COMPANY INTRODUCTION

INNOVATION OF STRAINER ENERIT CO.,LTD

TABLE OF CONTENTS



COPYRIGHT © ALL RIGHT RESERVED BY ENERIT

I. Company profile

1-1. Company Status 1-2. Company History 1-3. Vision

II. Business composition

2-1. Business Areas 2-2. Main Production Flange A-Type Flange B-Type Screw - Type

III. Technological competitiveness

- 3-1. Normal Strainer
- 3-2. Tornado Strainer
- 3-3. Certificate of Patent

IV. Annex

- 4-1. Improvement case
- 4-2. Main Customers
- 4-3. Reference Record

1-1. Company Status

ENERIT is specialized in development, Production and Manufacturing of Tornado-Strainer. Furthermore, we have a great conceit regarding our excellent technological skills and a great deal of patents. Especially, we acquired the patent on Tornado Strainer for the first time in the industry. That is why we are a pioneer. ENERIT has strived to make consistent progress since 2015 and we promise to grow consistently.

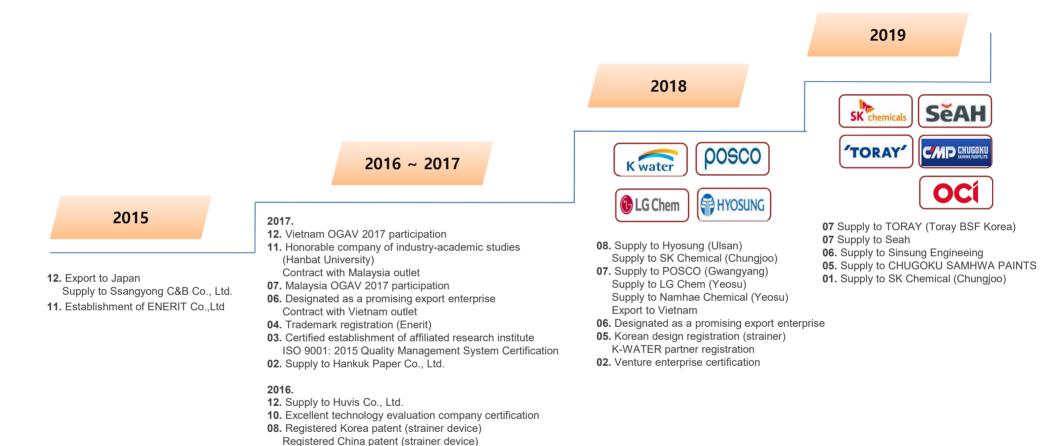
Name of Corporation	ENERIT CORPORATION
CEO	MYUNG-KI KIM
Date of Establishment	Nov. 25th, 2015
Address	#S9-305, 125, DONGSEO-DAERO, YUSEONG-GU, DAEJEON, 34158, REPUBLIC OF KOREA
Tel	+82.42.368.0600
Fax	+82.42.368.0603
E-mail	enerit@naver.com
Homepage	http://www.enerit.co.kr

"The next 100 years is a tornado strainer."

PCT international application (strainer device) **07.** Supply to Hwaseung Industries Co., Ltd.

05. Supply to Dongyang Environment Co., Ltd.04. Supply to Dongwon Paper Co., Ltd.03. Supply to Jeonju Paper Co., Ltd.

06. Supply to Asiapaper Co., Ltd.



Vision of Cordial

ENERIT will be devoted to being a company that will lead the field of plant pipe industry by creating the best quality products and fulfilling customer satisfaction with sincerity.





Tornado Strainer

- Tornado Strainer can be applied on fluid pipes that transport chemistry petrochemistry, water to protect equipment from Alien substance like sand, rust etc.
- ▲ Tornado Strainer automatically emits impurities that are flowed in as the fluid passes like tornado pattern.
- ▲ It can be used in a variety of fields including shipbuilding industry, paper industry, power plant, heating construction,
 - Water resources, and chemistry such as petrochemistry, synthetic fiber etc.

Merits

- Constant flux maintained for a long period
- Removal operation of foreign objects easy
- Productivity improved
- ▲ Filter maintained clean
- Piping management easy & convenient

Appearance

▲ Screw Type



Flange Type





2-2. Flange A-Type

▲ Style : ASME, ANSI, DIN, JIS, KS

▲ DESCRIPTION OF PARTS

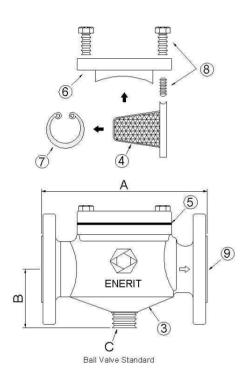
Working Fluid	A, S, W, O					
Body	Cast Iron (A126. CLB) , Carbon Steel (A216. Gr. WCB) , Stainless Steel					
Filter (Screen)	ANSI 304 , ANSI	316 , ANSI 316L				
Mesh	40 Mesh (Standard) , M20 ~ M400					
Gasket	Non asbestos , Graphite , P.T.F.E , N.B.R , E.P.D.M					
Cover	Cast Iron (A126. CLB) , Carbon Steel (A216. Gr. WCB) , Stainless Steel					
Bolt	Carbon Steel (Hexag	Carbon Steel (Hexagon) , Stainless Steel				
End Connection	KS , JIS , ASME / ANSI 10	6.5 , Flange Type (RF, FF)				
Mouling Town	Carbon Steel (A216. Gr. WCB)	Max 300℃ ~ Min -29℃				
Working Temp	Stainless Steel	Max 350°C ~ Min -29°C				

▲ MODEL

Dime	nsion	L (mm)	/ inch	H(mm)) / inch	C(mm)) / inch	PART NO,
2″	50A	228	9	81	3.2	25A	1″	E0050
21⁄2″	65A	285	11.25	92	3.6	32A	1¼″	E00065
3″	80A	305	12	106	4.2	32A	1¼″	E0080
4″	100A	360	14	114	4.5	32A	1¼″	E0100
5″	125A	406	16	127	5	40A	11⁄2″	E0125
6″	150A	480	19	143	5.6	50A	2″	E0150
8″	200A	584	23	169	6.6	50A	2″	E0200
10″	250A	650	25	201	7.9	65A	21⁄2″	E0250
12′	300A	800	31	226	8.9	65A	21⁄2″	E0300

모델명은 적용 사양 압력 및 여과망 적용 조건에 따라 변경될 수 있습니다.

Flange A - Type

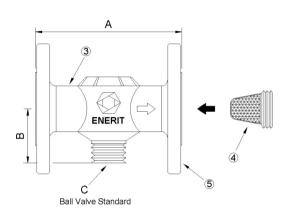




2-2. Flange B-Type



Flange B - Type



▲ DESCRIPTION OF PARTS

LOCKII HON OF FART	•					
Working Fluid	A, S, W, O					
Body	Cast Iron (A126. CLB, GC200) , Ductile Iron (A395, GC45) Carbon Steel (A216. Gr. WCB , SCPH2) , Stainless Steel					
Filter (Screen)	ANSI 304 , ANSI 316 , ANSI 316L					
Mesh	40 Mesh , 50 Mesh (Standard) , M20 ~ M400					
End Connection	KS , JIS , ASME / ANSI 16.5 , Flange Type (RF, FF)					
	Carbon Steel (A216. Gr. WCB)	Max 300°C ~ Min -29°C				
Working Temp	Stainless Steel Max 350°C ~ Min -29°C					



▲ MODEL

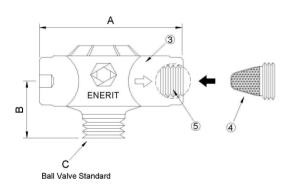
Dime	nsion	L (mm)	/ inch	H(mm)	/ inch	C(mm)	/ inch	PART NO,
3⁄4″	20A	140	5.5	51	2	20A	3⁄4″	E0020
1″	25A	160	6.3	60	2.36	25A	1″	E0025
1¼″	32A	178	7	60	2.36	25A	1″	E0032
11⁄2″	40A	195	7.7	65	2.55	25A	1″	E0040

모델명은 적용 사양 압력 및 여과망 적용 조건에 따라 변경될 수 있습니다.

2-2. Screw Type

▲ Style : ASME, ANSI, DIN, JIS, KS

Screw - Type



DES	CRIP	TION	OF	PARTS

Working Fluid	A, S, V	/, O				
Body	Cast Bronze , Cast Iron (A126. CLB, GC200) , Ductile Iron (A395, GC45) Carbon Steel (A216. Gr. WCB , SCPH2) , Stainless Steel					
Filter (Screen)	ANSI 304 , ANSI 316 , ANSI 316L					
Mesh	50 Mesh , 80 Mesh (Standard) , M20 ~ M400					
End Connection	KS , JIS , ASME / ANSI 16.	KS , JIS , ASME / ANSI 16.5 , Flange Type (RF, FF)				
M	Carbon Steel (A216. Gr. WCB)	Max 300°C ~ Min -29°C				
Working Temp	Stainless Steel	Max 350°C ~ Min -29°C				



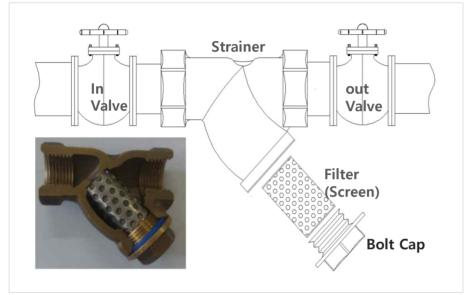
▲ MODEL

Dime	nsion	L (mm)	/ inch	H(mm) / inch	C(mm)	/ inch	PART NO,
1/2″	15A	68	2.67	40	1.57	15A	1⁄2″	E00015
3⁄4″	20A	82	3.2	51	2	20A	3⁄4″	E0020
1″	25A	104	4.1	60	2.36	25A	1″	E0025
1¼″	32A	138	5.43	60	2.36	25A	1″	E0032
11⁄2″	40A	150	5.9	65	2.55	25A	1″	E0040
2	50A	178	7	81	3.15	25A	1″	E0050

모델명은 적용 사양 압력 및 여과망 적용 조건에 따라 변경될 수 있습니다.

3-1. Normal Strainer

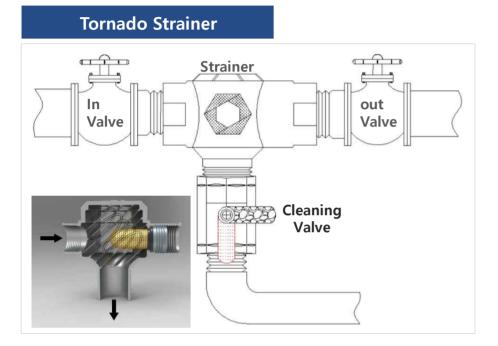
Normal Strainer



- <Cleaning process of Y-Strainer>
- \rightarrow Close in valve and out valve
- \rightarrow Disassemble bolt cap and filter net
- \rightarrow Clean the filter net
- \rightarrow Reassemble cap of bolt and filter net
- \rightarrow Make the invalve and out valve on
- \rightarrow Put fluid material and resume the work

- Y-shaped filter net is installed in body of Strainer. fluid flows from inside filter net and outside filter net after cleaning
 - ⇒ Foreign Substances are stacked inside filter net
 - ⇒ Decrease of flow rate
- In order to remove the foreign substances in the filter net, operators often(generally 1/week) disassemble the filter net and clean it by manual.
 - ⇒ Stop the line during cleaning
- * Not automatic cleaning system, impossible for smart line
 - Difficult for work management
 - Decrease of productivity
 - Increase of labor costs

3-2. Tornado Strainer



<Cleaning process of Tornado-Strainer> Turn on and off the cleaning valve for 3~5 secs (In valve and out valve are on open)

- Filter net is installed on fluid pipe in a straight line and fluid passes filter net with tornado.
 - ⇒ Foreign substances floats Following the tornado continuously
 - ⇒ Minimized accumulation of filter net
 - ⇒ Steady fluid power

In order to remove the substances from filter net, just open the cleaning valve without shutting down the fluid pipe.

- ⇒ Easy to manage fluid pipe and no delay for production
- Suitable for smart line with automatic valve
 - Easy for work management
 - Increase of productivity
 - Decrease of labor costs

KOREA







PCT (Patent Cooperation Treaty)

수선: 김생의			PCT
대한민국 25209 대전시 서구 오퍼스테 1309년	2002 13, 72	-74	출원인호 및 국제출원일 통지시 (PCT 규칙 28-2(c))
		발송일 (알류(6 20)	eti 08% 24% (24.08.2016)
출원인 또는 대라인의 서류권조 SIQUE#2010WO	71.11.		营요풍지사망
국제품원번호 PCT/KR2016/009244	국제출원일(일)월1 2016년 08월 22일		우선영(의상선) 2016년 03월 09월 (09.03.2016)
출권인 주목회사 얘니라드			
국제 충부되었습니다	*) 비행요한 하가할 얻지:	▶루티지 않았요¤	묘 국제사학국에 출부되었습니다. 4.이 후께시의 사본은 국제사무
 국제시부국은 수회본담대 의문 (서북 KTREME), 국제사무국 패레는 응답인해 제 이를 통제함 	- 우리인부터 너무히 정도	1월 패러지 기독원:	유민인에게 특지했니다. 은 수가에서 같은 편하다
· 위관 월생성 및 주민주소 대한민국 학학권 (3508) 대답관에서 사구 정부대권공사	명사)로 189.	파이성장	

4-1. Improvement case



Chemicals Line



Chemicals Line



Water Line



Steam Line



4-3. Reference Record

Years	Customer	Model (size)	Applications Line	Country	Remarks
2015	SsangYong C&B	¹ /2", ³ /4", 1", 1- ¹ /2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
2016	JEONJU PAPER	¹ /2", ³ /4", 1", 1- ¹ /2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	SsangYong C&B	¹ /2", ³ /4", 1", 1- ¹ /2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	MONALISA	¹ /2", ³ /4", 1", 1- ¹ /2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	ASIA PAPER	1/2", 3/4" , 1", 1-1/2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	Hankuk Paper	1⁄2", 3⁄4", 1", 1-1⁄2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	Danhan Paper	1/2", 3/4" , 1", 1-1/2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	MOORIM P&P	¹ /2", ³ /4", 1", 1- ¹ /2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	PAPER COREA	¹ /2", ³ /4", 1", 1- ¹ /2"	Steam, Water, Chemical	KOREA	Paper / Chemistry
	DONGYANG ENVIRONMENT	¹ /2", ³ /4", 1", 1- ¹ /2"	Chemical	KOREA	Cogeneration
	DONGWON Paper	1/2", 3/4", 1", 1-1/2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	HWASEUNG Industries	¹ /2", ³ /4", 1", 1- ¹ /2"	Steam, Water, Chemical	KOREA	Chemistry
2017	Hankuk Paper	1⁄2", 3⁄4", 1", 1-1⁄2", 2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	JEONJU PAPER	1⁄2", 3⁄4", 1", 1-1⁄2", 2"	Water, Steam, Chemical	KOREA	Paper / Chemistry
	Huvis (SK Chemicals)	1⁄2", 3⁄4" , 1", 1-1⁄2" , 2"	Water, Chemical	KOREA	Chemistry
	Samyang Corp	1/2", 3/4" , 1", 1-1/2" , 2"	Water, Chemical	KOREA	Chemistry
	Hankook Tire	1/2", 3/4" , 1", 1-1/2"	Steam, Water	KOREA	Chemistry
	MONALISA	1/2", 3/4", 1", 1-1/2"	Steam, Chemical	KOREA	Paper / Chemistry

4-3. Reference Record

Years	Customer	Model (size)	Applications Line	Country	Remarks
2017	Danhan Paper	1⁄2", 3⁄4" , 1", 1-1⁄2"	Water, Chemical	KOREA	Paper / Chemistry
	DONGYANG ENVIRONMENT	1⁄2", 3⁄4" , 1", 1-1⁄2"	Chemical	KOREA	Cogeneration
	DONGWON Paper	1⁄2", 3⁄4", 1", 1-1⁄2"	Water, Chemical	KOREA	Paper / Chemistry
	SsangYong C&B	1⁄2", 3⁄4" , 1", 1-1⁄2"	Steam, Chemical	KOREA	Paper / Chemistry
	ASIA PAPER	1⁄2", 3⁄4" , 1", 1-1⁄2"	Steam, Chemical	KOREA	Paper / Chemistry
	PAPER COREA	1⁄2", 3⁄4" , 1", 1-1⁄2"	Steam, Water, Chemical	KOREA	Paper / Chemistry
	HWASEUNG Industries	1⁄2", 3⁄4" , 1", 1-1⁄2"	Steam, Water, Chemical	KOREA	Chemistry
	MOORIM P&P	¹ /2", ³ /4", 1", 1- ¹ /2"	Water, Chemical	KOREA	Paper / Chemistry
2018~2019	NAMHAE CHEMICAL	1" , 2"	Steam, Water, Chemical	KOREA	Petro / Chemistry
	HYOSUNG CHEMICAL	$^{1\!/_{2}''},^{3\!/_{4}''}$, $1'',1^{-1\!/_{2}''}$, $2''$, $3''$	Water, Chemical	KOREA	Chemistry
	SK Chemicals	$^{1\!\!/_2''},^{3\!\!/_4''}$, 1", 1- $^{1\!\!/_2''}$, 2" , 4"	Water, Chemical	KOREA	Pharm / Chemistry
	Hankuk Paper	1⁄2", 3⁄4" , 1", 1-1⁄2" , 2"	Steam, Water, Chemical	KOREA	Paper / Chemistry
	POSCO	1" , 2" , 3" , 4" , 8"	Water, Chemical	KOREA	Steel
	LG Chem	$^{1\!\!/_2''},^{3\!\!/_4''}$, 1", 1- $^{1\!\!/_2''}$, 2" , 3"	Water, Chemical	KOREA	Chemistry
	Huvis (SK Chemicals)	1⁄2", 3⁄4", 1", 1-1⁄2"	Water, Chemical	KOREA	Chemistry
	K-WATER	1", 2"	Water		Water
	QMTechnology	1", 2"	Steam, Water, Chemical	VIETNAM	Local Agent
	Chugoku samhwa paints	2"		KOREA	Chemistry
	HALLYM UNIVERSITY MEDICAL CENTER	6″	Water	KOREA	MEDICAL CENTER
	SHINSUNG ENGINEERING	6″	Water	KOREA	
	TORAY (Toray BSF Korea)	1-1⁄2", 2"	Water, Chemical	KOREA	Chemistry



COMPANY INTRODUCTION

TORANDO STRAINER

www.enerit.co.kr

305ho, S9-dong, 125, Dongseo-daero, Yuseong-gu, Daejeon, 34158, Republic Of Korea TEL. +82-42-368-0600 FAX. +82-42-368-0603 E-Mail. enerit@naver.com

