel including the flow lines, pipes and couplers. All pumps and gauges are digitally interpreted and of the highest quality and accuracy to ensure production of the most superior quality lubricants. Materials are 100% Made in USA.

Inventor 發名家 — Dr. George C Fennell



Doctor of Astronomy and Astrophysics 天文學和天體物理學博士

Accreditation:

SAE (Society of Automotive and Aerospace Engineers)
Member

汽車與宇航工程師學會

ASNE (American Society of Naval Engineers) Member 美國海洋工程師學會

NCMA (National Contract Management Association)
Member

國家合同管理協會



1985 年 Dr. George C Fennell 秉承其父親及祖父在磁浮潤滑學的科研,成功開發"離子鍵轉移技術"將金屬表層轉化為陽離子(正電荷),Faradys Law 同極相斥形成磁懸浮狀態的(ABF)無形保護牆。自始,被學界冠以"磁浮態之父"的美譽。

In 1985, Dr. George C Fennell, a former scientist in Astronomy and Astrophysics doing research in advanced lubrication and surface Tribology, formulated a revolutionary metal treatment oil additive which can realize "lonic Maglev – the ABF Technology" through a proprietary and unique "electro-chemical ionization" process. Since then George has been crowned by the industry as the "Father of ABF Lubrication".



Friction 摩擦

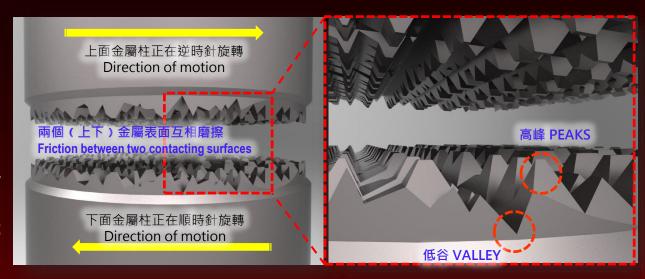


- 1.) Energy Loss 耗能
- 2.) Inefficient 效率低
- 3.) Heat 高熱
- 4.) Dysfunction 功能障礙
- 5.) Clogging 卡機
- 6.) Welding Up 燒結
- 7.) Fatal Damage 報廢
- 8.) High Cost 高維護費

ABF Technology 磁浮潤滑技術基礎

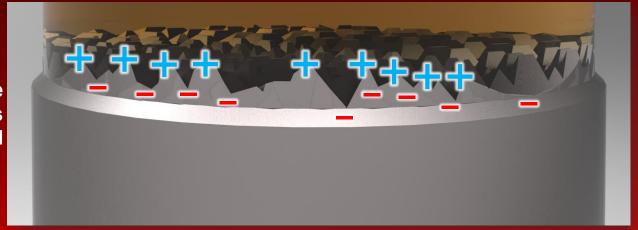
1. 金屬表面 Metal Surfaces 金屬表面是由"高峰"及"低谷" 組成,互動產生巨大阻力,這 就是磨擦阻力的源頭。

Surfaces characterized by series of peaks and valley. When two metal surfaces contact each other and move in opposite directions, friction is caused, producing heat and metal deterioration.



2. 表面的極性 Surface Charge "高峰"是帶正極的,而"低谷"是帶負極的。

Peaks known as asperities are positive charged whereas valleys referred to as micro-pores and fissures are negative charged.



3. 傳統潤滑油 Aftermarket Lubricants

利用化學物質甚至軟金屬元素(moly 鉬)來改變油品的特性,短暫緩和金屬磨損,這類元素互相制衡甚至因交叉反應產生酸性物質,有腐蝕金屬件之嫌。傳統潤滑之所謂磨合(run in)"金屬平整功能",實質是要機件互相斬砍,讓凸出的部份被削平,金屬脫落做成部件的原公差值劣化。機件不停碰撞產生碎屑,混合潤滑油,磨損更嚴重。

After market lubricants use chemicals and even substances like Moly and Esters to improve the characteristic quality of oil. These chemicals when mix together may cause cross effects creating acidic substances leading to abrasive wear and other adverse effects alike. The long applied traditional method for mechanical Run-In is actually a breaking-off or chip-away process which would create metallic debris in the lubricant leading to abrasive wear from wear metal particles. The resulting damage to the metal parts of the system is fatal and unrecoverable.









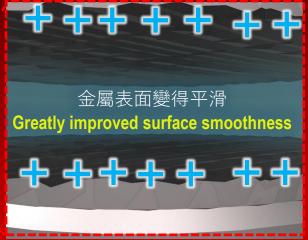
4. 神盾磁懸浮潤滑 ABF Technology

離子鍵轉移激活,金屬表面呈正極電荷狀態,法拉第定律的一股同極互斥能量於兩面互動金屬面之間形成,這能量會對突出的金屬部分進行徑向擠壓,往周邊微孔和裂縫推填並且撫平其表面,跟常規的縱向剪切方式完全相反,不但不會改變金屬體原有質量(mass)和公差值(measurement),而且加固了金屬表層的堅硬度。

Forms electro-negative surface attaching compounds to seek out and themselves to lower surface areas filling the micro-pores and fissures, as all metals are crystalline in structure and exhibit a lattice type matrix. This complex process also incorporates Van der Waal forces and dipole-dipole surface reactions. During this process, radical surface lapping is achieved instead of the longitudinal shearing. Asperities roll out or flatten creating greatly improved metal surfaces. Created in this process is a total positive state of polarity. When metal surfaces become uniform in charge, there is a significant reduction in friction due to Faraday reaction of like-charges. Viscosity, however, is a lesser consideration when incorporating Steel Shield techniques.









5. 神盾磁懸浮與傳統潤滑的抗磨對決 ABF vs Traditional technology

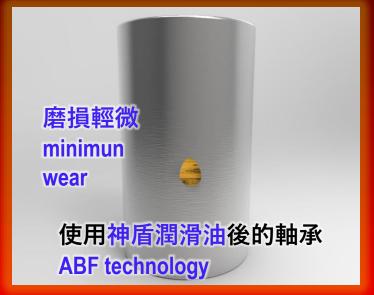
神盾不會改變或者提升潤滑劑(載體)的基本參數和功能,它獨有的離子鍵轉移技術確實的改變了兩面金屬的互動常態,產生磁懸浮效應。在磁浮狀態下,負載值與摩擦力之間呈幂函數關系,即在負載達到一定值后,增加負載量對摩擦力值的實質改變是"零",摩擦力值趨向一恒定值。此時表明,在摩擦接口上,負載已基本上由離子磁場所完全承担并使摩擦接口保持一定的間隙,而潤滑劑此時的僅有功能只起傳熱作用吧了!

Steel Shield Technologies' mechanism of operation is based upon Tribology methods that improve lubricity and load carrying capacity by improving surface characteristics and creating a stable chemical, corrosion controlled halide-based boundary film. Steel Shield's active components react with each other and to cause the contacting asperities of the metallic surfaces a change of cation. As a result a positive-charge ionic force (like-charge repel) is realized between the two contacting surfaces, and as then the friction coefficient is becoming independent of total load and apparent area of contact. At this stage the function of lube oil is only for heat transfer.



軸承 Bearings







神盾磁浮潤滑五大突破 Five Major Mechanism

1. 虛擬零摩擦 - RCB 離子磁懸浮

法拉第定律同極相斥,偶極反應原理

Virtual Zero Friction - RCB Ionic levitation

Faraday's Law like-charges Repel & Dipole-Dipole Reaction

2. 動態追熱和保護功能

活性因子動態追熱

Dynamic Heat Transfer

Lubricant accumulates at the hot spot automatically

3. 無腐蝕誘導技術物理排污

磁誘導技術徹底清潔金屬碎屑

Non Corrosive Cleansing

Metal sludge repelled via induction and removed

4. 金屬表層加固

縱向剪切轉為定向擠壓改善表層金屬剛度

Metal Surface Re-hardening

From Shear Friction to Surface Lapping

5.運動中保護,降低系統故障

Eliminate System Dysfunction













MSNs for the Steel Shield products added to EESOH-MIS

products for weapons, weapon systems and military equipment running under harsh conditions and environments

US Air-Force Purchasing Items

NSN/LPN: 9150PHM00065498 NSN/LPN: 9150PHM00065496

MSN: 9150PHM00065498 MSN: 9150PHM00065496

CAGE: 4TXQ2 CAGE: 4TXQ2

Trade Name: STEEL SHIELD WEAPON SHIELD METAL TREATMENT Trade Name: WSG-EP1, WEAPON-SHIELD EP #1

GREASE

NSN/LPN: 9150PHM00065584 NSN/LPN: 9150PHM00065578

MSN: 9150PHM00065584 MSN: 9150PHM00065578

CAGE: 4TXQ2 CAGE: 4TXQ2

Trade Name: STEEL SHIELD ANTI-WEAR EP METAL TREATMENT Trade Name: LITHI-SHIELD EP #2 GREASE

NSN/LPN: 9150PHM00065587N SN/LPN: 9150PHM00065590

MSN: 9150PHM00065587 MSN: 9150PHM00065590

CAGE: 4TXQ2 CAGE: 4TXQ2

Trade Name: STEEL SHIELD STRIKE SHIELD TOOL SHIELD



Compliments from the US Military



George C. Fennell, L.E. [gcfennell@s Friday, June 06, 2008 10:15 AM 'Mark W. Pushtick' FW: THANK YOU GEORGE FENNELL AND WEAPONSHIELD

From Alpha Company 2-13(etc. Histor. New Sections): It remembers thanks I thank you so wary much for produce the control of th

In short thank you so much from me, Eli, and from the Black Sheep



---- Original Message

From: Beck, Juson L MAJ 887 ESFS [mailto:jason.beck/@iraq.centcom.mil] Sent: Tuesday, February 24, 2009 9:45 AM To: Mark W. Pushnick

I wanted to send an excerpt from an e-mail I received from our weapons maintainers that have been using your product since it arrived here several weeks

n regards' to the Weapon Shield lubrication, it is an outstanding product. We in regards in the weapon street unoneation, it is an outstanding product. We filled lested the product with our troops who are required to elean their unsigned heavy weapons daily. The feedback we received was all positive. They said the lubrication provided a thick protective cost and revisualized the metal on the weapons. Unlike other lubricants the Weapon Shield is more durable when used in drug to deather when the contraction of the street of n day-to- day operations involving sand and dust. We also had sister services runging from Army and Navy personnel try the lubrication. They too had nothing but good things to say. The needle lubricant applicators are perfect for maintenance and small cleaning kits. They allow for precise placement of lubrication in tight places and on smaller parts.

The Lithi-Shield grease is also an amazing product. Thus far we have used it on numerous heavy weapons. It also cased the process of installing 25 safety kits on the M-2 Machine Guns. The grease is also very durable and applies with ease. from the Combat Arms perspective, we believe this product to be very efficient and would recommend it to anyone wanting to use it.

Just wanted to say thank you again, your products are amazing and definitely better than anything we've tried. The Airmen are already asking where they can purchase the Weapons Shield Lube when they get back to the states. Thanks again



07 May 2008

Mark W. Pushnick President & CEO Stoel Shield Technologies, Inc 3351 Industrial Blvd Bethel Park, PA 15102-2543

I wanted to take time to express my sincere thanks to you and Steel Shield Technologies, inc. for your support while I was deployed overseas in support of the Global War on Terrorism.

Your product, Wespon Shield, was truly a "life saver".

In my first combet tour to Afghanistan in late 2003, not knowing much about your product, I began to use it for my personal weapon and my crew-served vehicle weapon as a just another oil that I received in my care packages from home. I soon became educated on how this product was head and shoulders above the rest.

In the gracing conditions of southwestern Afghanistan, our weapons were subject to severe heat, dart, and even potential runt due to the humbility in the area. Compared to the other oils that we received, Weapon Eskeld was the only product that strood up to the hathfelied overnoment and did not cause the both of the weapons to become "gummy" or "sixio,". Weapon Shield actually acted as "shield" and as a dast prefet on as a dast prefet on as a dast prefet of the stroot of th

When I found out that I was deploying back to Iraq in 2007, one of my first calls was to my father to get my hands on Weapon Sheeld. While conducting pre-deployment training at Fort Brage, I introduced my solders to take product. When it comes to eding to a tough sendence, young entitled men are some of the trapliest to twy into a new idea. Within days, all of the men were carrieged in the contract and were even backing bottles within their peaks.

When we got to Iraq, Weapon Shield bottles became a part of the combat packing list as assigned by my Detachment Sergeant. Weapon Shield was now the Standing Operating Procedure, a small bottle on each man and tube of grease in each truck.

Weapons Shaled brought us through over 25 fire lights with great success when other soldier's from different surface. Once occasion to parted with another suit, their: 50 call machine gan jammed: specific field. Once occasion to parted with another suit, their: 50 call machine gan jammed: per jammed in sold of the sold for of Weapon Shaled to them. They broke down their weapon, specified the shaled supplied the shaled subtractive field state to the friendight. In one masters that exaction review, my soldiers quickly commented on him their weapon would only by threater with him product.

The bottom line is this... In two combat tours to both Afghanistan and Irac, weapons resented with Weapon Shield, NEVEZ jammed. That saved lives... As a unit commander, any notel important of the weapon to the commander, any notel important of the weapon to the commander to any cost important of the weapon to the commander to any cust accomplishing that mission. In combat, the only option in perfect, If you are not, you can die. Weapon Shield was a great many commander to the c



Hi George

Many thanks for the samples of Weapon Shield that you sent to me.

I tested your product on various firearms while I was home on R&R and was really impressed. They all felt amouther after applying Weapon Shield, even an old Norinco 1911 that is not known for being a smooth pistoll

I've now returned to Irsq and over the last month have used your product on Glock and Browning paces, AKF3 and FAMI sight machine game. All the finames fell at lot smoother shart applying wheepon Shard. I all the load that Velevers belief used one of port granty due to the hete generated yellow the last product of the last on the last product that Velevers did does not evaporate and disappear like other products that we have the running in the scale for the products that we have the running in the scale for the products that we have the running in the scale for the products that we have the running in the scale for the running in the scale for the running in the scale for the running the scale for the running the scale for the running in the scale for the running in the scale for the running that the running is the running that the running the scale for the running that the running that

I have given a couple of samples to other experienced shooters, instructors/operators in irsq and they have all given me very positive feetback. Good feedback for a new product in an old and competible includity in not always early corne by! It says a sol for Wespon Shleid that these experienced shooters have asked me for more of your monta-rit.

Having spent 30 years in the freezms training industry and working on various high risk units i have used many, many products that proclemed to be the shooters salvatton! Weapon Sheld has impressed me and will definitely be placing an order when I get out of the sendpit and back to my shooting school on a full time basis.

Once again, thank you for the samples! I will definitely be recommending Weapon Shield to my friends, colleagues and students.

Regards

Adrian Rossiee Tactical Defence Institute (SA) +27 (0)84 606 3647 (Ina)+954 (0)79 0258 7857 atrianrossise@yahoo.com / adrian@tacticaldelense.co.za





Letter from Siemens USA

December 10, 2008

Mark W. Pushnick President & CEO Steel Shield Technologies, Inc. 3351 Industrial Blvd.

Mark,

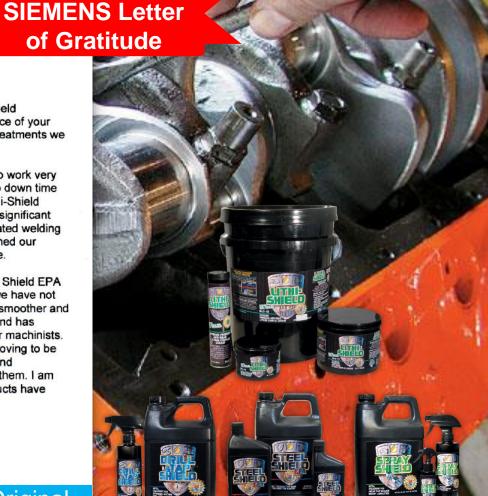
I would like to take this opportunity to thank you for introducing us to Steel Shield Technologies line of lubricants and Metal Treatment products. The performance of your products has been overwhelmingly superior to any other lubricants or metal treatments we have used in the past.

We are currently using the Lithi-Shield grease in our shop and it has proven to work very well in our high temperature applications. We have experienced absolutely no down time due to bearing failure on our high temp furnace since we began using the Lithi-Shield grease. In the past all bearings were replaced on a quarterly basis causing a significant amount of downtime and material cost. We also use the grease in our automated welding equipment and anywhere else frequent greasing is needed. It has out performed our previously used grease in every application and we use it as often as possible.

Because of the performance of the Lithi-Shield grease we started using Steel Shield EPA in all of our metalworking equipment. Since its introduction to our machines we have not experienced a significant breakdown of any kind and it has left them running smoother and quieter than ever. The Steel Shield Drill and Tap fluid is also used our shop and has significantly decreased our tooling costs and become a favorite of most of our machinists. The Spray Shield product is used by our maintenance department and it is proving to be superior to anything used here in the past. We are very happy with the cost and performance of Steel Shield Technologies products and I highly recommend them. I am continually looking for ways to reduce costs and downtime Steel Shield products have been a great contributor to our success.

Bob Cavill Maintenance Department Supervisor Siemens VAI Services, LLC 2901 Industrial Blvd. Bethel Park, PA 15102 412-851-6700

Original



SOUTHWEST RESEARCH INSTITUTE TEST REPORTS

STEEL SHIELD LARGELY OUTPERFORMS REPUTED GREASES MADE BY YAMAMOTO AND Petroleum Products Research Department ATLAS Petroleum Products Research Department

Petroleum Products Research Department Test Summary Report Steel Shield Technologies Purchase Order # 114 October 25, 2013

SwRI	Sample ID:		20003	20004
Code:	Sample Identification:	ple Identification:		Yamamoto EP grease
D1264	Water Washout of Grease			
	Avg. Grease Washed Out	Wt %	1.32	0.66
	Test Temp.	°C	79	79
	Dry Temp.	°C	77	77
D1742	Oil Separation from Lubricating Grease	mass %	2.04	* Note
D2265	Dropping Point	°C	258	307
	Oven Temp.	°C	288	316
D2266	Wear Characteristics (Four-Ball Method)			
	Scar Diameter	kgf	0.75	0.47
D2596	Four-Ball Extreme Pressure Properties			
	Corrected Load	kgf	851.1	501.68
	Load-Wear Index	kgf	92.27	66.73
	Weld Point	kgf	800	315
	LNSL	kgf	_ 80	63

^{*} No oil separation occurred for grease sample "Yall hase" herefore, sample is continued the scope of the method".

WIN

Petroleum Products Research Department Test Summary Report Steel Shield Technologies Purchase Order # 114 October 25, 2013

SwRI	Sample ID:		20005
Code:	Sample Identification:		Atlas Chisel lube
D1264	Water Washout of Grease		
	Avg. Grease Washed Out	Wt %	1.11
	Test Temp.	*c	79
	Dry Temp.	*c	77
D1742	Oil Separation from Lubricating Grease	mass %	** Note
D2265	Dropping Point	*c	302
	Oven Temp.	*C	316
D2266	Wear Characteristics (Four-Ball Method)		
	Scar Diameter	kgf	0.71
D2596	Four-Ball Extreme Pressure Properties		
	Corrected Load	kgf	302.79
	Load-Wear Index	kgf	41.23
	Weld Point	kgf	315
			50

** No oil separation occurred for grease sample "Atlas Chisel Lube", therefore, sample is considered "outside the scope of the method".

TEST ITEMS	Four-Ball Extreme Pressure Properties	Steel Shield Lithi Shield	Yamamoto EP Grease	Atlas Chisel Lube	conta med i dec he or pub tary yyee:
Loading Ability	Corrected Load	851.1	501.68	302.79	tes a ary o
Anti-Wear Ability	Load Wear Index	92.27	66.73	41.23	
High Temperature Loading	Weld Point	800	315	315	Ber
High Pressure Loading	LNSL	80	63	50	

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Benefiting government, Industry and the public through inne

SOUTHWEST RESEARCH INSTITUTE TEST REPORTS

STEEL SHIELD GAS ENGINE OILS AND COMPRESSOR OILS ASTM D2782 TIMKEN TESTS

THE TEST REPORT FROM SOUTHWEST RESEARCH INSTITUTE - Timken ASTM D2782

Test Report 2014 / 11 / 20 Steel Shield Technologies

SwRI Lab No.	24564	23728	25252	23727	25250	25251
ASTM D2782 Measurement of Extreme-Pressure Properties of Lubricating Fluids (Timken Method)	SST Gas Engine Oil SAE 40 Ashless Without EPA	Steel Shield Gas Engine Oil GECAT SAE40 Low Ash With EPA	Steel Shield EPA	Steel Shield Compressor Oil ISO #100 / 150	Mobil Pegasus 805 SAE 40 Gas Engine Oil	Mobil Pegasus 801 SAE 40 Gas Engine Oil
Volume (Gallon)	1	1	1	1	1	1
OK Load (lbs)	40	40	75	55	9	9
Score Load (lbs)	45	45	80	60	12	12
Temperature (°C)	38	38	38	38	38	38





Products of the same class



Results



Steel Shield Wins: Steel Shield outperforms Mobil in OK LOAD parameter by 444 % and in SCORE LOAD by 375 %. The SwRI Timken Test report clearly testified Steel Shield products are FAR Superior than Mobil products of the same classes

SOUTHWEST RESEARCH INSTITUTE TEST REPORTS

STEEL SHIELD GAS ENGINE OILS AND COMPRESSOR OILS ASTM D2783 FOUR BALLS TESTS

THE TEST REPORT FROM SOUTHWEST RESEARCH INSTITUTE - 4-Ball ASTM D2783

Test Report 2014 / 11 / 20 Steel Shield Technologies

SwRI Lab No.	24564	23728	25252	23727	25250	25251
ASTM D2783 Measurement of Extreme-Pressure Properties of Lubricating Fluids (4-Ball Method)	SST Gas Engine Oil SAE 40 Ashless Without EPA	Steel Shield Gas Engine Oil GECAT SAE 40 Low Ash With EPA	Steel Shield EPA	Steel Shield Compressor Oil ISO #100 / 150	Mobil Pegasus 805 SAE 40 Gas Engine Oil	Mobil Pegasus 801 SAE 40 Gas Engine Oil
Corrected Load (kgf)	70	109	NA	1	136	74
Load Wear Index (kgf)	35	46	NA	48	34	35
Weld Point (kg)	200	250	>800	250	200	200
Last Non Seizure Load (kg)	80	100	80	100	63	80





Products of the same class

Results

Steel Shield Wins:

Steel Shield outperforms Mobil in the Weld Point (oil strength in resistant to EP) parameter by 129 % and in the Last Non Seizure Load (wear performance in respect to load) by 159 %.

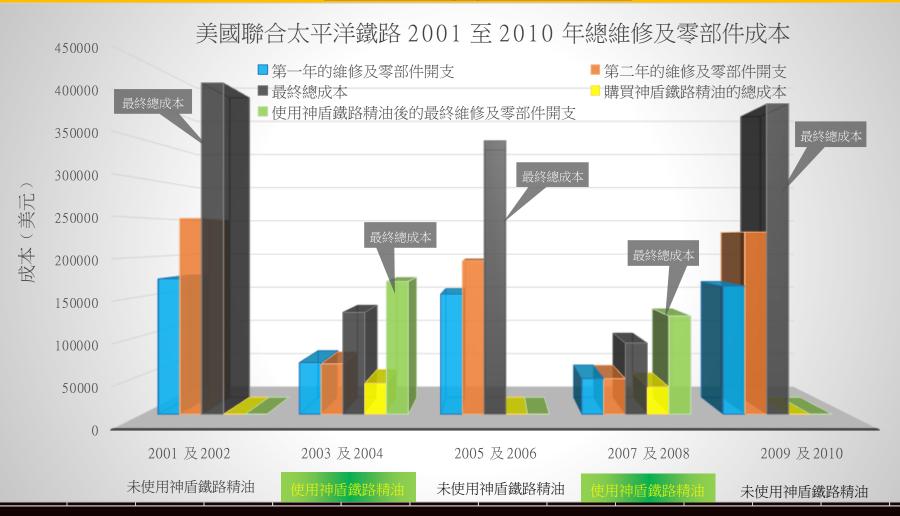
***Remarks: 4-ball test is normally for heavy weight oil and grease.

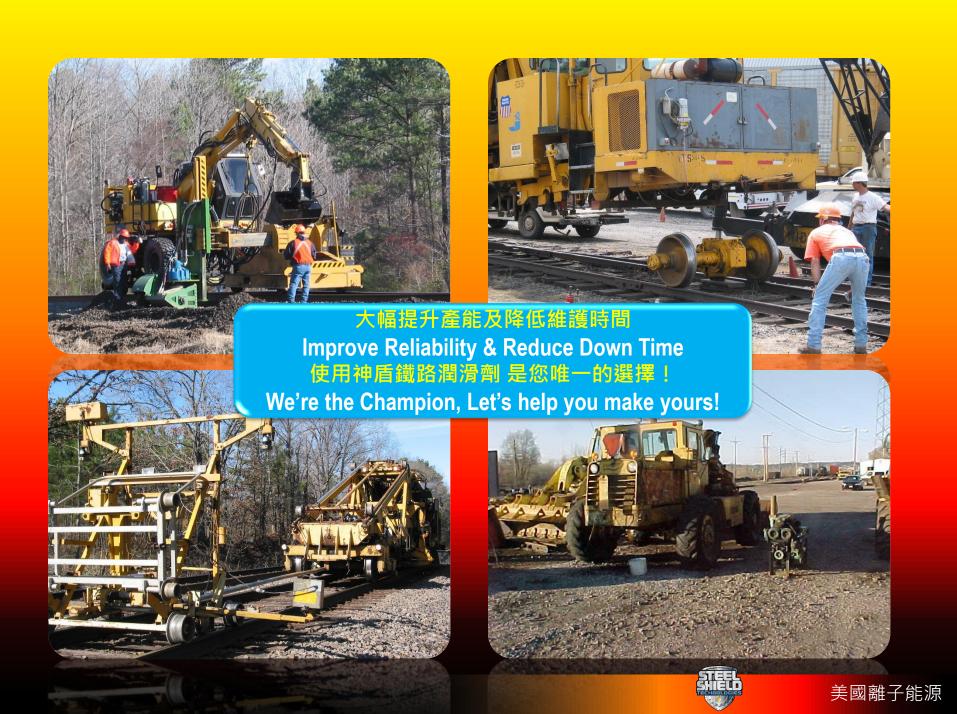
The SwRI 4-Balls Test testified Steel Shield products are superior than Mobil products of the same classes

美國聯合太平洋鐵路成本節省報告 UPRR REPORT

美國聯合太平洋鐵路總維修及零部件成本比較 使用神盾前 對 使用神盾後

<u>UPRR Repair & Maintenance Expenses</u>
Before & After applying Steel Shield Products





使用高級邊界膜技術的神盾鐵路潤滑劑 ABF TECHNOLOGY-RAIL EQUIPMENT

- ABF離子轉移磁浮技術,高效提升潤滑及負載能力
- ABF Ionic Maglev improves system performance & reliability
- 形成一層複雜的斥力保護牆於兩面金屬面之間
- Realize like-charges ionic force between two metal surfaces
- 經 ABF 技術處理後的金屬面變得極之平滑,而金屬的各種特性亦同時被優化
- Surface lapping improves smoothness & rehardens metal surface
- ABF 技術讓工作溫度下降,金屬件工作於適溫狀態,磨損減少,抗極壓性能亦被提升
- ABF Technology reduces system temperature, friction & improves loading capability

使用神盾鐵路潤滑劑所得到的益處 BENEFITS YOU MAY EXPECT FROM ABF TECHNOLOGY

- 增加列車行駛速度 increase train velocity
- 列車到站更準時 improve on-time train performance
- 延長零部件壽命及可靠性 extend parts life and component reliability
- 減少維修及停機時間 reduce maintenance interval and downtime
- 減少金屬互相磨擦 reduce friction
- 節省能源 save energy
- 降低運作溫度 reduce working temperature
- 機件操作時更順暢 improve smoothness & reduce noise
- 保護活動組件 protect metal parts from cold start & motion damage





中央地區的 M/W 設備(動力組件)

M/W EQUIPMENT CENTRAL REGION (POWER UNITS ONLY)

Case Study

在 2001 及 2002 年 Year 2001 & 2002

未有使用神盾鐵路潤滑劑於任何動力組件或其他 M/W 零部件 Without Steel Shield products

在 2003 及 2004年 Year 2003 & 2004

採用神盾鐵路潤滑劑於動力組件包括傳動系統、液壓系統、齒輪系統及差速系統

Steel Shield applied to the engine, gear, hydraulic, transmission & traction motor system

成本 Cost

2001至2004年美國聯合大平洋鐵路成本節省比較

	2001 主 2004 牛夫国	M卵口入十件域吃以本即自心蚁 Tedi Z	200 1/2 vs 2003/4 COSt allalysis	月一届
2001 及:	2002(未有使用神盾油)	2003 及 2004((使用神盾油)with Steel Shield	Not Just Oil
系統維修成本	= \$172,296 + \$249,476	 条統維修成本	= \$65,722 + \$64,021	IT'S TECHNOLOGY
Cost of Failures	= \$421,772	Cost of Failures	= \$129,742	
	(每年平均 cost \$210,886/p.a.)		(每年平均 cost \$64,871/p.a.)	
		神盾鐵路潤滑劑成本	= \$21,195 + \$18,000	
		Cost of Steel Shield products	= \$39,195 (每年平均 cost\$19,598	/p.a.)
		聯合太平洋總成本Total Cost to UPRR	= \$168,937 (每年平均 cost\$84,46	9/p.a. 5HELP
		節省的開支Savings to UPRR	= \$252,835 (每年平均 cost\$126,4	17/p.
		使用神盾鐵路油的投資回報 (ROI)	= <u>\$252,835 - \$39,195</u>	節省
		Return on Investment with Steel Shield	\$39,195	60%
(以上為美元)		(以上為美元 US\$ basis)	= 5.45 (545% 回報率 ROI)	Savings

* 投資回程Return on Investment: 節音 製造 Savings - 成本Cost = ROI



美國聯合太平洋鐵路2005至2008年維修費分析 UPRR 2005-2008 Cost Analysis

Case Study 2 Steel Shield products was purchased and added to M/W equipment components even though Case Study 2 is only showing the savings for Power Units.

• 2005 至 2006 年 Year 2005 & 2006

UPRR 維修費(沒有使用神盾油)Cost of Failures

• 2007至2008年Year 2007 & 2008

UPRR 採用神盾油的維修費分析 Cost of Failures with Steel Shield。



註:所有的主損壞及應用維修費均為平均值 All Repair cost are averaged due to core damage & applications

所有維修均為潤滑失效及過度磨損所引致 All repairs are due to poor lubrication & excessive wear

維修費並不包括工時、停機時間、租金或誤點損失 Repair Costs do not include man hours, downtime, rentals or delays

	維修單元	每單元維修費 Cost per unit	2005 年的維修單元 Unit Repairs		2006 年的維修單元 Unit Repairs		2007 年的維修單元 Unit Repairs		2008 年的維修單元 Unit Repairs	
	Unit Repairs to	oost per unit	Units	維修費 Cost	Units	維修費 Cost	Units	維修費 Cost	Units	維修費 Cost
	動力系統 Engines	12,000.00	4	48,000.00	6	72,000.00	1	12,000.00	0	0
日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日	變速系統 Transmissions	11,000.00	3	33,000.00	4	44,000.00	0	0	1	24,000.00
は は は は は は は は は は は は は は は は は は は	差速系統 Differentials	1,300.00	2	2,600.00	4	5,200.00	1	1,300.00	0	0
総維修复 Total Cost of	液壓系統油泵 Hydraulic Pumps	4,000.00	10	40,000.00	8	32,000.00	4	16,000.00	5	14,000.00
Units Per Year	閥門失效 Valve Failures	935.00	3	2,800.00	3	2,800.00	0	0	2	2100
rei ieai	液壓系統汽缸 Hydraulic Cylinders	600.00	12	7,200.00	15	9,000.00	6	3,600.00	5	3,800.00
	液壓系統發動機 Hydraulic Motors	2,500.00	8	20,000.00	12	30,000.00	5	12,500.00	1	1200
	年均總維修費 Total Cost of Repairs per	year		\$153,000.00		\$195,000.00		\$45,400.00		\$45,100.00

Case Study 2: Continued

- 2007 年,UPRR 購買了 US\$20,394 神盾潤滑劑 Purchased US\$20,394 Steel Shield Products
- 2008 年 UPRR 購買了 US\$14,100 神盾潤滑劑 Purchased US\$14,100 Steel Shield Products
- Steel Shield products was purchased and added to M/W equipment components even though Case Study 2 is only showing the savings for Power Units

		2	2005年	2006年	2007年		2008年
系統失效維修費 Cost of	of Failures		153,000	195,000	45,400		45,100
神盾產品成本 Cost of	Steel Shield Products				20,394	П	14,100
總維修費 Total Cost	of Failures		153,000	195,000	65,794		59,200

2005-2006 與 2007-2008 年度UPRR成本節省比較 Cost of Failures Analysis

	2005-2006	與 2007-2008 年度UPRR 成本即自比較	Cost of Fallures Analysis
	2005 及 2006 采用神盾鐵路潤滑劑)	2007 及 2008(採用神盾鐵	i路潤滑劑 Steel Shield Products being used)
系統維修費	= \$153,000 + \$195,000	系統維修費	= \$45,400 + \$45,100
Cost of Failures	= \$348,000	Cost of Failures	= \$90,500
	(每年平均 \$174,000/p.a.)		(每年平均 \$45,250/p.a.)
		神盾產品消費	= \$20,394 + \$14,100
		Cost of Steel Shield Products	= \$34,494 (每年平均 \$17,247/p.a.)
		UPRR總成本 Total Cost of Failures	= \$124,994 (每年平均 \$62,497/p.a.)
		節省的開支 Savings to UPRR	= \$223,006 (每年平均 \$111,503/p.a.) *** 節省
		使用神盾產品的投資回報 (US\$)	= \$223,006 - \$34,494 \$34,494
(以上為美元)		Return of Investment (US\$)	Savings = 5.46 (546% 回報率)

註:以上節省的開支不包括工資、租金、停機時間或延誤 This Savings does not include man hours, rentals, downtime costs or delays.



美國太平洋鐵路神盾產品編號 UPRR PRODUCT CODE FOR STEEL SHIELD

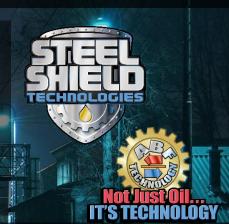
• RES-MT-16oz # 310-4437-0

RES-MT-128oz # 310-4440-0

RES-MT-5G # 310-4441-0

RES-MT-55G # 310-4444-0

RES-MT-300G # 310-4446-0



總結 SUMMARY

- 美國神盾潤滑劑能夠提高列車行駛速度、使列車到站更準時、延長零部件壽命及可靠性,及減少維修及停機時間,因為神盾 ABF 技術非靠油。它讓兩面反向互動的金屬表面產生質的優化,讓離子磁浮能量替代常態潤滑油的流體潤滑以減少金屬互相磨擦及工作溫度。
- 美國太平洋鐵路對美國神盾潤滑劑進行以年計算的長時間測試,證實神盾對所有金屬部件有正面效益, 值得信賴。
- · 美國神<mark>盾潤滑劑幫助</mark>美國聯合太平洋鐵路每年平均節省60%以上的維護成本。
- Steel Shield Products have increased train velocity, improved on-time train performance, extended parts
 life and component reliability and reduced maintenance and downtime by treating the metal surfaces to
 reduce friction, heat and wear.
- After more than 8 years of use experience shows that Steel Shield Products have had no negative or detrimental effects.





STEEL SHIELD VIDEO DEMONSTRATIONS

- Steel Shield ABF Technology How it works?
- Steel Shield ABF Technology Timken Demonstration.
- Steel Shield Technology Demo 1
- Steel Shield Technology Demo 2
- Steel Shield Tech Full Feature on Motorhead Garage
- Steel Shield Motorhead Garage Commercial







32. Letters from Union Pacific Railroad & PA Port

Authority

Joe Hendricks 6455 East Commerce Kansas City, MO 64120 MMEO Central Region

10/01/2003

Marla Carrow 6455 East Commerce Kansas City, MO 64120

RE: MT-10

Marla:

I want to update you on our progress with the MT-10 product. Sense my last report I have applied MT10 to all of my service units. We use the product in our engines, transmissions, gearboxes and hydraulic tanks thus protesting the entire systems. The product performed as expected. Our failures with these components have decreased even more. Now we are able to work on equipment from the preventative maintenance side instead of a breakdown mode.

We have had cases that I can attribute directly to MT10 and were able to save the company thousands of dollars on the spot. This product proves itself worthy over and over and should be used by all departments to get the maximum savings for the Union Pacific.

Sincerely

Joe Hendricks Manager M/W Equipment Operations CR

信內述明神盾磁浮潤滑油 在聯合太平洋鐵路公司廣 泛被使用。神盾產品已不 斷被證實為物超所值,備 受全力推薦。



Joe F. Hendricks

Mgr. M/W Equipment Operations Central Region

UNION PACIFIC RAILROAD 6455 E. Commerce Ave., Kansas City, MO 64120 ph. (816) 245-2733 c. (816) 804-6880 pgr. 4-980) 413-7243-pin 888985iftendri@up.com PORT

Mark Pushnick President Mark Pushnick Enterprises 3351 Industrial Blvd. Bethel Park. PA 15102-2543

Re: Return on Investment of MT-10 Metal Treatment

Dear Mr. Pushnick:

August 14, 2002

This letter states that they save around USD 45 in maintenance cost for every USD 1 investment in Steel Shield products. Also, the vehicles malfunctions drop to around 10%

As you are probably aware, Port Authority of Allegheny County's experiences with MT-10, has been very good. We have been using this product in the gearboxes of our light rail vehicles for approximately 8 of the last 9 years now. One year we discontinued the use of MT-10 and experienced a sharp decline in gearbox reliability and since have resumed the use of its application.

We regularly have oil analysis performed, by an independent testing laboratory and the results of the analysis have indicated that the use of MT-10 has significantly lowered the wear metals that we previously experienced prior to its use. The MT-10 has appreciably extended the service life of our existing gearboxes.

Based on the costs we were incurring prior to the use of the MT-10 product verse the costs we are currently incurring, we have realized a Return On Investment (ROI) of approximately \$45 saved for every \$1 expensed or 45:1 ratio. The most significant factor was the increase in reliability as well as availability. The vehicles were able to perform when needed and the missed trips were lowered to approximately 10% of past history.

As you are also aware, we continue to use the Power Cut (PC-10) and Power Lift (PL-10) grease with similar experiences.

Sincerely,

Mark P. Fo Manager of

Bus & Ra

If you have any questions or I can be of any further assistance, feel free to contact me at (412) 566-5149.

are nighty

信內述明每投入1美元 購買神盾磁浮潤滑油, 就使他們節省45美元維 修開支。

車輛失誤比率下降至只有原來的 10%。

The letter states that the

uses Steel Shield product

extensively. Steel Shield

has been proved to be

functional and cost-

Union Pacific Railroad

SPECIALTY PRODUCT LINES







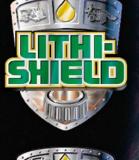


























www.steelshieldtech.com.hk www.facebook.com/steelshieldtech



INSURANCE CERTIFICATE AND CONFIRMATION OF NO INSURANCE CLAIM

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Best Insurance Agency

340 S. Main St., P.O. Box 670 Butler, PA 16003-0670 (724)283-5670 (724)283-1160Fax Email: Ray@Bestinsurancebutler.com

September 18, 2013

Steel Shield Technologies (Asia Pacific) Limited 22nd Floor, W. Business Centre 4 Kam Hong Street North Point, Hong Kong

To Whom It May Concern:

Please be advised that Steel Sheild Technologies Inc, manufacturer of specialty lubricants and greases, located in Bethel Park, Pennsylvania, USA, has had no claims, claim related incidents or notices of loss under any General Liability policy issued by our office. We have provided them with General Liability coverage continously since April 24, 2008

If you have any questions or need further information please feel free to contact me. I will be happy to be of further assistance.

Raymond A. Rosenbauer

Vice President





Guarante

MACAU GRAND PRIX AND EVENTS

61st Macau Grand Prix (2014)







Exhibition & Events





We're the CHAMPION, Let's help you make yours!!! 我們是冠軍領航者, 助你踏上冠軍路!!!

Are you READY ?你要來 嗎?



CONTACT US

Steel Shield Technologies

Company Address:

809B, 8/F., 8/F., Block B, Goodview Industral Buidling, 11 Kin Fat Street, Tuen Mun, N.T., Hong Kong.

Email: steelshieldtech@yahoo.com

Tel: +852-25458029

Fax: +852-25458030

Website: www.steelshieldtech.com.hk

Facebook: www.facebook.com/steelshieldtech





