2012順德工業
企業社會責任報告書

順德工業企業社會責任報告書簡介 Table of Contents

1.公司治理

1.1 公司簡介

順德工業從民國1953年創立至今已經60年，對每一個順德人來說，「誠信、穩健、挑戰、創新」不僅是公司最高的經營指導原則，更是落實在各項業務的執行和個人的工作態度上；也唯有堅持這股信念，所有員工才能和順德一起茁壯、成長，從基礎建設到不斷拓展發揮實力，為公司、也為自己，打造一則又一則光榮的傳說。

有感於未來自由化，國際化的世界潮流，順德於1988年起逐步展開與國際著名廠商合作，轉投資多家關係企業，進行上、下游重直整合及擴展國際行銷，以提升SDI產品在國際間的競爭力。未來，順德希望能更積極邁向跨國性企業、建立永續經營的基石，將SDI品牌推上世界亮眼的舞台。

1. 電子類股票上市公司。**(股票代號：2351)**
2. 全國半導體導線架第一大廠
3. 全國製造業前五百大企業
4. 全國金屬五金製造業第一大廠
5. ISO 9001、 ISO/TS 16949、ISO 14001及OHSAS 18001等管理系統。
6. 89年即導入甲骨文(ORACLE)企業資源規劃(ERP)系統。
7. 自行開發及製造高精密度、高品質之精密連續沖模，在台灣模具界具有領導地位。
8. 具有悠久歷史之「SDI手牌」文具產品，市場佔有率高，品質深受認同與肯定，近年來，並以自創品牌SDI行銷全世界，領導國內文具用品市場。
9. 擁有完整之研發體系，使用HP之工作站及世界級之CAD/CAM軟體系統(UG Ⅱ與Auto CAD)。擁有世界先進之各種加工設備及檢驗儀器：如瑞士、日本、德國、美國等之線切割機及放電加工、精密高速沖床、超精密三次元量床、非接觸式三次元測 量儀、治具研磨機、臥式綜合切削中心機、光學投影磨床、超精密平面磨床等等。

1.2 企業營運

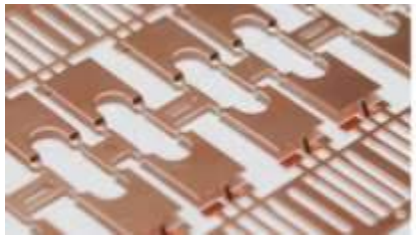
1. SDI 每年獲利都有成長，2012年EPS更比2011年成長近一倍。

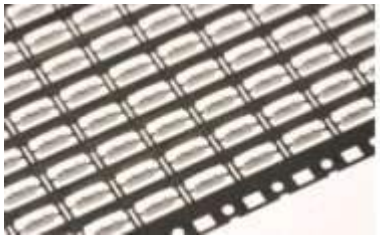
	2011年	2012年
營業額	NTD 78.4 億元	NTD 68.5億元
營業毛利	5.77 %	9.19 %
稅後淨利	NTD 1.47 億元	NTD 2.78 億
稅後EPS	0.83元	1.56 元

2. 順德的經營觸角已由台灣延伸全世界，擠身國際舞台，未來順德會加倍努力，型塑企業競爭優勢，創造最大價值，為人們打造更美好的生活。

1.3 市場定位

順德為全球前十大power lead frame的製造商，生產零件廣範應用於LED，醫療器材，消費者產品，無線通訊系統，與車用電子產品上，並以”精密工業的解決者”來為客戶服務。

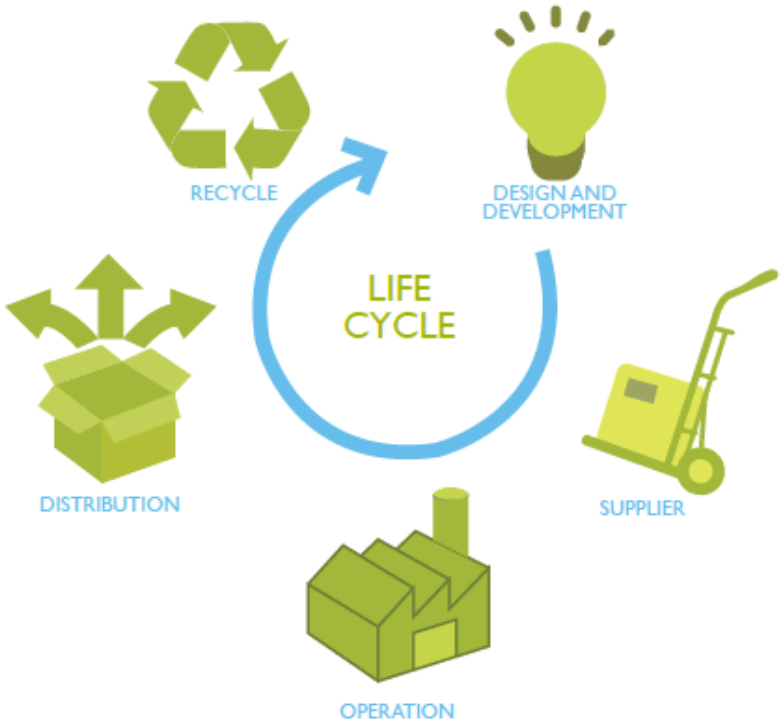




2. SDI產品設計責任

2.1 設計理念

人類進入21世紀後，人口數量與生活品質逐漸提昇，不僅快速消耗自然界資源，也造成環境污染與氣候劇烈變遷，現今產品設計責任的趨勢是對環境友善，在產品生命週期的整個過程中，從原物料的使用、製造到產品的經銷、使用與廢棄處理，都需要在設計階段就有具體規劃，以確保後續執行時能減少或降低對環境的負擔。



■產品生命週期(網路擷取圖片)

2.2 設計環保概念

SDI所生產的文具，主要加工原料為金屬與塑膠，在製造過程中會需耗費人力、電力與水資源，因此對於產品的組裝與生產效能要求，在設計上需符合ISO9001品質管理系統，將不良率與耗能量降到最低，而產品到了消費者手上，為了延長產品使用壽命，近年SDI在產品設計發展上，朝向可替換耗材的環保訴求，例如可替換式的筆削、電削、刀具與修正帶、自動橡皮擦等，不僅讓消費者實踐節能環保的生活，同時產品的花費上也更經濟，漸漸影響台灣、香港、新加坡與歐洲一些國家對文具的消費習性，激勵我們持續發展環保文具的動機與企圖心。

■SDI可替換耗材的產品

2.3 符合環保要求

對於產品製造者而言，掌握環境現有與即將立的法規是很重要的，攸關產品未來可銷售的國家與貿易組織，SDI在產品設計層面上，符合多項國際認證，例如限制有害物質的產生（RoHS、REACH），以及電動文具的使用（CE）與回收（WEEE、電池、包裝），未來擬將導入歐盟正在協議中的生態設計（ERP、IPP）等，讓大眾信任SDI在環境維護與使用者安全方面的努力，相信SDI始終在朝永續經營的理念前進，建立良好的國際企業形象。

■SDI產品申請國際認證

2.4 符合RoHS/IECQ QC080000有害物質管理系統

1. 隨著全球各國之RoHS以及化學物質管理相關法規的陸續生效，電子電氣產品全面禁止或限制使用危害化學物質已成不可避免的趨勢。其中RoHS危害物質限制指令，禁(限)用物質包括：鉛(Pb)、汞(Hg) 、鎘(Cd) 、六價鉻(Cr6+) 、多溴聯苯(PBB) 、多溴聯苯醚(PBDE)，以及WEEE廢電機電子設備回收指令更直接衝擊全球的供應鍊。企業除了面臨傳統製程轉換的壓力，更需確保產品的符合性，因此，本公司除了對法規進行分析解讀，掌握客戶需求的發展趨勢，也積極從設計、製造 、檢測及供應鏈管理等諸多方面採取有效的應對措施，確保符合綠色環保規範之要求。

2. 順德公司考量符合法規、法令、客戶需求及降低RoHS因應風險，建構IECQ QC080000 HSPM有害物質流程管理系統，藉由 QC080000管理系統有效運作，證明公司善盡管理責任，免除產品額外檢測與罰款。電子事業群更進一步於2009年7月27日通過UL公司評鑑，獲得IECQ HSPM (QC080000)認證。證明我們有效地執行有害物質流程管理，並且符合相關法規及客戶綠色環保產品要求。

3.環境保護

3.1 環境保護訴求

1. 隨著科技的進步，經濟的發展，地球上有限的自然資源與生態環境受到過度開發，使用及產生廢棄物，造成整個唯一人類生存空間的地球遭受前所未有的衝擊與損害，而達到不可復原之窘境。在此危機潛伏之下，世界各國已深切地體認如今若不採取行動保護環境資源的話，再也不能讓後代人類同享受到“青山綠水”的星球。因而，國際間於共識下紛紛簽訂公約，發表宣言喚醒世界人類一同致力“地球村”的環境與資源的保護及改善，以確保並提昇人類的生活品質。為此在舊有環境管理體系已不符實際需要，而改以著重企業自發性、整體性、預防性、系統性及符合國際標準之環境管理模式，方得達到全面環境品質之管理要要。
2. 順德公司秉持上述理念，配合政府環保政策竭盡法律責任與社會義務，期望藉由落實環境管理，創造優良工作環境，保護員工身心健康及安全，除了追求『顧客至上，品質優先，做好品質，人人有責』的品質政策之外，更能樹立環保品質的造成環境管理政策『惜源減廢，持續改善』。在此堅定理念下，特推動實施ISO-14001之環境管理系統。
3. 順德公司已於2004年取得環境管理系統(ISO-14001)，並且定期進行內部稽核及委請英國標準協會(BSI)進行外部稽核(每年定期舉辦環境安全各項演習活動)，督導全公司之環境安全。

■環境管理系統驗證合格證書

4. 制定環境政策時考量了下列觀點：
   a. 企業之作業活動，產品及服務的性質，規模及環境衝擊是否合宜的。
   b. 對持續改善和污染預防之承諾。
   c. 符合相關的環保法令規章以及與企業組織簽署之其他環境考量面要求事項之承諾。
   d. 提供一架構以設定環境目標與標的。
   e. 己文件化，並實施，維持。
   f. 被傳達與溝通給企業組織所有的聘雇員工或其代表者。
   g. 可向社會大眾及利害關係者公開。
   h. 環境政策、計劃之擬訂，應邀集產業工會代表參與諮詢，以取得配合執行環境政策相關活動之承諾。

5. 環境政策

a. 各項環境管理作業符合乎政府環保法令規章。
b. 執行各項減廢及防治污染工作，以達污染預防之目的。
c. 積極推展節約能源及落實資源回收活動。
d. 加強員工環境教育，創造無污染之工作環境。
e. 以矯正和預防措施，使各項環境管理作業持續改善。
f. 對外宣導環境政策，與社會大眾共同維護環境。
g. 落實企業社會責任，結合上、下游廠商推廣綠色環保採購與生活消費，響應愛護地球活動。
h. 環境方針：遵守法規、污染預防、提高效能、持續改善。

5. 順德公司並依其環境政策，推動各項改善方案，並每年定期舉行ISO 14001 環境管理系統管理審查會議，檢討環境政策及各項改善方案。至2012年止，已提出168件環境管路方案，已完成144年，24件持續執行改善中。

■ISO 14001
環境管理系統管理審查會議

■推動過的環境政策目標及標的案例表

政　策	目　標	標　的	管理方案
1. 各項環境管理作業符合政府環保法令規章。 2. 執行各項減廢及防治污染工作，以達污染預防之目的。 3. 積極推展節約能源及資源回收活動。 4. 加強員工環境教育，創造無污染之工作環境。 5. 以矯正和預防措施，使各項環境管理作業持續改善。 6. 對外宣導環境政策，與社會大眾共同維護環境。	一、確實遵行環保法規要求	1. 於2003年12月底完成規劃設置廢棄物貯存場	1. 改善廢棄物貯存場所設施工程
		2. 於2004年2月底前完成申請合法地下水水權	2. 申取合法地下水權方案
		3. 於2003年12月完成地下水過濾池反洗設備排水改善方案	3. 地下水過濾池增設排水沈澱池改善方案
		4. 於2003年12月完成排氣洗滌塔排水沈澱槽改善方案	4. 排氣洗滌塔排水反洗沈澱池改善方案
		5. 於2003年12月完成周界檢測方案	5. 周界噪音檢測管理方案
	二、落實廢棄物管理	6. 於2003年12月完成設置資源回收箱，於2004年度減少一般廢棄物/單位產品：5%	6. 廢棄物減量回收管理方案
		7. 於2003年12月底完成油品貯存區防溢體工程	7. 油品貯存區防溢體改善方案
		8. 於2004年2月完成廢鐵收集槽改良	8. 廢鐵(附產品)收集槽改善方案
	三、推行能資源有效利用	9. 於2004年3月底完成增設二氯甲烷冷凝回收設備	9. 二氯甲烷廢氣排放回收設備方案
		10.於2004年度減少二氯甲烷使用量/單位產品：5%	10.降低二氯甲烷使用量方案
		11.於2004年度減少員工用水量：5%	11.全廠省水方案
		12.於2004年度降低用電量：3% (以 營業額為基準)	12.全廠省電方案
		13.於2004年度降低刀片研磨污泥含水率：3%	13.廢棄污泥(研磨)減量方案
		14.於2004年度 降低保麗龍使用量20% (以包裝材比率為基準)	14.保麗龍領用金額減量計畫方案
	四、改善現場作業環境	15.於2003年12月底完成於刀片拋光區裝設集塵設備	15.集塵設備設置方案
		16.於2004年2月完成油漆(噴漆)作業區抽風設備裝設	16.油漆(噴漆)區作業環境改善方案
		17.於2003年12月完成刀片研磨區抽風設備改善	17.刀片研磨區作業場所改善方案
		18.於2003年12月完成電子沖壓區裝設音罩	18.電子沖壓區噪音改善方案
		19.於2003年12月完成電子沖壓區排氣工程	19.電子沖壓區排氣改善方案
	五、落實作業安全之管制	20.於2003年12月完成純水再生藥品區防溢體工程	20.純水再生藥品區改善方案
		21.於2003年12月底完成作業現場音量(環境)檢測	21.現場音量(環境)檢測方案

3.2 順德工業減電目標管理

1. 由於隨著當前全球氣候變遷的發展趨勢,產業及大環境的改變,能源已是企業及社會大眾生活上不可或缺之要件,隨工業越發達及社會愈進步其所消耗之能源相對越大,且依附相互依賴能源就越普及,故企業要紮穩經濟的根,提升產業競爭力,必須先從有效的推動能源以高效能為核心,將耗能之設備逐步淘汰更新,已提高設備使用效能，近來能源市場的變化,顯見當前企業的發展趨勢,皆已發展綠色產業,節能減碳為主題,順德發展產業亦此以此為主軸發展LED之產品,藉此落實節約能源政策,提供社會大眾開闢另一種綠色產業,更為順德永續經營之目標。
2. 順德公司配合政府於2008年6月提出「永續能源政策綱領」，希望在追求永續能源發展過程中，兼顧能源安全、經濟發展為主題,以滿足未來世代發展的需求,將有限能源做有效率使用,使環境及能源、經濟共榮並存。
   首先我們將 節能=減碳 畫上等號,亦是順德經營為社會盡一己之責
3. 讓節能減碳措施讓社會大眾認同此行動，鼓勵大眾節能減碳措施讓大眾生活中實踐節能的目標，落實生活上，為溫室氣體所造成的全球暖化與氣候變遷效應日益嚴重之下,作此措施。
4. 順德公司積極配合政府之節能業務，2012 年派員參予能源管理人員訓練並取得 兩張證照2013年再派 2員參予訓練,並依經濟部能源局規定每年填寫能源用戶節約能源查核制度申報表, 這顯示順德對能源之重視。

3.3 順德公司在行動策略下選定節能措施：

1. 在空調系統調控上：
   首先談論空調系統約佔順德用電量 18.5%,若能在不影響空間溫濕度、舒適度及空調運轉壽命下,進而降低空調系統用電,並可減少環境污染,及降低公司費用之支出,達成節能減碳之效,故順德訂定冷氣控溫標準如下之實行細則：
2. 順德空調溫度控制細則：管控檢討如下(溫度設定設定只能往上調整,不可往下調。)
   a. 辦公室及會議室溫度設定為26℃以上，濕度控制在70%RH以下，各單位並指定負責人。
   b. 公共區域溫度設定為28℃以上，一般走道及更鞋區以不開空調為主。

3. 機工處空調管控:

a.銑床區溫度設定為27度C，外加電扇循環溫度。
b.CNC切削中心機溫度設定為25度C。
c.CNC高速加工機與治具磨床區溫度設定為20度C。
d.精密研磨區含量測室溫度設定為23度C。
e.大型磨床區含細孔放電區溫度設定為25度C。
a.一般研磨區溫度設定為25度C。
b.光學研磨區溫度設定為20度C。
c.線切割A區與線切割B區溫度設定為20度C。
a.放電加工區溫度設定為23度C。

4. 現場則主要依據相關作業規定，如無規定則濕度控制在70%RH以下，溫度設定如下：

a.沖壓區溫度設定為24℃濕度控制在65%RH
b.局（後）電鍍收料區溫度設定為25℃,預鍍及貼膠區溫度設定為27~28℃
c.包裝無塵室溫度設定為23℃，濕度控制在50%RH ±10先測試
d.倉儲區溫度設定為28℃，濕度控制在70%RH以下
e.精密加工區（治具研磨溫度設定為20℃，光學研磨溫度設定為22℃濕度控制在60±10
f. 粗加工區(研磨及銑床)溫度設定為28℃
g.銑床CNC中心切削機溫度設定為28℃
h.校正實驗室溫度設定為20℃，濕度控制在55%RH ±5之間
i. 三次元品檢室溫度設定為22℃溼度50~60 RH %,現場品檢室溫度設定為26 ℃濕度控制在65%RH以下
j. 大包區溫度設定為26℃，濕度控制在60%RH以下
k. 資訊室機房溫度設定為23℃，濕度控制在60%RH以下
l. 部份有管控溼度區域可利用除溼機除濕氣。
m. 加強門控管制防止冷氣外洩及電源節能。
n. 請5S稽核人員亦納入此項目之稽核

5. 公司為求節約能源在購買機械上，考量大型冷棟空調系統耗電比重，以高效率值為基準，如購買冰水機等：

a. 冰水主機用電所造成空調總用電60%以上,
b. 冰水輸送系統約佔20%
c. .空氣側或負載測系統20%

故當以前公司購置機械以螺旋式之冰水主機,逐漸的專換更高效率之離心式為主之考量 如 2010 年購買冰水主機600噸評估時以效能及能源上之考慮選擇 離心式冰水主機因離心式其效率高， 2011年購買冰水主機250噸時亦相同之考慮，2013年購買冰水主機450噸。目前皆以省能源高效率為主。

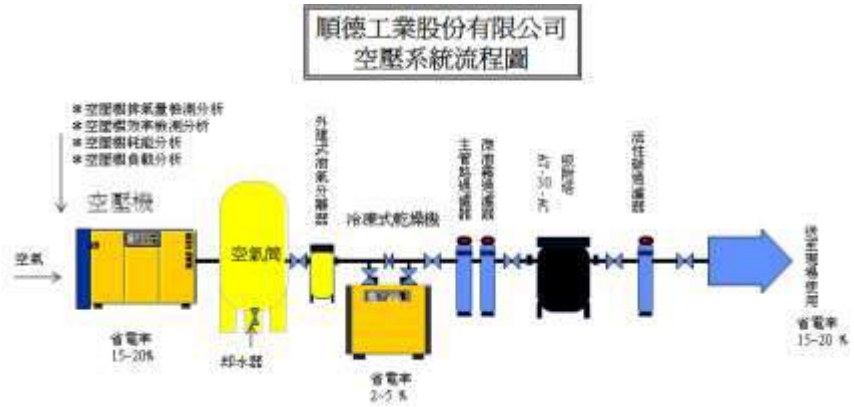
6. 再則公司每年亦將效率為主提高機械效能降低損耗,每年定期保養及清洗冷凝器內盤管使傳熱效果降低,增加冰水主機動力，高效率之機械及定期保養之下,此皆為企業為減電而避免環境造成更大之污染,達到節能環保之目標。

7. 隨手關燈(標語)及拔插頭、換省電燈泡、換LED燈 ；檢討採光需求，提升照明績效， 減少多餘燈管數。(如圖)

8. 新購電燈以省電燈具優先：將傳統燈泡逐步改為省電燈泡，一 樣亮度更省電、壽命更長、更省錢。 如圖

水銀燈　　T5日光燈

9. 在空壓系統調控上：



10. 順德在空壓系統上購置以高性能德國機械為主，且請廠商作效能分析如下：
檢測出各機台之效能,在此公司已從空壓機將效能差部分逐步汰換更新,並且依原廠商提供之保養手冊處理保養事宜,讓機械運轉效率達到,更修改增設變頻方式,使能源供應穩定且達到省能源之目標,※怯水器部分遇有損害洩氣則更新處理,2012年更新15個此為降低氣壓減損,直接降低能源耗量※順德在使用端亦採將出風口修改,原出風口為0.025mm變更為0.015mm以不影響產品品質為主， 在此皆為將能源有效利用,達到節能目的。

1	1	HITACHI OSP-37UA#	50	5	220	31.6	5.307	42.62	0.1240	6.4	82.92	0.1280	96.87		
2				6	221	34.9	5.244	46.7	0.1120		81.94	0.1280	97.50		
3				7	220	37.3	5.194	50	0.1039		81.16	0.1280	81.17		
4	2	HITACHI OSP-37UA#	50	5	217.6	32.6	5.331	43.69	0.1220	6.4	83.30	0.1280	95.31		
5				6	218.3	35.1	5.27	47.05	0.1120		82.34	0.1280	87.50		
6				7	218	36.9	5.185	49.46	0.1048		81.02	0.1280	81.87		
7	3	HITACHI OSP-37UA#	50	5	221	31.7	4.962	42.49	0.1167	6.4	77.53	0.1280	91.17		
8				6	222.3	34.1	4.908	45.71	0.1073		76.69	0.1280	83.82		
9				7	222	36.7	4.846	49.19	0.0985		75.72	0.1280	76.96		
10	4	HITACHI OSP-75UWL	100	5	217.6	71.1	11.84	95.3	0.1240	12.4	95.44	0.1240	100.00		
11				6	217	75.9	11.66	101.7	0.1146		94.04	0.1240	92.41		
12				7	217	80.9	11.2	108.4	0.1033		90.34	0.1240	83.30		
13	5	KAESER DS201	150	5	216.6	106.7	18.56	143	0.1186	7.5(bar) 20.9 伴字值計 7(bar) 約21.3	86.34	0.1420	82.52		
14				6	217	112	18.37	150.1	0.1223		86.24	0.1420	86.12		
15				7	218	119.3	18.19	159.9	0.1137		85.38	0.1420	80.07		
16	6	KAESER DS201	150	5	217	111.3	19.52	149.2	0.1308		91.64	0.1420	92.11		
17				6	218	116.7	19.36	156.4	0.1238		90.99	0.1420	87.18		
18															
15	7	KAESER DS201	150	5	391.3	107.4	19.04	144	0.1322		89.36	0.1420	93.09		
17				6	391	114.2	18.89	153.1	0.1234		88.69	0.1420	88.9		
18				7	391.3	120.1	18.71	161	0.115		87.85	0.1420	81.69		
16	8	KAESER DS201	150	5	384.3	102.5	19.11	137.4	0.1391		89.73	0.1420	97.95		
17				6	385.3	108.9	18.97	146	0.1299		89.04	0.1420	91.47		
18				7	386.3	115.2	18.79	154.4	0.1216		88.21	0.1420	85.63		
16	9	KAESER DS201	150	5	385.3	102.3	19.43	137.1	0.1417		91.22	0.1420	99.79		
17				6	385.3	109.4	19.26	146.6	0.1313		90.40	0.1420	92.46		
18				7	386.3	116.4	18.9	156	0.1211		88.73	0.1420	85.28		
16	10	KAESER DS241	175	5	388.3	130.5	24.35	174.9	0.1392	7.5(bar)2 4 伴字值計7(bar) 約24.5	99.40	0.1400	99.42		
17				6	388.3	137.8	24.21	184.7	0.1310		98.50	0.1400	93.57		
18				7	387.6	145.3	23.66	194.8	0.1230		96.66	0.1400	87.86		
16	11	KAESER DS241	175	5	384	128.5	24.39	172.3	0.1416		99.56	0.1400	101.10		
17				6	385.6	135.4	24.25	181.5	0.1336		98.97	0.1400	95.42		
18				7	384.3	140.7	24	188.6	0.1220		97.93	0.1400	87.14		

11. 公司秉持理念，配合政府節能政策竭盡社會義務與責任,提高能源使用效率，減少能源浪費，使能源運用達到最佳化可提高企業經爭力，進而達到國家整題經濟競爭力並可為地球環保盡一份心力，是每一位國民責無旁貸的責任與義務。

4.順德空氣污染防治管理

4.1 空氣污染防治(單元)

1. 隨全球經濟的發展下,環保意識的抬頭，加上日本東京議定書的出爐及歐盟綠色產業的嚴格要求，已再提醒大家共同維護地球的尊嚴。也因此帶動產業發展結構的變革以及環保技術的科技化，希望透過能源與資源生產力的最佳配套，以達到營運績效提升，更能實現環境零污染的環保目標，如此企業方能走向永續經營之道。
   在順德基於製造過程中，早就覺醒到這份工作任務，特別是對大自然的維護及本著對環境的重視，因此所有在製造過程中對環境本著清潔生產，推動製程減廢、產業零污染等環保的企業文化邁進。

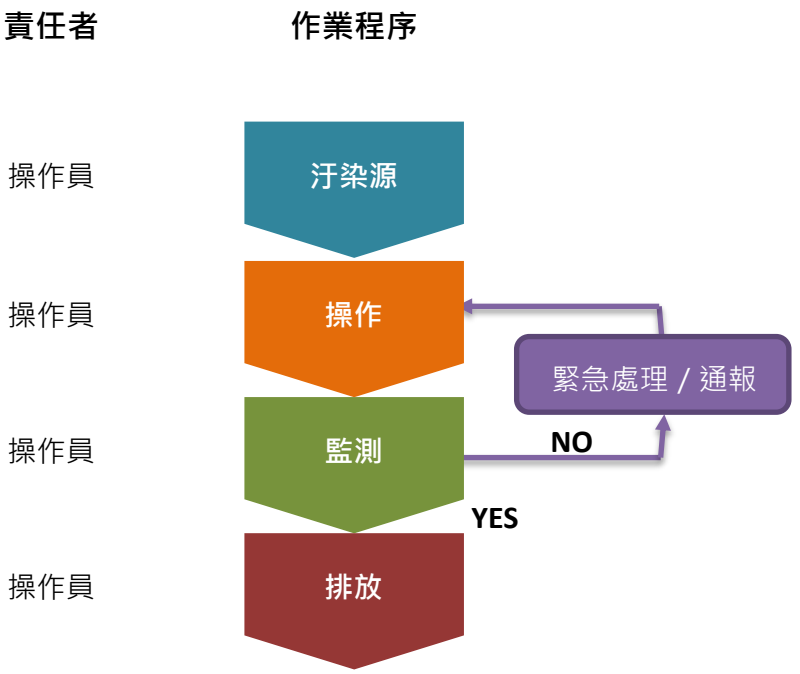
2. 順德公司秉持上述理念，配合政府環保政策竭盡法律責任與社會義務，期望藉由落實環境管理，創造優良工作環境，保護員工身心健康及安全，特推動實施ISO-14001之環境管理系統下之空氣汙染管理政策。

3. 為確管制順德固定污染排放源所排放之空氣品質合乎政府相關法令規定，其範圍包含鍋爐排放【PAR、SOX、NOX】、洗滌塔【H_2SO_4、HCl】、活性炭吸附塔【二氯甲烷、碳氫廢氣】等

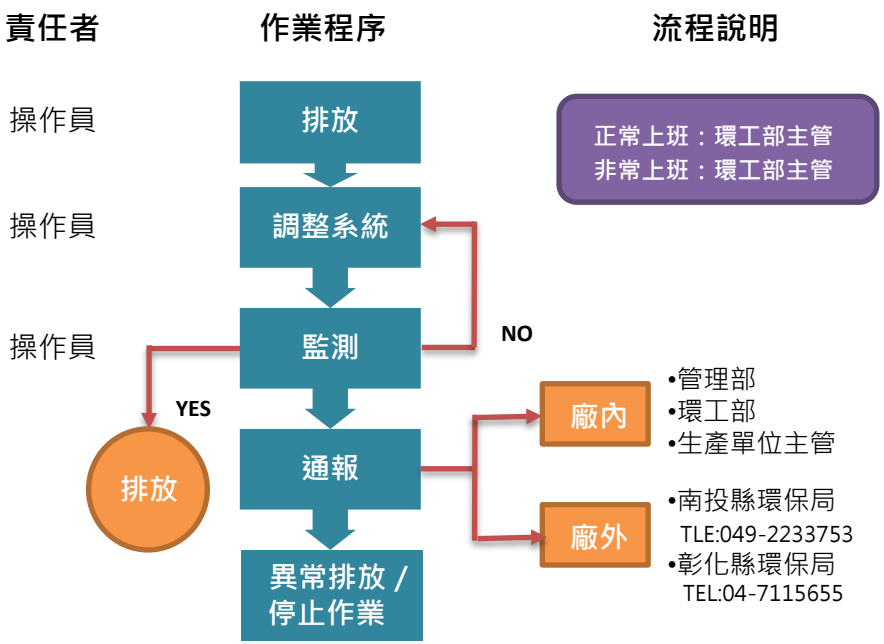
4. 公司在權責處理上：

污染源設備	操作	監測 / 排放	緊急處理 / 通報
鍋爐	操作員	操作員	環工部 / 管理處
洗滌塔	操作員	操作員	環工部 / 管理處
活性炭吸附塔	操作員	操作員	環工部 / 管理處

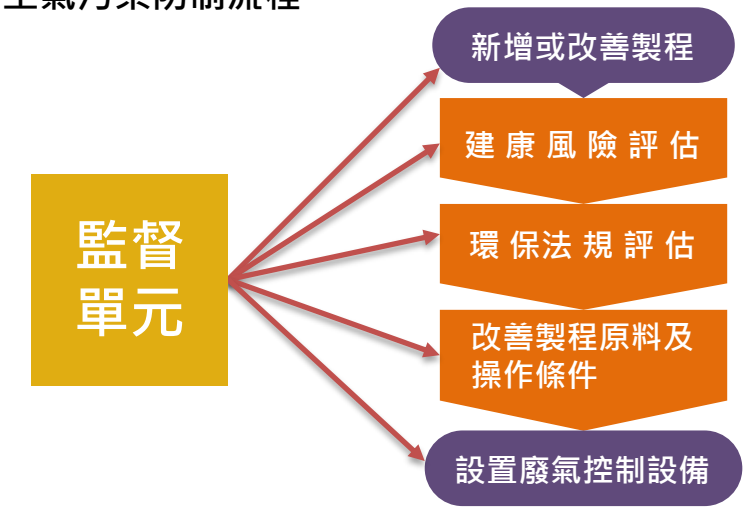
4.2 管制流程：空氣污染防制操作流程



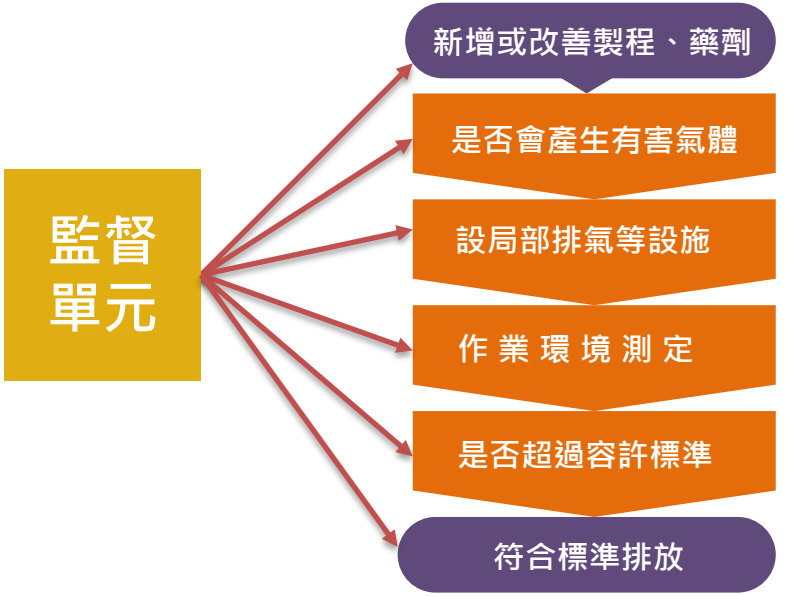
4.3 緊急應變通報流程圖



4.4 空氣污染防制流程



4.5 作業場所中有害氣體管制架構



4.6 空氣污染管制原則

1. 具危害性作業製程之密閉化、自動化及隔離局部排氣。
2. 局部排氣+霧滴抑制劑或鍍槽加蓋。
3. 於可能產生危害性區懸掛危害警告圖示。
4. 於可能產生危害性區之工作人員應配置呼吸用保護具。
5. 完善之作業環境測定計畫。
6. 應定期確實實施有害作業環境測定。
7. 各單位如有作業環境測定及空氣防制困難時，可協調環工部處理之。

4.7 空氣污染管制方法

1. 室內空氣污染管制方法
   a. 作業場所空氣品質應符合勞委會所製定之勞工作業環境。
   b. 各單位應設專責人員負責作業場所異常氣味時之緊急通報及連繫。
   c. 具局部排氣設備場所依勞工安全衛生法第十四條精神須實施自動檢查制度、檢查項目、頻率及相關表格另由安衛實施方法規定之。
   d. 各作業場所於每次實施作業環境測定後應將數據整合俾利於作空污防制設備性能參考。
   e. 各單位應與契約醫院保持密切連繫，對於員工經健康檢查異常且確定為作業場所不良所致，應建檔追縱。
2. 室外空氣污染管制方法
   a. 各煙道口應定期請檢測定相關污染物(頻率及項目依相關環保法規辦理)。
   b. 鍋爐燃燒使用低污染低硫燃料。
   a. 嚴禁廠區內露天燃燒原物料或廢料。

4.8 污染源設備：本廠經主管機關核准並領“固定污染源操作許可證”

依規定內容執行者共有四項：

1. 鍋爐蒸汽生產程序 - 鍋爐排放大氣中【PAR、SOX、NOX】。
2. 半導體引線架製造程序 - 洗滌塔排放於大氣中【 H_2SO_4 】。
3. 金屬電鍍製造程序 - 洗滌塔排放於大氣中【 HCl 】。
4. 金屬表面清洗程序 - 活性炭吸附塔排放於大氣中【二氯甲烷】。

洗滌塔

排氣管線

活性碳吸附塔

4.9 監測 / 排放

1. 本廠依操作指導書之規定進行監測，無論在任何情況下排放空須符合『空氣污染防制法規』之規定。
2. 依主管機關規定，本廠排放口污染物檢測頻率，由合格檢測機構每年測定一次，其檢測執告書並保存三年備查。

3. 本廠固定污染源排放管道，應設置安全操作平台，以利檢測之進行。
4. 本廠申請代為檢測，應由環工部於五日前向南投/彰化縣環保局提出檢測計劃，並於十五日內向南投/彰化縣環保局提報檢測結果。
5. 南投廠設置乙級專責人員負責空氣污染防制工作。

4.10 緊急處理

1. 當操作人員發現排放異常時，應立即調整設備使之正常，若發現突發大量排放空污染物時，應依「緊急應變作業流程」處理。
2. (2). 操作人員應緊急通報廠內相關單位，必要時停止全部或部份生產作業。
3. (3). 公司如接到南投/彰化縣環保局發佈之空氣品質惡化時，應依「緊急應變作流程」處理。

5.員工照顧

5.1 員工訓練及發展

員工是順德最重要的資產，因為具有優質人才，才讓順德得以走過一甲子的歲月。因應企業不同階段的發展，不斷投入人才的培訓是確保順德得以永續經營最大的基石。
順德致力於提升員工基本能力，厚實企業競爭能力，近年來著力於以下幾項人才培養之機制：

1. 員工專業職能的建立

順德致力於人才之培訓，這從年年提升的訓練資源及每位員工訓練時數中可顯現外，近期更將人才培訓的重心於紮實各機能的基礎訓練，依照各部門的工作職掌及工作說明書，重新分析及細緻化人才培訓的體系。

▼ 表一： 員工教育訓練費用　　單位：元(台幣)

年度	2008年	2009年	2010年	2011年	2012年
投入訓練費用	2,052,722	1,057,103	1,365,141	2,395,894	3,680,721

▼ 表二：員工訓練時數

年度		實體課程	數位課程	總計
2008年	訓練時數	13,006.5小時	920.2小時	13,956.7小時
	訓練人次	2,321人次	2,875人次	5,196人次
2009年	訓練時數	4,924.5小時	1,060小時	5,984.5小時
	訓練人次	1,249人次	3,367人次	4,616人次
2010年	訓練時數	7,419小時	715.3小時	8,134.3小時
	訓練人次	1,117人次	1,546人次	2,663人次
2011年	訓練時數	10,421小時	875.6小時	11,296.6小時
	訓練人次	1,899人次	2,169人次	4,068人次
2012年	訓練時數	8,321小時	850.4小時	9,171.4小時
	訓練人次	1,463人次	1,855人次	3,318人次

2. 友善學習環境的建立

因應公司是二十四小時長態性的生產模式，加上公司已邁入跨國籍的企業經營模式，如何讓員工的學習更加容易取得且知識可以很速的複製，順德導入數位學習的方式，讓員工可隨時進行學習。而課程規劃的方向以使用頻率高的新人訓練及全員皆需具備的課程為主。近幾年度課程完成狀況如下表所示。

▼ 表三：數位課程時數(累計)　　單位：門

年度	2008年	2009年	2010年	2011年	2012年
數位課程門數	28	50	73	103	114

3. 全面提升國際溝通能力

順德總體營業額外，比例佔整體營業額×%？(電子事業群更高達93%)，因應與國際接軌且期更即時回應客戶需求，具備溝通能力的研發、製品人才已是經營所必須，順德每年定期開設基礎文法、字彙的多益課程班外，更是採取一對一英文教學，聘請英、日籍教師，針對學員的直接需要，提供最務實的語文訓練。

4. 企業知識管理系統的建構

順德於2008年申請經濟部工業局知識管理的輔導專案，透過此專案開始有系統的搜集企業內部知識。2011年度再度得以知識管理推動優良廠商之成就，獲得工業局第二度的輔導補助，讓順德的KNOW-HOW得以有系統留存，並轉換為員工能力提升的基礎。

▼ 表四：知識文件件數

年度	2010年	2011年	2012年
知識文件件數	474	968	1096

5. 員工能力提升與員工晉升制度結合

順德除辦理各式員工能力提升之訓練外，為鼓勵員工自我成長的動機，公司的晉升制度系以員工能力的完備率為主要評核標準，近年來員工能力合格率大為提升，獲得晉升人數也逐年成長。

不斷培訓企業及社會所需人才，是順德主要企業責任之一，而為確認順德的人才培訓制度之有效性，順德於2010及2011二年度參加台灣訓練品質系統(TTQS)之認證，二年度皆獲得勞委會職訓局所頒發銀牌獎之肯定。獲得政府獎項的肯定，讓順德將更踏實投入於企業人才的養成。

■ TTQS銀牌獎

■順德提供不同類型及多元的課程

5.2 職業安全與衛生管理

1. 由於隨著產業結構蛻變，勞工安全衛生範圍不再侷限於某項領域，安全衛生技術層次亦隨之提高，如何認知工作場所之風險，以預先排除可能對人體造成傷亡之危險因素，為企業積極須解決的課題；基於企業對員工生命保障及維護之責任，本廠提供安全的機械設備，完善的作業流程及防護，健全的勞工教育訓練 / 宣導及健康檢查，以確保職業災害及意外事故發生機率降至最低，以符合本公司“安全無憂、災害從缺”的最終目標。
2. 順德公司依遵照勞工安全衛生法及其施行細則、勞工安全衛生設施規則、勞動檢查法及其施行細則、加強勞工安全衛生管理作業要點、勞動基準法及其施行細則、安全衛生設施標準等有關規定確實辦理。此外任用新進員工時即提供職前體檢及勞工安全衛生教育訓練，對在職員工實施定期健康檢查對於從事特別危害健康之作業者，提供適當之安全防護器具，並施行特定項目之健康檢查，實施健康管理，並定期舉辦安全衛生教育訓練課程，例如危險物及有害物之使用與管理、作業時如何避免不安全之動作行為、交通安全宣導及消防訓練等課程。順德公司在2012年參與公司年度體檢的員工超過880人次，職業病體檢210人次，公司舉辦消防、安全衛生及健康促進培訓人數達到了221人。



3. 為有效防止職業病及職業災害之發生，本公司於2006年即取得職業安全衛生管理系統認證(OHSAS-18001)，並且於各廠設有5S稽核小組，定期進行工作環境及安全衛生推廣查核，並結合職業安全衛生管理系統(OHSAS-18001、CNS 15506)進行內部稽核及委請英國標準協會(BSI)進行外部稽核(每年定期進行環境、安全衛生及消防安全等稽核活動)，督導全公司之環境安全衛生及改善作業，而職場零災害更是本公司經營及管理之指標。


4. 順德針對工傷事故的根本原因持續採取糾正和預防措施，避免事故重複發生。以下為根據環安衛管理體系的要求，持續追蹤2012年度工傷事故(含上下班途中)數據：

評估項目 / 廠別	失能傷害頻率 (失能傷害件數/百萬工時)	失能傷害嚴重率 (失能傷害損失日數/百萬工時)
彰化廠	1.15	0.52
南投廠	0.45	2.23

5. 順德公司積極推行勞工安全衛生業務，獲行政院勞工委員會評選為「全國勞工安全衛生群合作組織100年服務績優獎」、「99年獲評選為勞工安全衛生優良單位獎」，及「100年獲評選為勞工安全衛生優良人員功績獎」等獎項。


6. 本公司持續推行安全衛生政策
   a. 遵循政府安全衛生相關法令規定及客戶等利害相關者要求。
   b. 推行預防傷害及疾病的承諾，持續消除各種危害因素，以確保職場之安衛績效。
   c. 推展各項安衛管理相關訓練及活動，持續設定和審查安全衛生目標。
   d. 建立安全衛生技術、設備、措施及文件化程序，以有效管制風險事故，降低意外事故發生。
   e. 建立安衛作業稽核及持續改善審查制度，以確保安全衛生管理系統之有效性及合宜性。
   f. 對組織內、外宣導安衛政策，使其認知個人之安全衛生應有的責任。
   g. 落實企業社會責任，妥善照顧供應商、承攬商入廠安全，並提供安全衛生資源給予運用。
   h. 安衛方針：遵守法規、災害預防、零傷害、零災害、零職業病。

6.社會參與

6.1 實踐企業社會責任

年收超過百億，作為一個成功的企業，順德不忘自身所肩負的社會責任，創立於2008年順德公益慈善基金會，即秉持大愛的宗旨，持續多年透過捐助、舉辦公益活動及志工服務等模式，針對貧困學童、弱勢團體提供協助，包括二林喜樂保育院、彰化家扶中心、彰化慈生仁愛院、和美實驗學校等，都曾是其扶助的對象。

順德公益慈善基金會逐年編審計畫，捐贈各弱勢團體經費、打擊樂器及健康器材等，更於每年的年終尾牙晚會，邀請二林喜樂保育院、彰化慈生仁愛院一同參與表演活動，與員工同樂，讓弱勢團體也能夠感受到社會之溫暖，積極創造不一樣的人生價值。

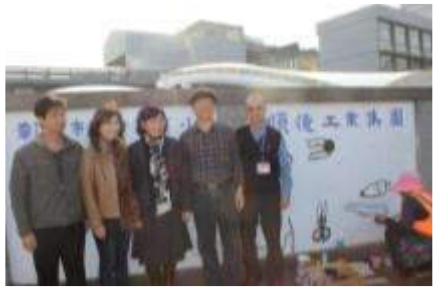
至於公司員工，順德除了以適才適用的原則建構一套人才培植制度，另設置關懷急難救助基金，積極落實幸福企業的理念。「我們不怕挖角，因為員工在這裡很穩定，除了自由發揮的環境，公司還會根據他的表現給予相對等的獎勵。」

6.2 成立志工培育、扶助弱勢族群

順德公益慈善基金會於2012年7月首度成立志工團，鼓勵員工及子女們，利用暑假期間至彰化慈生仁愛擔任志工活動，全力投入院生關懷、陪伴並輔導個案學童或青少年，包含單親、失功能高風險家庭、身心障礙兒童家庭等，志工服務時數約達2000小時。

6.3 社區回饋與互動

順德工業股份有限公司本著「取之於社會，用之於社會」的精神，長期積極投入當地社會參與社區服務與互動，包括社區綠化、清潔、慶瑞午及九九重陽敬老活動，也結合社區一同推廣預防工安、節能減碳等藝文推廣，同時也教育國小學童從小培養省水、省電及節能減碳之觀念，為地球盡一份心力。



2012 SDI Corporation
Corporate Social Responsibility Report

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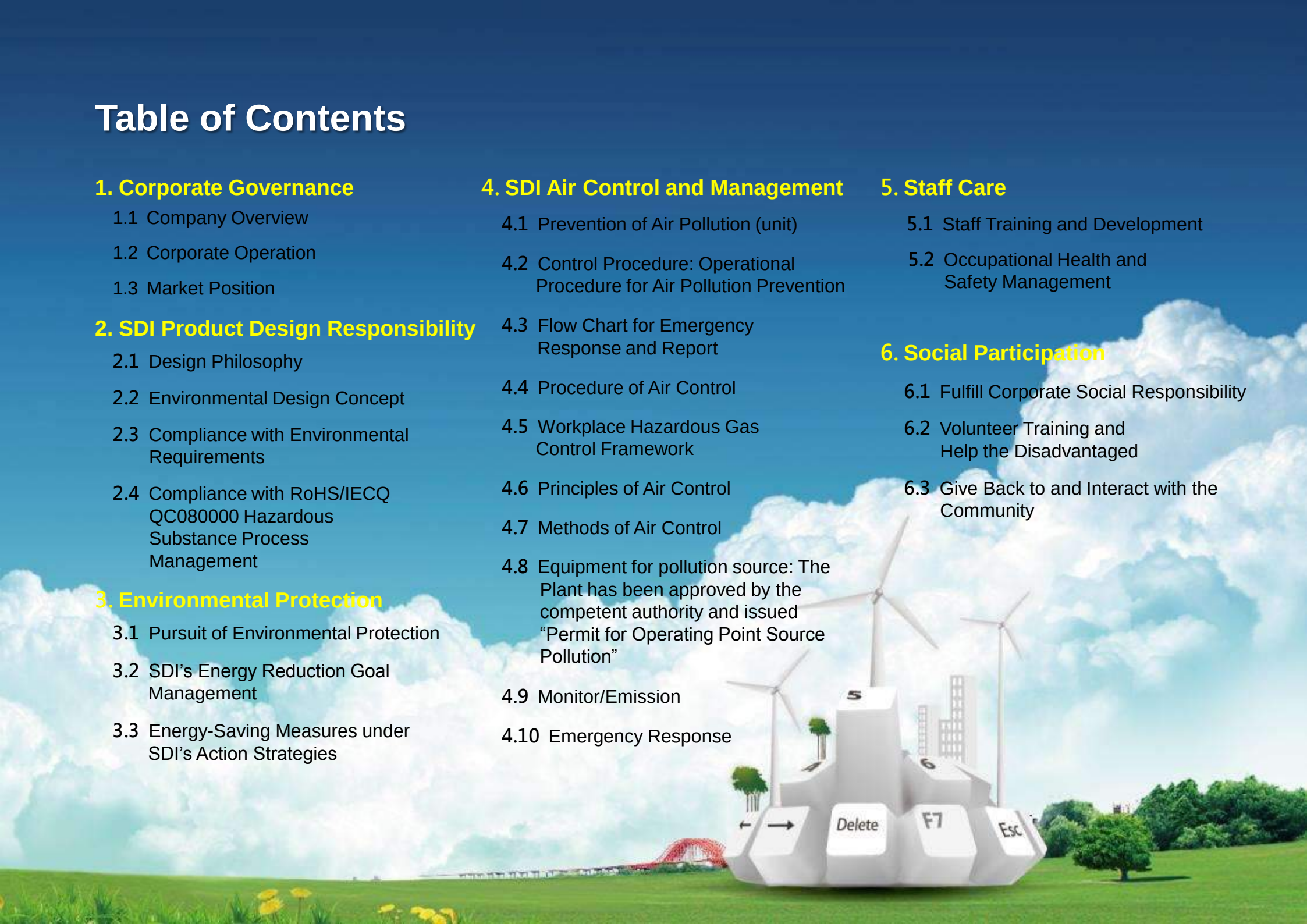


1. Corporate Governance

1.1 Company Overview

60 years have gone by since SDI Corporation was founded in 1953. To each and every member of SDI, “Sincerity, Stability, Challenge, Innovation” are not only the highest guiding principles for the company, but also the business and personal philosophies. By persisting this path, all of our employees are grow and heading forward side by side. They created glorious legend one after another, not just for the company; also for themselves from the beginning till now.

In light of globalization and free trade trends, SDI has been collaborating with leading international brands and investing in multiple affiliates. The vertical integration that incorporates the up and down stream as well as international marketing is increasing SDI’s competitiveness in the international community. For the future, SDI is aspired to become a multi-national corporation, establishing the foundation for sustainability and bringing SDI under the spotlight in the international stage.

1. Listed on the stock market in the electronics sector. **(Ticker Symbol):2351)**
2. The leader of semiconductor lead frame manufacturing in the nation.
3. One of the top 500 manufacturing enterprises in the nation.
4. The leading metal and hardware manufacturing company in the nation.
5. SDI has adopted management systems including ISO 9001, ISO/TS 16949, ISO 14001 and OHSAS 18001.
6. SDI introduced Oracle's ERP system in 2000.
7. SDI develops and manufactures high precision and high quality progressive stamping dies, which is the leader in the mold industries in Taiwan.
8. SDI stationary has a long history and high market share. The product quality has been widely recognized. In recent years, SDI has expanded the brand globally while still leading the domestic stationary market.
9. SDI is equipped with the complete R&D system, including the HP workstation and the world class CAD/CAM system (UGII and AutoCAD). SDI also has advanced machining equipment and testing instruments, including line cutting machines, electrical discharging machining, high speed precision press, ultra-precision coordinate measuring machine, non-contact coordinate measuring machine, jig grinder, horizontal machining center, optical projection grinder and ultra-precision surface grinder from Switzerland, Japan, Germany and the US.

1.2 Corporate Operation

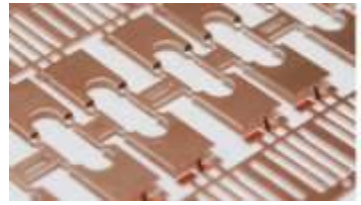
1. SDI's annual profit has been growing every year. The 2012 EPS has also grown by nearly 100% than 2011

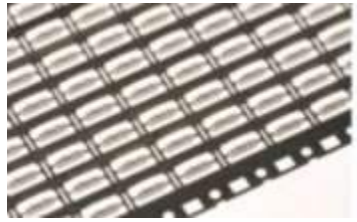
	2011	2012
Revenue	NTD $7.84 billion	NTD $6.85 billion
Gross Profit	5.77 %	9.19 %
Net Income after Tax	NTD $147 million	NTD $278 million
EPS after Tax	NTD 0.83	NTD $1.56

2. SDI has branched from Taiwan into the world and stepped onto the international stage. In the future, SDI will work harder toward creating corporate competitive edges and maximizing values to build a better life for everyone.

1.3 Market Position

SDI is one of the top 10 lead frame manufacturers. The products that SDI produces are widely used in LED, medical equipment, consumer products, wireless communication system and automobile electronics. SDI has positioned itself as the "problem solver in precision industry" to serve the clients.

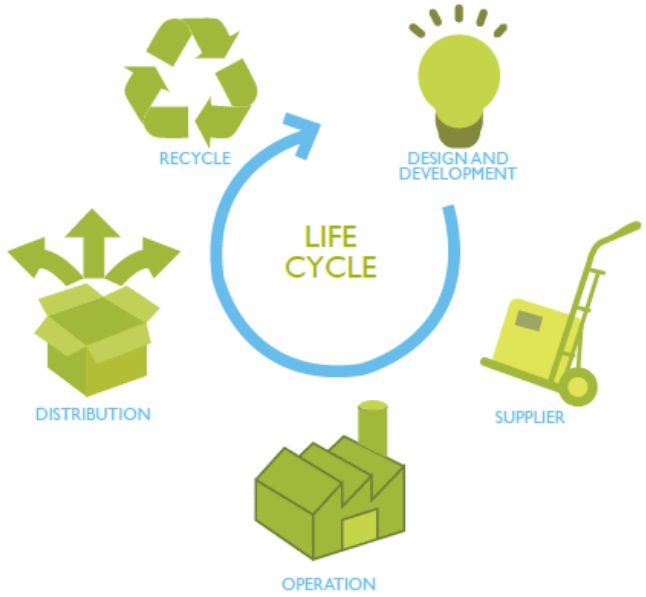




2. SDI Product Design Responsibility

2.1 Design Philosophy

As civilization enters the 21st century, population has been increasing and the quality of life has gradually improved. Both factors contribute to the rapid consumption of natural resources, pollution and drastic climate changes. It is an obligation that products should be designed with environmental eco-friendly. During the entire product life cycle, including the use of raw materials, manufacturing, product distribution, usage and disposal, must be well planned during the product design stage to ensure minimal impact to the environment during implementation.



■Product Life Cycle (graphic obtained from the internet)

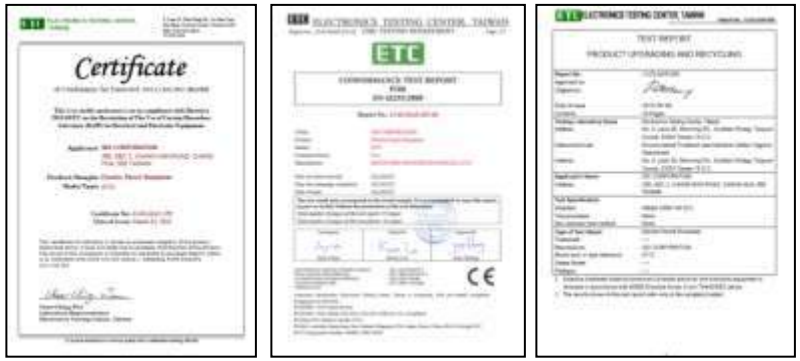
2.2 Environmental Design Concept

The materials used for SDI's stationary are mainly metal and plastic. Tremendous amount of labor, electricity and water are required during the production process. Therefore, compliance with ISO9001 is required during product assembly and for production performance to minimize defects and energy consumption. Additionally) in order to prolong product lifespan after the products reach the customer, SDI has been working on product design for replaceable consumables that are friendly to the environment, such as changeable pencil sharpener, electric sharpener, knife, correction tape and automatic eraser. These products are affordable while allowing consumers to be environmental. This has influenced the consumer behaviors in Taiwan, Hong Kong, Singapore and some European countries, which continues to motivate us in developing environmentally eco-friendly stationary.

■Replaceable consumables by SDI

2.3 Environmental Compliance

It is extremely important for a product manufacturer to be with existing laws and regulations as well as those that will be legislated in the near future, which may be closely associated with what countries and trade organizations the products could be sold to. In terms of product design, SDI has obtained multiple international certifications, including RoHS and REACH for hazardous substances and CE for the use and recycling of electric stationary (WEEE, batteries, packaging). SDI is also planning on the eco-design (ERP and IPP) that currently under negotiation in the EU. The public will be aware of SDI's efforts in environmental protection and user safety. Sustainability and building corporate reputation in the international community have always been SDI's goals.



■ International certification applied for SDI products

2.4 Compliance with RoHS/IECQ QC080000 Hazardous Substance Management System

1. Regulations governing RoHS and the management of chemical substance have taken effects around the world. The prohibition or restriction on the use of hazardous chemical substance in electronic and electric products has also become an inevitable trend. Substances prohibited under RoHS directives include Pb, Hg, Cd, Cr6+, PBB and PBDE. WEEE directive has also impacted the global supply chain. While corporations face pressure from converting from the traditional manufacturing process, they also must ensure product compliance. Therefore, SDI conducts thorough analysis on the regulations, fully understands the development in client needs and has also taken effective measures in design, manufacturing, testing and supply chain management to ensure that they meet the requirements of environmental regulations.
2. SDI has considered current laws and regulations, client needs and the reduction of RoHS risks and established IECQ QC080000 Hazardous Substance Process Management. The effective operation of QC080000 management system is proof that SDI is fulfilling its responsibilities and eliminating the need to additional product testing and any fines. The Electronics Group also passed the evaluation of UL Management System Solutions Inc. (UL) and received IECQ HSPM (QC080000) certification, which is a testimony of SDI's effective implementation of hazardous substance process management and compliance with applicable regulations and client needs for environmental products.

3. Environmental Protection

3.1 Pursuit of Environmental Protection

1. The advance in technology and economic development caused over development and overuse of the natural resources and habitat. Such phenomenon and the waste it creates have brought unprecedented and irreversible impacts and damages to our environment. Under such risks, countries around the world has realized that if they don't take immediate actions toward protecting the environment and resources, future generations will no longer able enjoy the majestic mountains and waters on this planet. Therefore, nations around the world have signed conventions and made declarations to call for all to protect and improve the environment and resources in this global village and to ensure and improve the quality of life. Thus, existing environmental management system no longer meets the actual needs. Corporations must be self-motivated and instigate a comprehensive, preventive and systematic environmental management model that complies with international standards in order to meet the requirements in comprehensive environmental management.
2. With the above company philosophy, SDI complies with the governmental policies on environmental protection and fulfills its legal responsibilities and social obligations to create quality work environment and protect employees' physical and mental health and safety through environmental management. In addition to pursuing "customers first, quality priority" and holding every employee responsible for quality assurance, SDI has also established environmental management polices that focus on "energy saving and waste reduction through continuous improvement". Under these firm believes, SDI has implemented ISO-14001 environmental management system.
3. SDI has obtained ISO-14001 certification in 2004. In addition, SDI conducts regular internal audit and has commissioned British Standards Institution (BSI) to conduct external audit with regular annual safety drills to ensure the safety of the company environment.

■Certificates from Environmental Management System

4. The following aspects were taken into consideration when establishing environmental policies:
   a. Whether the scale of corporate business activities, products and services are adequate to minimize environmental impact.
   b. Commitment to on-going improvement and pollution prevention.
   c. The policies shall comply with applicable environmental regulations, other environmental requirements and commitment that the corporation has signed.

d. Provide a single framework to establish the goals and targets for environmental protection.
e. The policies have been documented, implemented and maintained.
f. The policy requirements have been conveyed and communicated with all employees or their representatives within the corporation.
g. Open to the public and the stakeholders.
h. Representatives from the industry and trade associations should be invited and consulted for establishing environmental policies and programs to obtain commitment concerning the implementation of campaigns related to the environmental policies.

5. Environmental Policy
   a. All environmental protection operations shall comply with the environmental regulations set forth by the government.
   b. Implement various waste reduction and pollution control tasks to achieve the goal of pollution prevention.
   c. Actively engage in the promotion of energy saving and implement recycling.
   d. Enhance environmental education for the employees to create a pollution-free work environment.
   e. Continue to improve all environmentally management operation with correction and prevention measures.
   f. Conduct external promotion of the environmental policies to protect the environment with the entire society.
   g. Fulfill corporate responsibility. Integrate the up and down stream suppliers to promote green procurement, green living and green consumption to be earth friendly.
   h. Directions for environmental protection: Compliance with regulations; pollution prevention; efficiency increase; continuous improvement.

5. SDI has been promoting various improvement programs based on its environmental policies and holding ISO 14001 review meeting on the environmental management system to review the environmental policies and the improvement programs. 168 environmental management proposals have been reviewed as of the end of 2012. 144 have been completed and 24 are still in the implementation stage.

■ISO14001 Review Meeting for the Environmental Management System

■Goals and targets for environmental policies that have been implemented

Policy	Goal	Target	
1. All environmental management operations comply with government environmental regulations. 2. Enforce waste reduction and pollution control tasks to achieve the goal of pollution prevention. 3. Actively promote energy saving and recycling activities. 4. Strengthen environmental training for employees to create pollution free work environment. 5. Continuously improve environmental control with correction and prevention. 6. Promote environmental policies outside the corporation and protect the environment with the entire society.	**A. Fully comply with environmental regulations**	1. Completed the planning for waste storage site by the end of December 2003.	1. Project for improving waste storage site.
		2. Applied for legal ground water rights by the end of February 2004.	2. Proposal for obtaining legal ground water rights.
		3. Completed drainage improve plan for the backwash facility of underground filtration tank in December 2003.	3. Improvement plan for drainage sedimentation tank for underground filtration tank.
		4. Completed improvement plan for drainage sedimentation tank for the exhaust scrubber in December 2003.	4. Improvement plan for backwash drainage sedimentation tank of exhaust scrubber.
		5. Completed the proposal for perimeter inspection in December 2003.	5. Proposal for perimeter noise inspection.
	B. Implement waste management	6. Completed the installation of recycling boxes in December 2003. Regular waste/unit product reduced in 2004: 5%.	6. Proposal for reducing and recycling waste.
		7. Completed spill-proof project in oil storage area by the end of December 2003.	7. Proposal for anti-proof improvement in oil storage area.
		8. Completed the improvement of scrap collection tank in February 2004.	8. Proposal for the improvement of scrap (and by products) collection tank.
	C. Promote effective utilization of resources	9. Completed the addition of dichloromethane condensation and recycling equipment by the end of March 2004.	9. Proposal for recycling dichloromethane exhaust.
		10. Reduced dichloromethane usage/unit product in 2004: 5%.	10. Proposal for reducing the usage of dichloromethane.
		11. Reduced employee water consumption in 2004: 5%.	11. Plant-wide water conservation proposal.
		12. Reduced energy consumption in 2004: 3% (based on revenue).	12. Plant-wide energy saving proposal.
		13. Moisture content reduced in grinding sludge in 2004: 3%.	13. Proposal for reducing sludge (for grinding).
		14. Reduced usage of Styrofoam in 2004: 20% (based on packaging materials).	14. Proposal for reducing requisition for Styrofoam.
	D. Improve on-site operating environment	15. Completed the dust equipment for the polishing area by the end of December 2003.	15. Proposal for installing dust equipment.
		16. Completed the installation of exhaust equipment in painting (spray painting) area in February 2004.	16. Proposal for the improvement of painting (spray painting) area.
		17. Completed the improvement of exhaust equipment in the grinding area in December 2003.	17. Proposal for the improvement of grinding area.
		18. Completed the noise enclosures for the electric pressing area in December 2003.	18. Proposal for noise improvement in electric pressing area.
		19. Competed the exhaust project in electric pressing area in December 2003.	19. Proposal for the improvement of electric pressing area.
	E. Implement operational safety control	20. Completed the spill-proof project for regenerated pure water solution area in December 2003.	20. Proposal for the improvement of regenerated pure water solution area.
		21. Completed the noise (environment) testing for operating environment by the end of December 2003.	21. Proposal for noise (environment) testing.

3.2 SDI's Energy Reduction Goal Management

1. Changes that occur in the industry, the overall environment and the global climate have made energy an integral part of a corporation and people's lives. Energy consumption increases as the society progresses with industrial advancement. The use of energy prevails when this reciprocal relationship deepens. Therefore, corporations must promote high efficiency energy in order to firmly establish its economic foundation and increase competitiveness. Equipment with high energy consumption should be replaced to promote energy efficiency. Recent changes in the energy market have reflected the current trends in corporate development in the green industry, energy saving and carbon reduction. SDI has also been developing LED products based on this trend to implement energy saving policies. Furthermore, providing the public an alternative for the green industry is SDI's answer to sustainability.
2. SDI has also worked with the government and proposed Sustainable Energy Policy in June 2008. The policy will balance energy safety and economic development during the pursuit of sustainable energy sources in order to meet the needs of the next generation. Efficient use of limited resources will allow the environment to coexist with energy and economic prosperity. Putting and equal sign between energy saving and carbon reduction is SDI's way of fulfilling its social responsibility.
3. As the effects of global warming and climate change caused by the greenhouse gas worsen, make the public recognize this program through energy saving and carbon reduction measures and encourage the public to do the same to fulfill their goals in energy saving.
4. SDI has been fully compliant with the government's call for energy reduction. In 2012, SDI sent staff to undergo energy management personnel training and obtained two certificates. SDI sent two additional staff in 2013. We have been filling out the declaration form for energy saving audit system annually as required by the Bureau of Energy, Ministry of Economic Affairs, which exemplifies how highly SDI values energy.

3.3 Energy Saving Measures under SDI's Action Strategies:

1. For air conditioning: Air conditioning (A/C) accounts for approximately 18.5% of the total energy consumption in SDI. Under the premise of not affecting the temperature, humidity, level of comfort and the lifespan of the air conditioner, SDI has established the following temperature control standards for A/C to reduce the power usage of the A/C system, environmental pollution and company expenditure in order to achieve the effect of energy saving and carbon reduction:
2. Rules for A/C temperature in SDI: The review is shown as follows (The temperature setting can only be turned up, not down.)

a. The temperature for offices and meeting rooms is set at above 26°C and the humidity is kept under 70%RH. Each unit shall designate a person in charge.
b. The temperature for public areas is set at above 28°C. No A/C for the corridors and shoe-changing area.

3. A/C control for the Machinery Department:
   a. The temperature for the milling area shall be set at 27°C with electric fan for circulation and balance the temperature.
   b. The temperature for the CNC machining center shall be set at 25°C.
   c. The temperature for the CNC high speed machining and jig grinding area shall be set at 20°C.
   d. The temperature for the precision grinding area shall be set at 23°C.
   e. The temperature for the large grinder area shall be set at 25°C.
   f. The temperature for the regular grinding area shall be set at 25°C
   g. The temperature for the optical grinding area shall be set at 20°C.
   h. The temperature for the line cutting areas A and B shall be set at 20°C.
   i. The temperature for the electrical discharge machining area shall be set at 23°C.

4. On-site conditions shall be in accordance with applicable regulations. If not specified, the humidity shall be kept under 70%RH and the temperature settings are as follows:
   a. he temperature for the stamping area shall be set at 24°C and the humidity at 65%RH.
   b. The temperature for the spot-plating (and post-plating) reeling area shall be set at 25°C, and 27 – 28 °C for pre-plating and rubberize area.
   c. The temperature for the packaging cleanroom shall be set at 23°C and the humidity around 50%RH ±10 first for testing.
   d. The temperature for the storage area shall be set at 28°C and the humidity under 70% RH.
   e. Precision processing Zone (The temperature for jig grinding shall be set at 20°C, and 22°C for optical grinding with humidity around 60%RH±10).
   f. The temperature of rough machining area (grinding and milling) shall be set at 28°C.
   g. The temperature of milling and CNC machine center cutting machine shall be set at 28°C.
   h. The temperature of calibration laboratory shall be set at 20°C and the humidity around 55%RH ±5.
   i. The temperature of 3D coordinate measuring machine quality inspection room shall be set at 22°C and the humidity between 50 – 60% RH. The temperature of on-site quality inspection room shall be set at 26°C and the humidity under 65% RH.
   j. The temperature for bulk packaging area shall be set at 26°C and the humidity under 60% RH.
   k. The temperature for the data processing room shall be set at 23°C and the humidity under 60% RH.
   l. Parts of the humidity control areas may use dehumidifier.
   m. Reinforce entry control to keep the cold air from leaking and save energy.
   n. Request that 5S audit personnel include this inspection.

5. When procuring machineries, the corporation should consider the percentage of electricity consumption for large A/C system. High efficiency should be the basis for procurements such as the chiller:
   a. Electricity consumption for the chiller accounts for over 60% of the overall A/C electricity usage.
   b. Ice water delivery system, approximately 20%.
   c. Air-side or load testing system 20%.

   In the past, the machines purchased were mainly screw chillers. They were gradually replaced with centrifugal chillers, which are more efficient. For instance, when procuring the 600 ton chiller in 2010, efficiency and energy were the main factors for evaluation. Centrifugal chillers were chosen for their high efficiency. The same considerations applied for the procurement of the 250 ton chiller in 2011 and 450 ton chiller in 2013. Energy saving and high efficiency have become the main consideration.

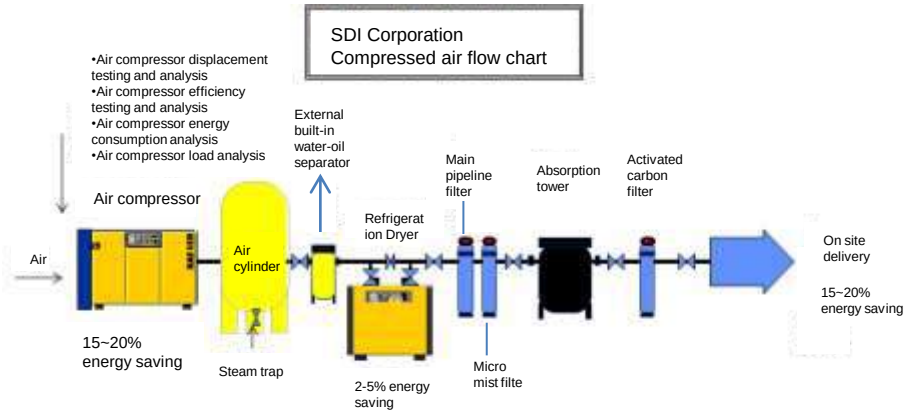
6. The corporation will also increase mechanical efficiency to reduce wear and tear, maintain and clean the coils inside the condenser to reduce heat conduction and increase the power of the chiller. Both measures will help the corporation reduce energy consumption and minimize further pollution to the environment and thereby achieve the goal of energy saving and environmental protection.

7. Turn off the lights (slogan), unplug, use energy saving light bulbs and LED light. Increase lighting efficiency and decrease excess tube light (as shown in the picture).

8. Energy saving should be the priority concern when procuring lamps: replace the conventional light bulbs with energy saving light bulbs, which will provide the same lighting with more energy saving, longer lifespan and more money saving. As shown in the picture.

Mercury vapor lamp　　T5 fluorescent lamp

9. Compressed Air System:



10. SDI's air compressing system is composed mainly with high performance German equipment and the suppliers are asked to conduct the following efficiency analysis:
    Test the performance of each machine. The corporation has been gradually replacing the air compressors with poor efficiency and conducting maintenance according to the manufacturer's maintenance manual so that the machines may operate at its optimal efficiency. The methods for the variable frequency are modified or added to allow stable energy supply that achieve the goal of energy saving. The stem traps that leak hazardous gas are replaced. In 2012, 15 were replaced to reduce pressure decrease, which can directly reduce energy consumption. SDI also modified the outlets from 0.025mm to 0.015mm under the premise of note affecting product quality. These are measures that allow effective use of energy in order to achieve energy saving.

順德工業股份有限公司——空壓機效能檢測分析總表
SDI Corporation - Table of Air Compressor Efficiency Testing and Analysis

Order	Plant	Machine Number	機型 Model	HP Rated Horsepower	kg/cm2G Tested Pressure kg/cm2G	Volts Average Voltage Volts	Average Power kw	Actual Airflow m3/min	HP Estimated Horsepower	Energy Consumption Ratio m3/min/HP	Airflow indicated by manufacturer m3/min	Volumetric Efficiency %	m3/min/HP Average m3/min/HP	Difference in Energy Consumption Ratio %	Note
1	SDI's Nantou Plant- Building D	1	HITACHI OSP-37UAII	50	5	220	31.8	5.307	42.62	0.1240	6.4	82.92	0.1280	96.87	Lower Volumetric Efficiency Lower Energy Consumption Ratio
2					6	221	34.9	5.244	46.7	0.1120		81.94	0.1280	87.50	
3					7	220	37.3	5.194	50	0.1039		81.16	0.1280	81.17	
4		2	HITACHI OSP-37UAII	50	5	217.6	32.6	5.331	43.69	0.1220	6.4	83.30	0.1280	95.31	Lower Volumetric Efficiency Lower Energy Consumption Ratio
5					6	218.3	35.1	5.27	47.05	0.1120		82.34	0.1280	87.50	
6					7	218	36.9	5.185	49.46	0.1048		81.02	0.1280	81.87	
7		3	HITACHI OSP-37UAII	50	5	221	31.7	4.962	42.49	0.1167	6.4	77.53	0.1280	91.17	Lower Volumetric Efficiency Lower Energy Consumption Ratio May be used as standby
8					6	222.3	34.1	4.908	45.71	0.1073		76.69	0.1280	83.82	
9					7	222	36.7	4.846	49.19	0.0985		75.72	0.1280	76.95	
10		4	HITACHIOSP-75UWLI	100	5	217.6	71.1	11.84	95.3	0.1240	6.4	95.44	0.1240	100.00	Volumetric efficiency and energy consumption ratio are moderate 8.44hp overload
11					6	217	75.9	11.66	101.7	0.1146		94.04	0.1240	92.41	
12					7	217	80.9	11.2	108.4	0.1033		90.34	0.1240	83.30	
13		5	KAESER DS201	150	5	216.6	106.7	18.56	143	0.1186	7.5(bar) 20.9 A Conservative Estimate 7(bar) 21.3	86.34	0.1420	82.52	Lower Volumetric Efficiency Lower Energy Consumption Ratio 9.9hp overload
14					6	217	112	18.37	150.1	0.1223		86.24	0.1420	86.12	
15					7	218	119.3	18.19	159.9	0.1137		85.38	0.1420	80.07	
16		6	KAESER DS201	150	5	217	111.3	19.52	149.2	0.1308		91.64	0.1420	92.11	Volumetric efficiency and energy consumption ratio are moderate 6.4hp overload
17					6	218	116.7	19.38	156.4	0.1238		90.99	0.1420	87.18	
16		7	KAESER DS201	150	5	391.3	107.4	19.04	144	0.1322		89.36	0.1420	93.09	Volumetric efficiency and energy consumption ratio are moderate 10.9hp overload
17					6	391	114.2	18.89	153.1	0.1234		88.69	0.1420	86.9	
18					7	391.3	120.1	18.71	161	0.116		87.85	0.1420	81.69	
16	(Building F)	8	KAESER DS201	150	5	384.3	102.5	19.11	137.4	0.1391		89.73	0.1420	97.95	Volumetric efficiency and energy consumption ratio are moderate 4.4hp overload
17					6	385.3	108.9	18.97	146	0.1299		89.04	0.1420	91.47	
18					7	386.3	115.2	18.79	154.4	0.1216		88.21	0.1420	85.63	
16		9	KAESER DS201	150	5	385.3	102.3	19.43	137.1	0.1417		91.22	0.1420	99.79	Volumetric efficiency and energy consumption ratio are moderate 6hp overload
17					6	385.3	109.4	19.26	146.6	0.1313		90.40	0.1420	92.46	
18					7	386.3	116.4	18.9	156	0.1211		88.73	0.1420	85.28	
16		10	KAESER DS241	175	5	388.3	130.5	24.35	174.9	0.1392	7.5(bar) 24 A Conservative Estimate 7(bar) 24.5	99.40	0.1400	99.42	Volumetric efficiency and energy consumption ratio are moderate 6hp overload
17					6	388.3	137.8	24.21	184.7	0.1310		98.80	0.1400	93.57	
18					7	387.6	145.3	23.66	194.8	0.1230		96.55	0.1400	87.85	
16		11	KAESER DS241	175	5	384	128.5	24.39	172.3	0.1416		99.56	0.1400	101.1	Volumetric efficiency and energy consumption ratio are moderate 21.7hp overload
17					6	385.6	135.4	24.25	181.5	0.1336		98.97	0.1400	95.42	
18					7	384.3	146.7	24	196.6	0.1220		97.93	0.1400	87.14	

11. With the corporate philosophy in mind, SDI complies with governmental policies on energy saving and fulfills its social obligations and responsibilities by increasing energy efficiency, reducing energy waste, and optimizing energy usage to increase corporate competitiveness and eventually increase the overall economic competitiveness for the entire country. This is SDI's devotion to the earth and the environment, an obligation and responsibility that should be shared among all citizens.

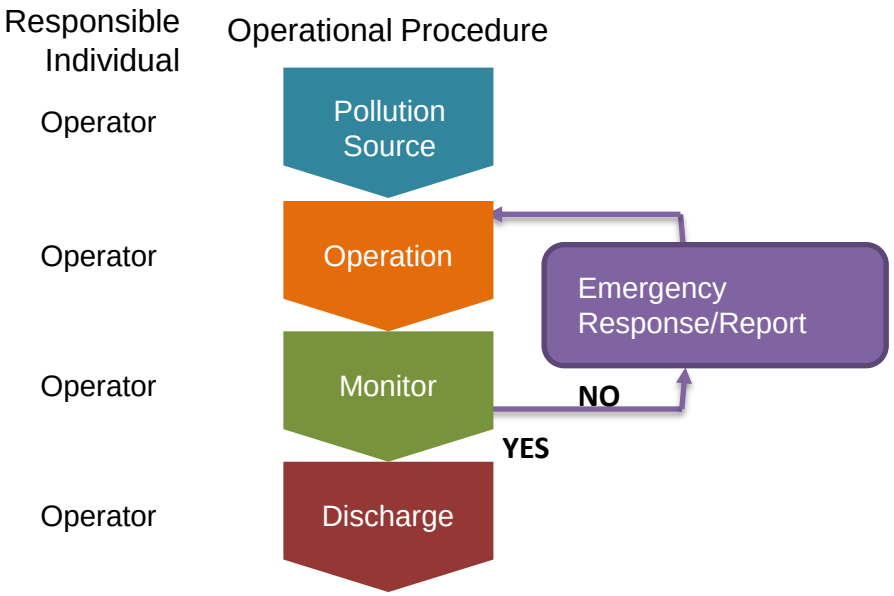
4. SDI Air Control and Management

4.1 Air Control (unit)

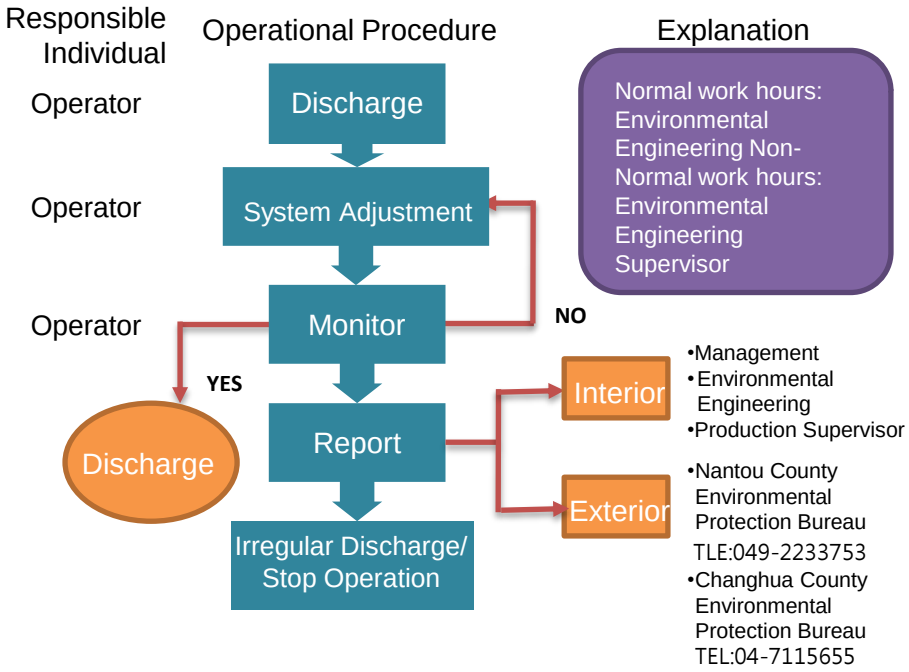
1. Environmental awareness has risen under the developing global economy. Kyoto Protocol and the stringent requirements EU places on the green industry have served as constant reminders of our duty to protect the earth. Such trends have brought reform to the structure of industry development and made the environmental protection technology more and more scientific. The combination of energy and resource productivity will be optimized to elevate the operational performance and achieve the goal of zero pollution so that the corporation may head toward its goal of sustainability. SDI's awareness of this duty came early during the production process, especially protecting the natural environment. Therefore, SDI is working toward the corporate culture of clean production, reduced waste during the manufacturing process and pollution-free industry.
2. SDI abides by the above philosophy, comply with the government environmental policies and fulfill its legal and social obligations. SDI has also implemented the air management policies under ISO-14001 to implement environmental management, create quality work environment and protect employees' mental and physical health.
3. To ensure that the point source pollution discharged by SDI is within the scope of governmental regulations, boiler discharge of PAR, SOX and NOX; scrubber discharge of H2SO4 and HCl; activated carbon adsorption tower discharge of dichloromethane and hydrocarbon emissions are included.
4. Responsibility:

Pollution Source Equipment	Operation	Monitor/Discharge	Emergency Response/Report
Boiler	Operator	Operator	Environmental Engineering Department/Management Division
Scrubber	Operator	Operator	Environmental Engineering Department/Management Division
Activated carbon adsorption tower	Operator	Operator	Environmental Engineering Department/Management Division

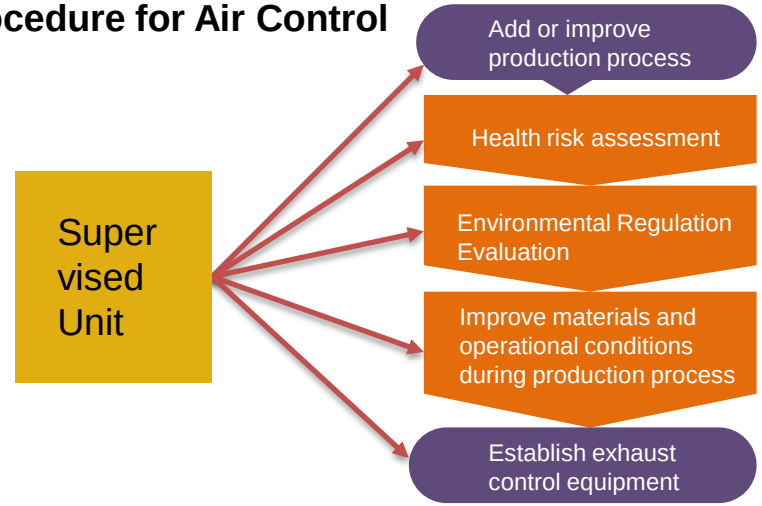
4.2 Control Procedure: Operational Procedure for Air Control



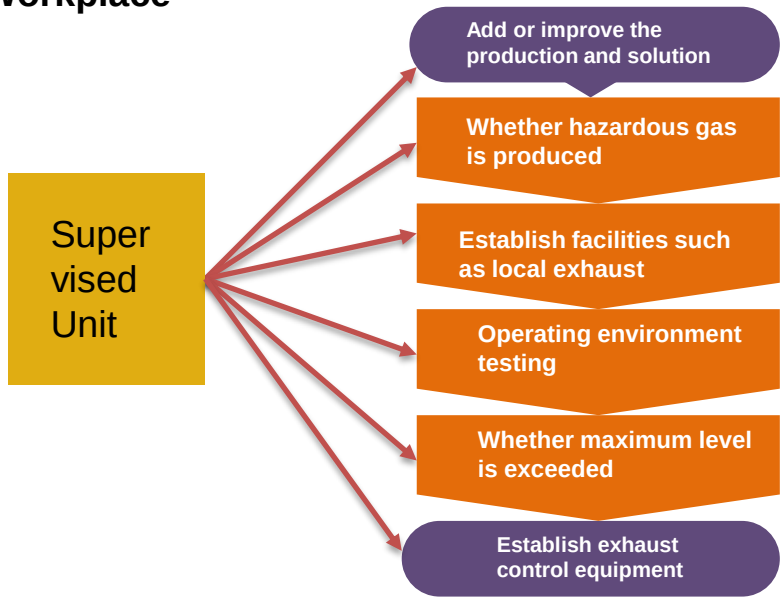
4.3 Flow Chart for Emergency Response and Report



4.4 Procedure for Air Control



4.5 Control Framework for Hazardous Gas at Workplace



4.6 Principles of Air Control

1. Hazardous operations shall be enclosed and automated with isolated local exhaust.
2. Local exhaust + mist suppressant or covered plating tank.
3. Warning signs shall be placed in hazard prone areas.
4. Employees working in hazardous areas shall be equipped with respiratory protective equipment.
5. Establish complete testing plan for the operating environment.
6. Fully implement the testing of hazardous operating environment regularly.
7. All units may coordinate with the Environmental Engineering Department for assistance when encountering difficulties for the testing of operating environment and air control.

4.7 Air Control Regulations

1. Indoor Air Control Regulations
   a. The air quality of the operating environment shall comply with the labor operating environment stipulated by the Council of Labor Affairs.
   b. Each unit shall designate personnel to be in charge of emergency report and contact when abnormal odors are detected at the operating environment.
   c. As intended in Article 14 of the Labor Safety and Health Act, self-inspection shall be conducted in areas equipped with local exhaust. The inspected items, frequency and related form shall be stipulated in separate health and safety implementation standards.
   d. Each operation shall compile the data collected from each operating environment testing as a reference for evaluating the performance of air control equipment.
   e. Each unit shall keep in close contact with the chartered hospitals. When the health checkup confirms that employees' health conditions are caused by poor work environment, such cases shall be tracked and filed.

2. Outdoor Air Control Regulations
   a. Each flue opening shall be tested for pollutants regularly. The frequency and substance to be tested shall be in accordance with the applicable environmental regulations.
   b. Low sulfur fuel shall be used for the boiler.
   c. The burning of raw materials or waste materials in open air within the Plant is strictly forbidden.

4.8 Equipment for source pollution: The Plant has been approved by the competent authority and issued "Permit for Operating Point Source Pollution"

According to the regulation, four areas shall be enforced:

1. Procedure for Boiler Production – Boiler discharges into the air 【PAR, SOX, NOX】
2. Procedure for Manufacturing Lead Frame – Scrubber discharges into the air 【H2SO4】
3. Procedure for Metal Plating – Scrubber discharges into the air 【HCl】
4. Procedure for Cleaning Metal Surface – Activated carbon adsorption tower discharges into the air 【Dichloromethane】

Scrubber

Activated carbon adsorption tower

Exhaust Line

4.9 Monitoring/Discharge

1. The Plant shall monitor in accordance with the regulations set forth within the operational manual. The discharge shall comply with the Air Pollution Control Act under any circumstances.

2. In accordance to the regulations set forth by the competent authority, the testing of pollutant discharge shall be conducted once every year by registered testing organization and the report from such testing shall be maintained for three years for review.
3. Safety operation platform should be established at the point source pollution discharge channel at the Plant to allow the testing to proceed smoothly.
4. When applying for testing, the Environmental Engineering Department shall submit the proposal for testing to Nantou/Changhua County Environmental Protection Bureau five days prior to the testing and submit the testing result to the Bureau within fifteen days.
5. Level B personnel shall be designated for the task of air pollution prevention in Nantou Plant.

4.10 Emergency Response

1. When operators found irregular emissions, adjust the equipment to return to the normal condition immediately. When discovering massive pollutant discharge, follow the “Operational Procedure for Emergency Response”
2. The operator shall immediately notify applicable units within the plant. When necessary, stop all or partial operations.
3. Upon receiving notifications for poor air quality from Nantou/Changhua County Environmental Protection Bureau, follow the “Operational Procedure for Emergency Response”.

5. Staff Care

5.1 Staff Training and Development

Employees are SDI's most important assets. Quality staff is the key for SDI's 60 years of success. Continuous investment in staff training during the different stages of corporate development has set the foundation for SDI's sustainability. SDI has been devoted to improving employee's basic skills and increasing corporate competitiveness. In recent years, SDI has been focusing on the following training mechanisms:

1. Establishment of Employee's Professional Skills

SDI has been devoted to the training of talents, which is evident in the increasing resources dedicated to training and staff's training hours. Recently, SDI shifted the focus to basic trainings on various skills and functions. The training system has also been re-analyzed and become more specified according to the responsibilities and the standard procedures of each department.

▼ Table 1: Staff Education Expenditure Unit: NTD

Year	2008	2009	2010	2011	2012
Expenditure on Skill Training	2,052,722	1,057,103	1,365,141	2,395,894	3,680,721

▼ Table 2: Staff Training Hours

Year		Classroom Courses	Online Courses	Total
2008	Training Time	13,006.5 Hours	920.2 Hours	13,956.7 Hours
	Number of People Trained	2,321 Persons	2,875 Persons	5,196 Persons
2009	Training Time	4,924.5 Hours	1,060 Hours	5,984.5 Hours
	Number of People Trained	1,249 Persons	3,367 Persons	4,616 Persons
2010	Training Time	7,419 Hours	715.3 Hours	8,134.3 Hours
	Number of People Trained	1,117 Persons	1,546 Persons	2,663 Persons
2011	Training Time	10,421 Hours	875.6 Hours	11,296.6 Hours
	Number of People Trained	1,899 Persons	2,169 Persons	4,068 Persons
2012	Training Time	8,321 Hours	850.4 Hours	9,171.4 Hours
	Number of People Trained	1,463 Persons	1,855 Persons	3,318 Persons

2. Establish a friendly learning environment

SDI has a 24-hour production line. As the corporation heads toward multi-national operation, it is important to enable the employees to learn easily and duplicate the knowledge they learn rapidly. Therefore, SDI has introduced online learning so that employees can learn anytime they wish to. The curriculum focuses on high frequency courses, such as training courses for new staff and general courses applicable for all staff. The data on course completion from the past few years is as follow:

▼ Table 3: Hours of Online Courses (Total) Unit: Number of Courses

Year	2008	2009	2010	2011	2012
Online Courses	28	50	73	103	114

▼ Table 4: Number of Documents

Year	2010	2011	2012
Number of Documents	474	968	1096

3. Improve international communication capability

In addition to the overall business revenue, it accounts for 88% of the total revenue. The Electronics Group even reached 93%. In order to connect with international trends and respond to clients requests in a timely manner, SDI needs R&D and Production staff with communication skills. Thus, in addition to basic grammar, vocabulary and TOEIC courses, SDI also offers one on one English lessons and hires native English and Japanese teachers to provide the most practical training that address the staff's needs.

4. Establish corporate knowledge management system

SDI applied for the knowledge management program from Industrial Development Bureau of Ministry of Economic Affairs in 2008, through which SDI conducted a systematic search of the corporate knowledge. In 2011, SDI received the honor of outstanding vendor for promoting knowledge management and received funding from Industrial Development Bureau for the second time, which allows SDI to pass down its know-how to its employees to help build a solid foundation for them.

5. Combine staff improvement with promotion

In addition to provide skill improvement trainings and in order to motivate staff to grow, SDI's staff advancement system is based on the completeness of employee's skill sets. Staff's passing rate has greatly improved in recent years and the number of staff promoted is also gradually increasing. It is one of SDI's social responsibilities to cultivate talents for the corporation and the society. In order to ensure the effectiveness of the training system, SDI participated in Taiwan Training Quality System (TTQS) twice and was awarded the silver medal by Council of Labor Affairs both times. Award recognition from the government encourage SDI to devote more efforts in the nourishment of corporate professionals.

■ Silver Medal, TTQS

■DI provides diverse courses covering many subjects

5.2 Occupation Health and Safety

1. As the industry structure changes, the issue of labor health and safety is no longer confined to certain fields. The health and safety technology has also improved. Therefore, it is important for a corporation to recognize the risks in the workplace in order to prevent any risk factors that might cause injury or even death among the people in this environment and come up with solutions. A corporation is obligated to protect the lives of its employees. SDI provides safe equipments, well thought out operational procedure and protection as well as sound employee training, education and health checkup to minimize occupational hazards and accidents and achieve the ultimate goal of “hazard free, worry free”.
2. SDI complies with regulations including Labor Safety and Health Act and its Enforcement Rules; Regulations Governing Labor Safety and Health Facilities; Labor Inspection Act and its Enforcement Rules, Operational Guidelines for Reinforcing Labor Health and Safety, Labor Standards Act and its Enforcement Rules; Safety and Health Facility Standards. In addition, pre-employee physical and labor health and safety educational training are provided to all new employees. For in service employees, regular health checkups are also conducted and safety protection equipment is provided for those who work on the risk-prone operations. The health checkup targets specific conditions for health management supplemented with educational training on health and safety. For instance, the training include the use and management of dangerous objects, how to avoid unsafe actions during operation, traffic safety and fire safety training. Over 880 people participated received health checkup provided by the SDI in 2012, 210 people received physicals for occupation related illness and 221 people took part in the training for fire safety, health safety and health promotion.

3. In order to effectively prevent occupational hazard and related illnesses, SDI obtained certification from OHSAS-18001 in 2006 and established 5S audit team to regularly inspect the work environment and promote health and safety. Occupational health and safety management systems such as OHSAS-18001 and CNS 15506 are integrated to conduct internal audit. SDI also commissions British Standards Institution (BSI) to conduct external audit annually on environmental safety, occupational safety, health safety and fire safety to supervise the environmental health and safety of the entire corporation and improvement. It is SDI's goal to achieve zero workplace hazard.

4. SDI adopts preventive measures for occupational injuries by correcting the root causes to avoid repeating occurrences. The followings are the 2012 statistics on occupational injuries (including on the way to and from work) as required by the environmental health and safety management system:

Evaluation Category / Plant	Disabling Injury Frequency Rate (number of disabling injuries/1,000,000 employee hours)	Disabling Injury Severity Rate (number of days lost to disabling injuries/1,000,000 employee hours)
Changhua Plant	1.15	0.52
Nantou Plant	0.45	2.23

5. SDI has been actively promoting labor health and safety and is selected by the Council of Labor Affairs of Executive Yuan as the recipient of awards including 2011 Outstanding Award for National Labor Health and Safety Collaboration Organization, 2010 Outstanding Unit for Labor Health and Safety and 2011 Outstanding Staff Performance for Labor Health and Safety.

6. SDI will continue to promote health and safety policies.
   a. DI will abide by the health and safety regulations set forth by the government as well as client requests in relation to such matters.
   b. SDI is committed to prevent injuries and illness and will continue to eliminate all hazardous risks to ensure workplace health and safety.
   c. SDI will promote trainings and activities related to health and safety management and continue to establish and review health and safety goals.
   d. SDI will establish standard procedures for health and safety technology, equipment, measures and documentation to effectively control the risk factors and reduce accidents.
   e. SDI will create the systems for health and safety operation audit as well as continuous improvement and evaluation to ensure the effectiveness and adequacy of the health and safety management system.
   f. Promote health and safety policies in and outside the organization to make everyone aware of the obligations toward workplace health and safety.
   g. Fulfill corporate social responsibilities, ensure the safety of suppliers and contractors inside the plant and provide them with adequate healthy and safe resources.
   h. Health and safety directions: Comply with the regulations, hazard prevention, zero injuries and zero occupational hazards.

6. Social Participation

6.1 Fulfill Corporate Social Responsibility

As a successful corporation with billions in annual revenue, SDI has never forgotten its social responsibilities. In 2008, SDI Foundation was established. With universal love as its mission, the foundation has been providing assistance to disadvantaged children and groups through donations, charity events and volunteer service. Organizations which have received assistance from the Foundation include Erhlin Happy Christian Homes, Taiwan Fund for Children and Family, Changhua Branch, Changhua Tze Sheng Children's Home and National Hemei Experimental School. SDI Foundation sets aside funds in its annual appropriation to sponsor the budget, musical instruments and health equipments for the disadvantaged groups. At its annual year-end banquets, SDI invites Erhlin Happy Christian Homes and Changhua Tze Sheng Children's Home to perform with the employees so these individuals may feel the warmth from the society and create different values for their lives. SDI also established a set of training and cultivation system that is tailored to the employee's strengths. In addition, SDI also set up emergency fund for its employees to fulfill its goal of becoming a corporation that spreads happiness. "We don't worry about the headhunters. Our employees enjoy a stable environment here, which allows them to develop freely. In addition, SDI always awards them according to their performances."




6.2 Volunteer Training and Help the Disadvantaged

SDI Foundation established its volunteer group in July 2012 and encourages its staff and their children to volunteer at Changhua Tze Sheng Children's Home during summer vacation where they may provide care, companion and advices for the children and teenagers at the Children's Home. The hours of volunteer service has reached 2000 and volunteers from SDI has provided services for single parent families, high-risk dysfunctional families and families with physically and mentally disabled children.


6.3 Give Back to and Interact with the Community

SDI has always been a firm believer of applying what we benefit from the society toward the society. We participate in local community services and activities, including greening the community, community cleanup, holiday celebrations and Double Ninth Festival to celebrate the elders in the community. SDI works with the community in the promotion of occupational safety and health, energy saving and carbon reduction. Meanwhile, conservation education starts small. SDI also works with the elementary schools to educate school children about water, electricity and energy conservation as well as carbon reduction to keep earth a healthy environment.