

The Leader of Safety Equipment

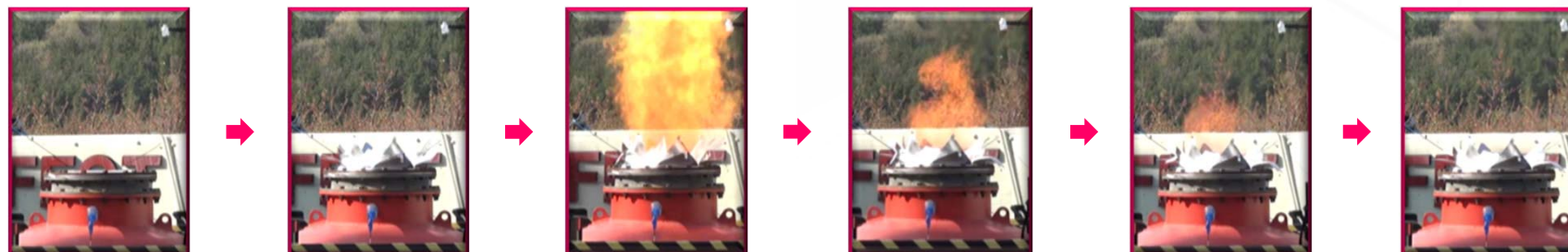


FDC Co., Ltd.

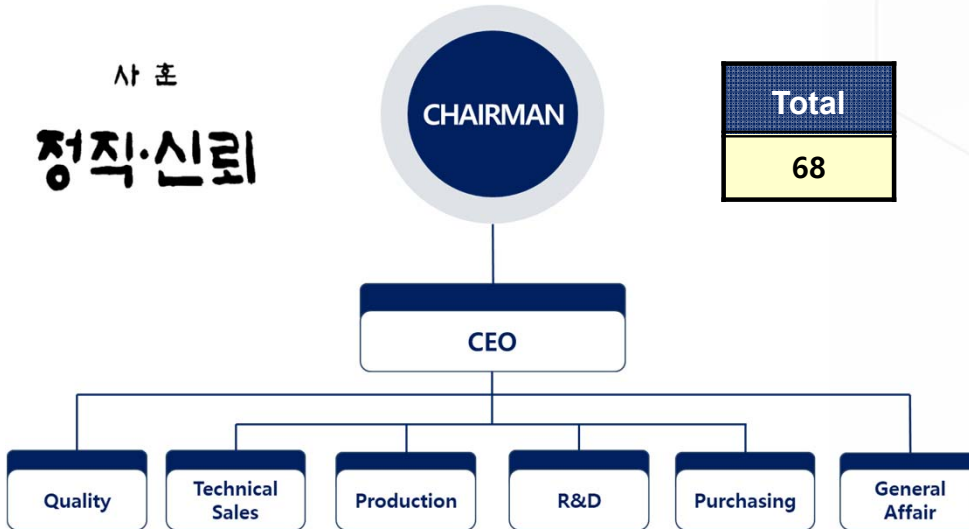
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1. INTRODUCTION



COMPANY NAME

FDC Co., Ltd.

PRESIDENT

HA-WON, YUNE
JONG-WON, LEE

ESTABLISHED DATE

MARCH. 1991

BUSINESS REGISTRATION NUMBER

615-81-65518

CONTACTS

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MAIN OFFICE & 1st FACTORY



129, Golden root-ro
129beon-gil,
Juchon-myeon, Gimhae-si,
Gyeongsangnam-do, Korea.

R&D CENTER & 2nd FACTORY



99, Seobu-ro 1293beon-gil,
Juchon-myeon, Gimhae-si,
Gyeongsangnam-do, Korea.

2. HISTORY



1991 ~ 2010

Preparation

- 1991** Established as KSPC(Rupture Disc Part)
- 1999** Fine Disc was split off as the company of related in Rupture Disc
- 2002** Acquired ISO 9001
- 2008** Converted into an incorporation
- 2009** Developed the Size Calculation Program for Rupture Disc
- 2010** Company name was changed to FDC Co., Ltd. Established Corporate R&D Center



2011 ~ 2020

Development

- 2011** Acquired CE (Module B+D)
Acquired GOST(Russia)
- 2012** Registered for a Korea Hydro & Nuclear Power Co., Ltd.(Class : A137)
- 2013** Acquired ISO 14001
Acquired OSHAS 18001
Acquired CE ATEX & IEC-Ex
- 2014** Acquired CSEL(China)
- 2015** Acquired TR-CU(Russia)
- 2016** Acquired ASME UD
Acquired NBBI
Acquired KOSHA(PSV)
- 2017** Registered for a Korea Hydro & Nuclear Power Co., Ltd.(Class : Q137)
- 2020** Acquired CE ATEX (Explosion Panel)
Awarded the 'Promising Small and Medium Enterprise in Export'



2021 ~

Jump

- 2021** Acquired CE(Module H)
Selected as an excellent ESG company
- 2022** The head office and the 1st factory were moved. (Golden root - general industrial complex)
- 2023** Selected as a youth-friendly small but strong company

3. STATUS OF TECHNOLOGY

Intellectual Property Rights			
TRADE MARK (Registration: 1 / Application: 2)	DESIGN (Registration: 12)	PATENT (Registration: 32 / Application: 15)	PROGRAM (Registration: 3)

Quality Certificate				
ISO 9001/14001/45001	ASME UD STAMP	NBBI STAMP	KOSHA Safety Cert' (96 Type)	CE (MODULE D/H)
ATEX	IEC-Ex	TR-CU	CSEL	IATF 16949

3. STATUS OF TECHNOLOGY

Research & Development(1)





	<p>N2 BLANKETING SYSTEM (MODEL:KSBKT) Development completed Oct. 2002</p>		<p>ULTRA LOW PRESSURE RUPTURE DISC Development completed Jan. 2003</p>
	<p>SCORED TYPE RUPTURE DISC (MODEL : KSRS) Development completed July. 2004</p>		<p>DOUBLE ACTION TYPE RUPTURE DISC (MODEL: KSROD) Development completed Oct. 2007</p>
	<p>REVERSE BUCKLING TYPE LOW PRESSURE RUPTURE DISC (MODEL: KSRR-LP) Development completed Nov. 2007</p>		<p>BURSTING TEST SYSTEM Development completed Nov. 2008</p>
	<p>HIGH CLEANING ROOM Completion Mar. 2009</p>		<p>RUPTURE DISC FOR MULTIPLE PULSE Development completed Dec. 2010</p>
	<p>INFLATOR FOR ADVANCED AIR BAG (RUPTURE DISC) Development Schedule Jul. 2010 ~ Jun. 2013</p>		<p>RUPTURE DISC FOR WEAPONS Development completed Nov. 2011</p>
	<p>RUPTURE DISC FOR MIXING FULE Development completed Nov. 2011</p>		<p>RUPTURE DISC FOR ROCKET MOTOR Development completed Sep. 2012</p>

3. STATUS OF TECHNOLOGY

Research & Development(2)

	<p>RUPTURE DISC FOR MULTIPLE ROCKET MOTOR Development completed Jan. 2013</p>		<p>RUPTURE DISC FOR AUTOIGNITOR Development completed Nov. 2011 ~ Mar. 2013</p>
	<p>RUPTURE DISC FOR PYROSTAT Development completed Apr. 2013</p>		<p>LARGE SIZE RUPTURE DISC KSRBK MODEL Development completed Nov. 2011 ~ Mar. 2013</p>
	<p>Bursting Discs for Semiconductor Process Equipment(RUPTURE DISC) Development Schedule Jul. 2014 ~ Jun. 2016</p>		<p>Safety valve for semiconductor process equipment(SAFETY VALVE) (8A~50A) Development Schedule Jul. 2016~ Dec. 2022</p>
	<p>Flameless Explosion Venting for Inflammable Gas(KSEVP) Development Schedule Apr. 2017~ Dec. 2019</p>		<p>Fast Opening Valve(FOV VALVE) Development Schedule Apr. 2017~ Dec. 2020</p>
	<p>ESS explosion and venting safety device technology and product development for eco-friendly new and renewable energy (EVA-W) Development Schedule Apr. 2020~ Dec. 2022</p>		<p>Bursting disc fusion safety valve for semiconductor process equipment (KSSVI) Development Schedule Apr. 2020~ Dec. 2022</p>
	<p>Daegu Line 3 train fire suppression system parts(Burst disk) and fire suppression device prototype development Development Schedule Sep. 2020~ Dec. 2022</p>		<p>25.8kV GIS/EGIS pressure relief valve standard model development and fire extinguishing device development Jul. 2017 ~ Dec. 2022</p>

4. MAIN PRODUCTS

Main Products							
PRODUCTS	IMAGE	CAPACITY	MODEL	MFG. SIZE	BURST. PRESS.	RANGE	REMARK
RUPTURE DISC		3,000 EA/M	KSRR(L)	1/2" ~ 48"	0.1 ~ 150kgf/cm ²	±3/5/10%	- USE WITH HOLDER - ULTRA LOW PRESSURE
			KSRRK	1/2" ~ 24"	0.35 ~ 20kgf/cm ²	±3/5/10%	- USE WITH HOLDER
			KSRC	1/2" ~ 56"	0.05 ~ 150kgf/cm ²	±3/5/10%	- USE WITH HOLDER
			KSRRC	1/2" ~ 56"	0.05 ~ 150kgf/cm ²	±3/5/10%	- NON HOLDER
			KSRRCH	1/2" ~ 56"	0.05 ~ 150kgf/cm ²	±3/5/10%	- USE WITH HOLDER
			KSRO	1" ~ 72"	0.05 ~ 35kgf/cm ²	±3/5/10%	- HOLDER OPTION
			KSRO(L)	4" ~ 32"	0.01 ~ 0.15kgf/cm ² (100 ~ 1500mmAq)	±5/10%	- NON HOLDER - ULTRA LOW PRESSURE
			KSRBK	1/2" ~ 36"	0.8 ~ 150kgf/cm ²	±3/5/10%	- USE WITH HOLDER
			KSRSF	1/2" ~ 12"	5 ~ 700kgf/cm ²	±3/5/10%	- USE WITH HOLDER
KSRSR	1/2" ~ 32"	5 ~ 50kgf/cm ²	±3/5/10%	- USE WITH HOLDER			
EXPLOSION PANEL		500 EA/M	KSRPR	Up to 1,500 X 2,000 Or Φ3,600	0.01 ~ 0.5kgf/cm ²	±5/10/20%	- NON HOLDER
			KSRPS				
N2 BLANKETING SYSTEM		50 SETS/M	KSBKL	1/2" ~ 2"	12.5 ~ 10,000mmAq	-10%	- ORIFICE TYPE
			KSBKT	1/2" ~ 2"	20 ~ 10,000mmAq	-10%	- LARGE VOLUME TYPE
EMERGENCY RELIEF HATCH		30 SETS/M	KSRH	36"	0.1 ~ 0.5barg	±10%	- RUPTURE ROD TYPE

5. STATUS OF FACILITIES

Desing Tool

TOOL NAME	SPECIFICATION	Q'TY	TOOL NAME	SPECIFICATION	Q'TY
CAD	VER. 2007~2022	27 COPY	FRS(RUPTURE DISC SIZING)	SPECIAL(FDC PATENT)	10 COPY
2D DRAFTING TOOL	NX MACH POWER DRAF.	1COPY	FES(EXPLOSION PANEL SIZING)	SPECIAL(FDC PATENT)	10 COPY
ANALISYS TOOL	NX NASTRAN-SIMENSE	1 COPY	3D CAD-MODELING TOOL	UG NX MACH3-SIMENSE	3 COPY

Manufacturing Equipment(SMART FACTORY-MES)

EQUIPMENT NAME	SPECIFICATION	Q'TY	EQUIPMENT NAME	SPECIFICATION	Q'TY
HYDRAULIC MACHINE	3TON / 7.5TON	2(EACH 1)	COMPRESSOR	350/150/10 kgf/cm ²	7
HYDRAULIC MACHINE	50TON / 60TON	2(EACH 1)	FORK LIFTER	1 TON	2
HYDRAULIC MACHINE	150TON/200TON	2	OVER HEAD CRANE	2.8TON	2
HYDRAULIC MACHINE	300TON / 500TON	2(EACH 1)	LASER WELDING MACHINE	200W PULS LASER	2
HEATING FURNACE	AMB ~ 600°C	6	LASER MACHINE	FIBER LASER	4
FREEZING CHAMBER	0 ~ -120	1	CNC	L300C/12"	4
TIG WELDING M/C	150NPS	2	MCT	VX460/8,000RPM	2
ARC WELDING M/C	IEW-180	2	MCT FOR HIGH SPEED MACHINING	NANO-653H/30,000RPM	1
SPOT WELDING M/C	N/A	3	WIRE CUTTING MACHINE	AG600L/0.01	3
LATHE	Φ500X2000L etc.	3	SUPER DRILL	NSD600/00.8~3	2
BENCH DRILLING M/C	SMD-360	2	LASER CUTTING M/C	TRUMPF/300W	1
HYDRAULIC BOOSTER	1,500kgf/cm ² / 2,100kgf/cm ²	2(EACH 1)	VENTING DEVICE LINE	240SETS/DAY	1

5. STATUS OF FACILITIES

Inspection Equipment

TOOL NAME	SPECIFICATION	Q'TY	MAKER	TOOL NAME	SPECIFICATION	Q'TY	MAKER
BURSTING TEST SYSTEM	0~700.0kgf/cm ²	3	FDC	HIGH PRESSURE TESTER	300~2000kgf/cm ²	1	FDC
HIGH SPEED BURST TEST SYSTEM	0 ~ 5000psig	1	FDC	N2 BLANKET SETTING SYSTEM	N/A	1	FDC
HIGH PRESSURE BURST TEST SYSTEM	MAX 1500BARG	1	FDC	ACTUAL TEMP. BURST TEST SYSTEM	-196°C ~ 650°C	2	FDC
HYDRAULIC BURST TEST JIG	MAX 2100BARG	1	FDC	PORTABLE BURST TEST EQUIPMENT	0~8.0kgf/cm ²	1	FDC
PSV POPPING TEST SYSTEM	SPECIAL	2	FDC	PULSATION CYCLE TESTER	0 ~ 200bar.abs	1	FDC
ACCUMULATOR TESTER	SPECIAL	1	FDC	PRESSURE GAUGE & JIG	0~100kgf/cm ² etc.	5	WOOJIN/FDC
VMS (VISION MEASUREMENT)	300X200X200	1	HEXAGON	WITHSTAND VOLTAGE TESTER	ST-3353D	1	SEC
3D MEASURING MACHINE	640X600X500	1	ABERLINK	ULTRA SONIC THK. METER	0-150mm	1	DEFELSKO
MICRO METER	0~25mm etc.	5	MITUTOYO	HARDNESS METER	AR936	1	SMART SEN.
SURFACE ROUGHNESS TESTER	-200μm/+160μm	1	MITUTOYO	UV LIGHT (BLACK LIGHT M/C)	220V/S-100	1	TOWOO TECH.
PRESSURE SENSOR	0~2barg etc.	15	DRUCK etc.	HELIUM LEAK TESTER	0.35L/sec etc.	2	ADIXEN etc.
TORQUE WRENCH	196.13N·m etc.	9	KANON etc.	VERNIER CALIPERS	0~150mm etc.	16	MITUTOYO
DIAL GAUGE	12.7mm	1	MITUTOYO	PLUG GAUGE	M55XP1.5 etc.	10	MIKRON
SCREW GAUGE	7/16-20 UNF etc.	8	JPG	HEIGHT GAUGE	0~300mm	2	MITUTOYO
STONE SURFACE PLATE	1500X1000 etc.	3	MIKRO etc.	INFRARED THERMOMETER	JT-650C	1	BLUE BIRD
MICROSCOPE	SZ51	1	OLYMPUS	ELECTRONIC SCALES	MWP-600	2	CAS
SPRING TESTER	SPECIAL	1	TIME	PMI	ALLOY-DC2000	1	INNOV-X SYS'

6. MAJOR CUSTOMERS

Global Networks



6. MAJOR CUSTOMERS

Major Customers(Domestic)

EPC Plant



Petro Chemical



Bio



Defense Ind.



Semi conductor



Chemical



Ship building



Electricity Power plant



6. MAJOR CUSTOMERS

Vendor Registered List(Oversea)

Europe



America



Africa



Asia



Middle East



Middle East



7. AGENCIES

Agent(Domestic)



- **Seoul Agent – Fine**
- Location : F441, 16, Misagangbyeonseo-ro, Hanam-si, Gyeonggi-do, Republic of Korea
- TEL : 82-(0)31-8028-0003 / ● FAX : 82-(0)31-8028-0006 / ● E-Mail : fine2050@naver.com



- **Honam Agent – Power tech**
- Location : 8, Hwasan 3-gil, Yeosu-si, Jeollanam-do, Republic of Korea
- TEL : 82-(0)61-691-9223 / ● FAX : 82-(0)61-91-9224 / ● E-Mail : power5950@hanmail.net



- **Joongbu Agent – Jun Plant**
- Location : 13-5, Muran 1-ro, Daesan-eup, Seosan-si, Chungcheongnam-do, Republic of Korea
- TEL : 82-(0)42-541-8988 / ● FAX : 82-(0)42-367-8989 / ● E-Mail : jhkim@junplant.com



- **Daegu Agent – Doldam E&T**
- Location : 16, Yutongdanji-ro, Buk-gu, Daegu, Republic of Korea
- TEL : 82-(0)53-604-1400 / ● FAX : 82-(0)53-604-1405 / ● E-Mail : byun3860@naver.com



- **Ulsan Agent – Korea protech**
- Location : F501, 24, Galbat-ro, Nam-gu, Ulsan, Republic of Korea
- TEL : 82-(0)52-267-9002 / ● FAX : 82-(0)52-267-9005 / ● E-Mail : kopro@kopro.co.kr

7. AGENCIES

Agent(Oversea)



- **U.A.E Agent – Gulf Commercial Group Engineer-ing Services**
- Location : Abu Dhabi-Tourist Club Area-Makeen Tower- Suite 1901 (Agent) P.O. Box: 43044 Abu Dhabi, United Arab Emirates.
- TEL : TEL : +971-4-2384440 / ● Web site : www.ids-energy.com



- **Kuwait Agent – Arabi Enertech K.S.C**
- Location : P.O.Box 9831, Ahmadi, 61009, Kuwait
- TEL : +965-2-3986083 / ● Web site : www.arabienertech.com



- **Iran Agent – Damoon Co.**
- Location : Unit3, No6, Soroush Alley Mozafar St, Taleghani St, Tehran, Iran
- TEL : +98-21-860 37 157 / ● Web site : www.rupturedisc.ir



- **Australia Agent – CMC Technologies Pty Ltd**
- Location : Unit 19, 77 Bourke Road Alexandria NSW 2015 Australia
- TEL : +61-2-9669-4000 / ● Web site : www.cmctechnologies.net.au



- **Taiwan Agent – FELCA Int`l Corp**
- Location : No.120-1, Niasong 3rd. street, Yongkang District, Tainan city 71042,Taiwan
- TEL : +88662423111 / ● Web site : www.felca.com.tw