Summary

Part I – Introduction

The report was prepared to show the supply opportunities and market basics for the so-called BPSFC's:

- **B**lanks (including Laser Blanks)
- **P**ressings
- **S**tampings
- **F**inished Products and
- **C**omponents.

The possibility of supply to this market segment for South African companies was researched in the following areas of the world:

- Western Europe
- North America
- Asia

1,350 companies have been contacted by telephone, from which 75 companies were selected and prepared to accept visits for discussions.

The companies selected were found in the following end-use segments of the stainless steel market:

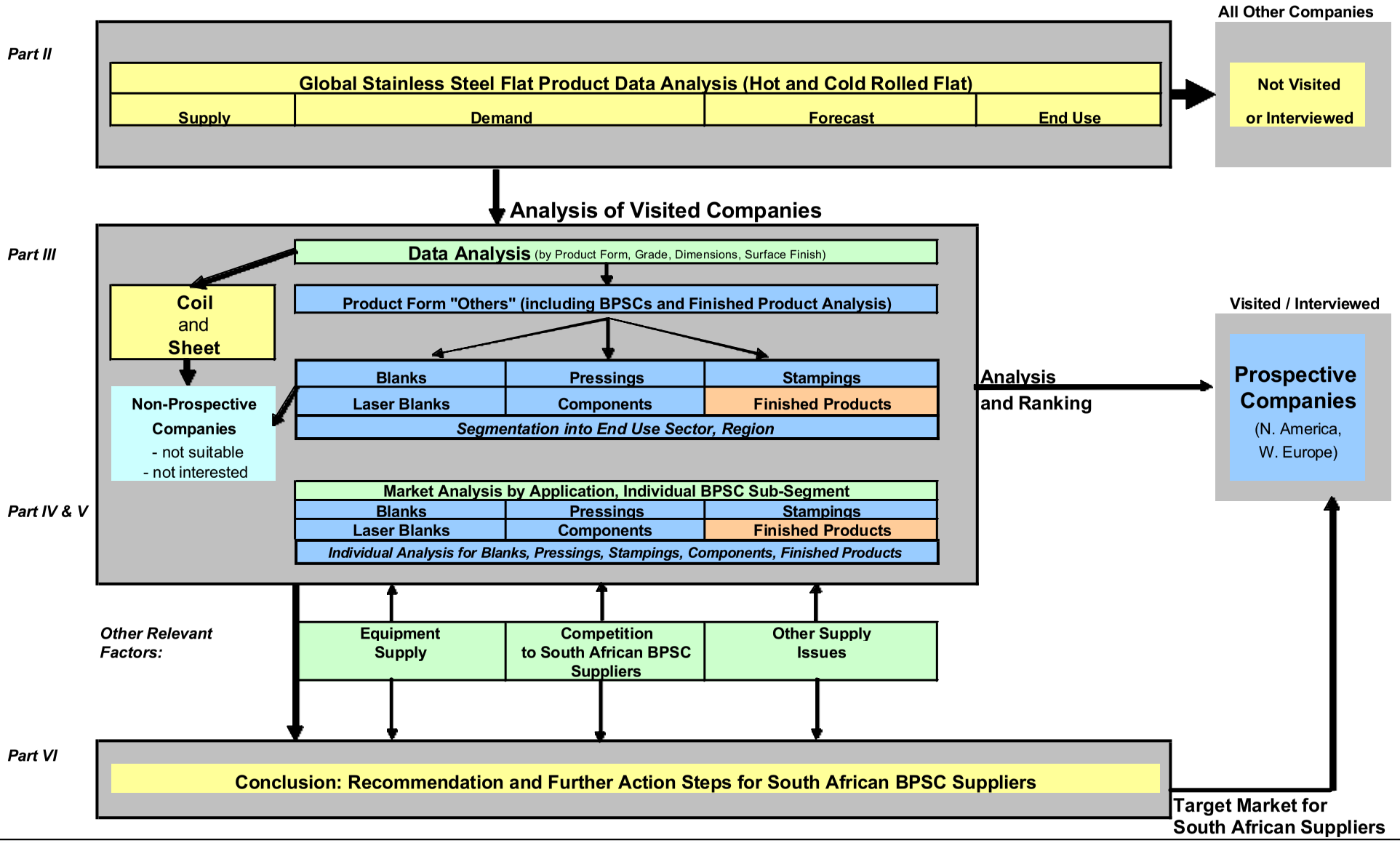
- Metal Goods
- Electro & Electronic
- Engineering
- Building & Construction.

The graph on the next page depicts the „Basic Study Concept“.

Part II – Industry Background

The Supply & Demand Balance of **chapter 1.1** gives an overview of the major stainless steel markets. It is interesting to note, that the area of Europe at present is worldwide the most important source for stainless steel – it is exporting between 700 – 800,000 t per year into markets like United States, China/Hongkong and selected other countries outside its own area.

Basic Study Concept

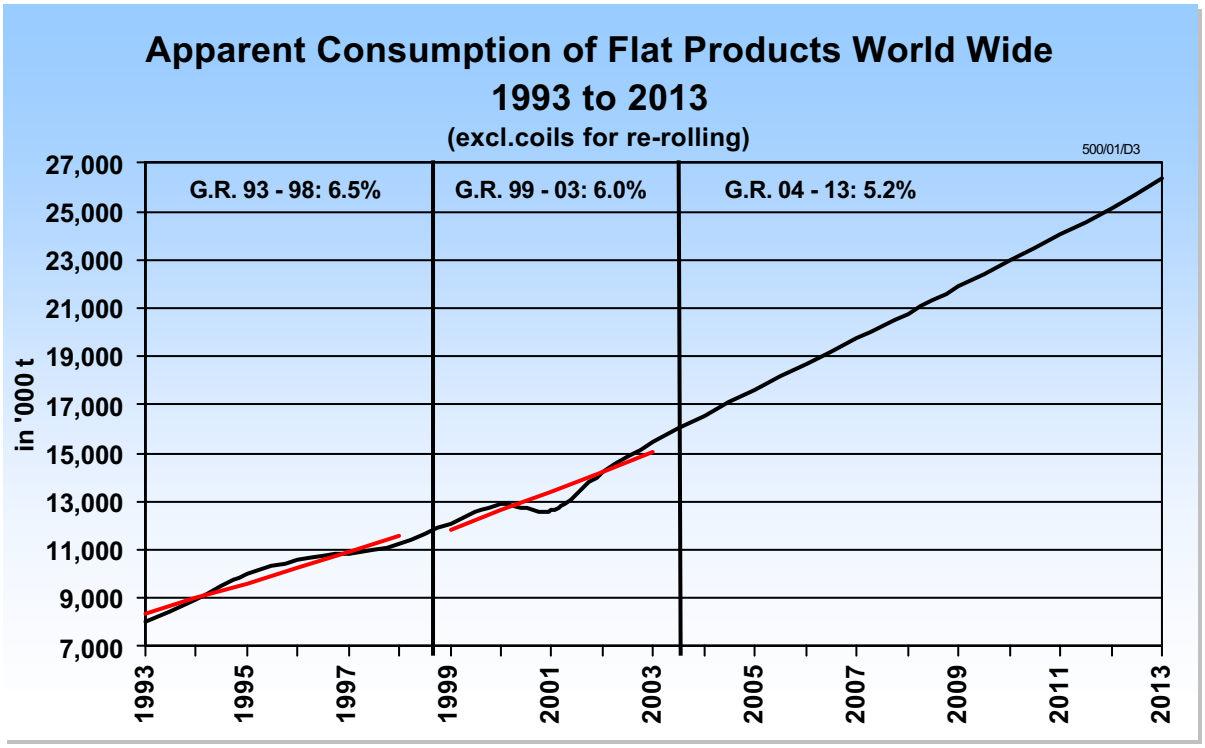


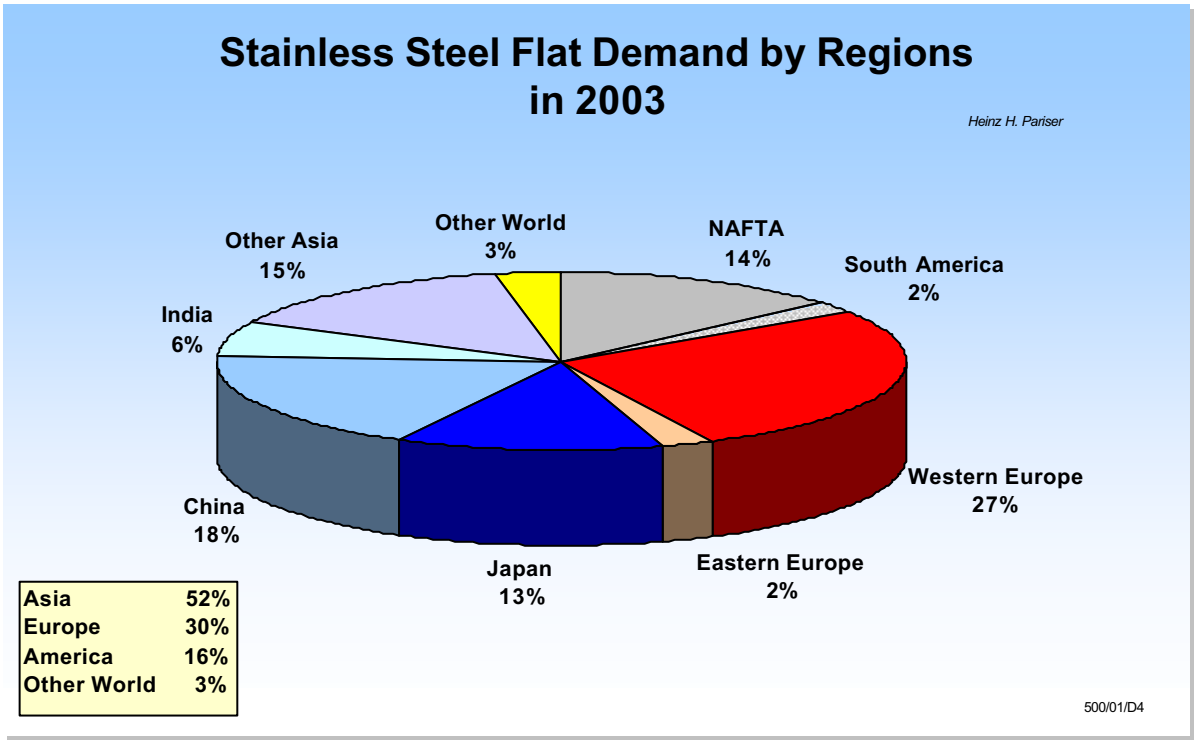
Market Statistics for SS Flat Products (excluding hot rolled coils for re-rolling)

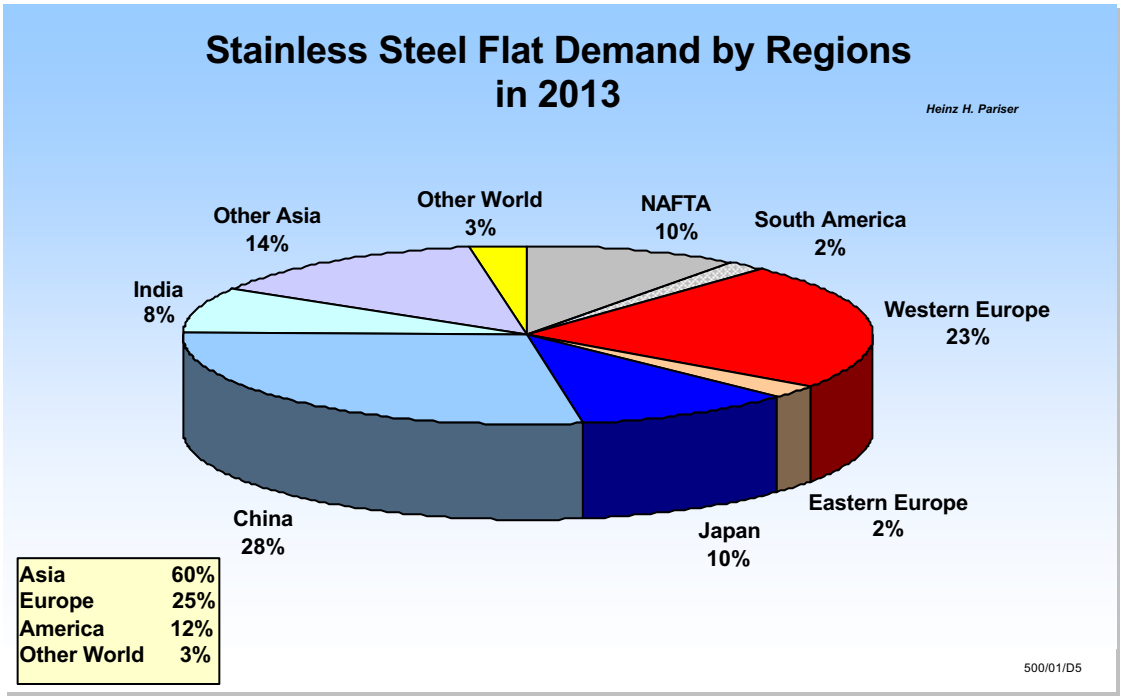
500/16/T9

Country/Region		2002					2003				
		SS Flat Products in '000 t									
		Supply	Demand	Net Import	Net Export	SS Ratio (%)	Supply	Demand	Net Import	Net Export	SS Ratio (%)
America	USA	1,534	1,668	134		91.9	1,612	1,721	109		93.7
	Other NAFTA	279	347	68		80.3	285	380	95		75.1
	Other America	280	245		35	114.4	398	303		95	131.5
	Total America	**2,093**	**2,260**	**167**		**92.6**	**2,295**	**2,403**	**108**		**95.5**
Europe	France	694	353		341	196.7	689	383		306	180.1
	Germany	959	905		54	106.0	988	932		57	106.1
	Italy	765	1,038	273		73.7	777	1,057	280		73.5
	United Kingdom	291	294	3		98.8	280	294	14		95.1
	Spain	759	485		274	156.6	779	538		241	144.8
	Other EU	1,482	647		835	229.1	1,568	704		864	222.8
	Other W. Europe	0	257	257		0.0	0	288	288		0.0
	E. Europe	139	327	188		42.5	154	379	225		40.6
	Total Europe	**5,089**	**4,306**		**783**	**118.2**	**5,235**	**4,574**		**661**	**114.4**
Asia	Japan	2,502	1,812		691	138.1	2,574	1,945		629	132.3
	China/Hong Kong	1,269	2,595	1,326		48.9	1,479	2,819	1,340		52.5
	India	829	853	24		97.2	865	923	58		93.8
	Taiwan	1,018	555		463	183.6	1,124	654		470	171.8
	Thailand	150	127		23	118.3	170	129		41	131.8
	South Korea	1,181	958		223	123.3	1,286	1,083		203	118.8
	Other Asia	20	350	330		5.7	18	413	395		4.4
	Total Asia	**6,969**	**7,249**	**280**		**96.1**	**7,516**	**7,966**	**450**		**94.4**
Middle East		0	127	127		0.0	0	161	161		0.0
Africa		411	241		170	170.4	475	214		261	222.0
Australasia		0	93	93		0.0	0	104	104		0.0
Total Flat		**14,562**	**14,277**		**285**	**102.0**	**15,521**	**15,422**		**99**	**100.6**

The apparent consumption has been forecast in **chapter 2.** A worldwide growth in demand of 5.2% in average is expected for the years 2003 to 2013. It is however, expected that over these years the structure of demand will change considerably with China taking up some 28% of all stainless steel used by 2013.







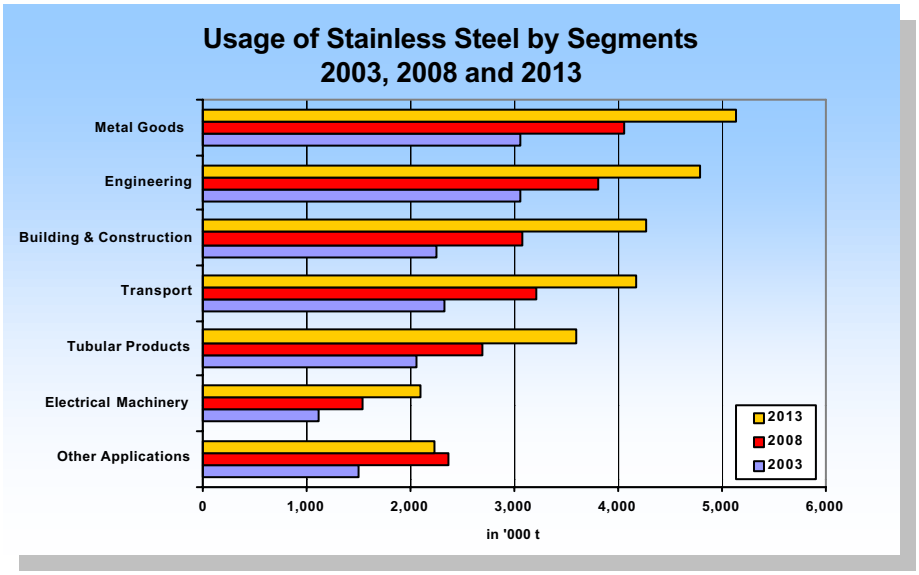
Detailed forecast tables show the development.

In **chapter 3** the end uses of stainless steel are pinpointed for the years **1993 to 2013** in a detailed table on page 24. The breakdown of the years 2003 and 2013 compare as follows:

	2003	2013
Transport	*15.1*	*15.9*
Electronics	*7.3*	*8.0*
Engineering	*19.9*	*18.2*
Building / Construction	*14.6*	*16.2*
Tubular Products	*13.4*	*13.7*
Metal Goods	*19.9*	*19.5*
Others	*9.8*	*8.5*
Total	**100.0**	**100.0**

The expected development is also depicted in the this graph:

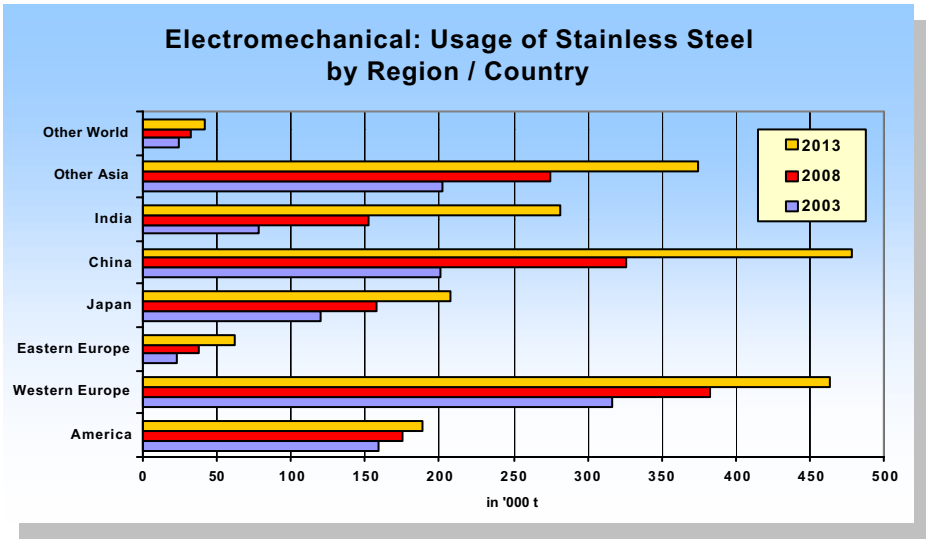
Per Capita demand is discussed in **chapter 3.1.**



In the **chapters following 3.2.1** the development by market segment is highlighted:

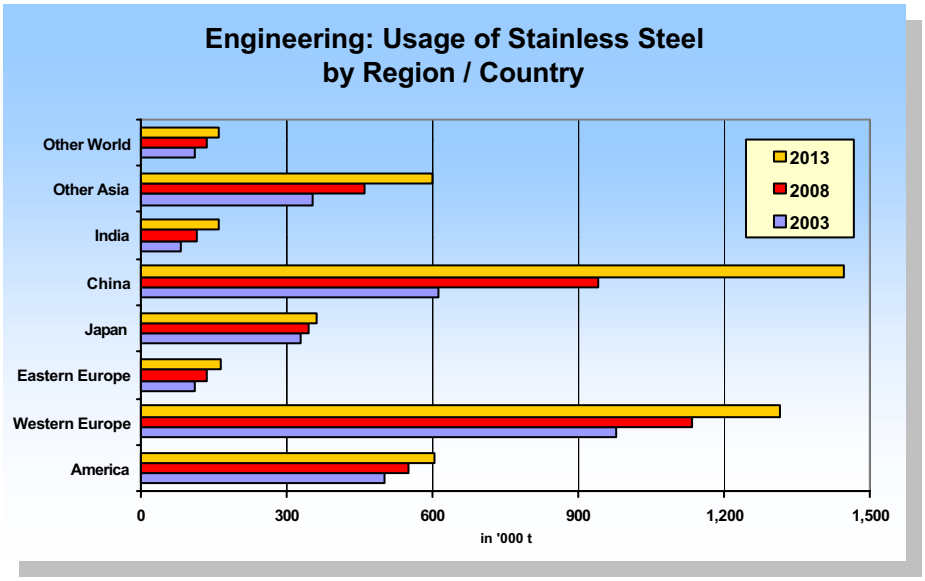
- **Electromechanical/Electronic**

It is expected that the growth in this sector will be around 6% in the forthcoming ten years. The fasted growing area should be Asia (8.1%), with China (8.0%) and India (14.1%) as the peak demand areas. In Europe a similar development is expected only in the countries of the East (9,5%) and „other" European countris (6.1%). The following graph shows the development in tonnage terms.



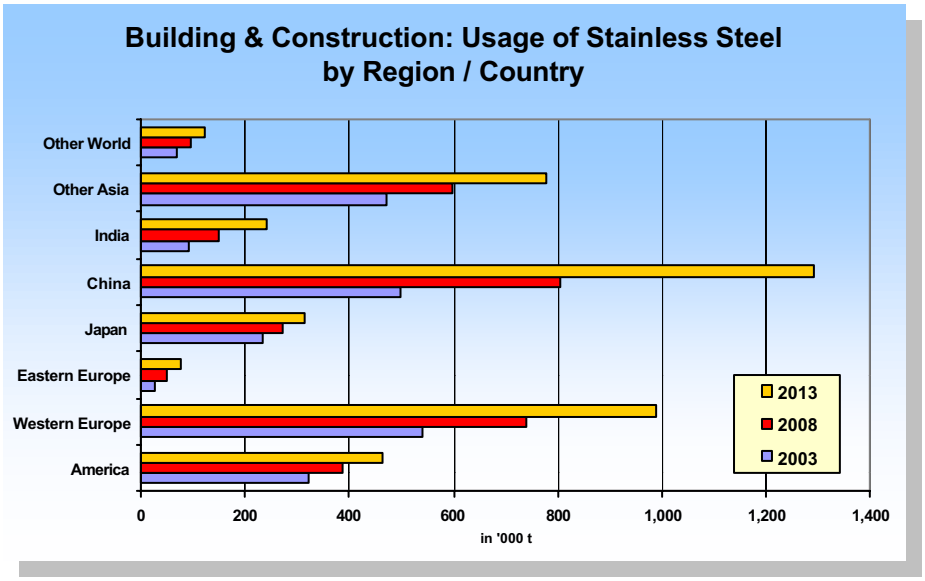
- **Engineering**

A similar development can be expected here – with the overproportional growth rates in China/India (9%/6.8%). Other areas of the world in comparison show only a low average percentage growth (Europe 3.1 %, United Stataes 1.8%). However, in these old established industries the base tonnage is already quite high, so that the increase in terms of tonnage is also considerable (see following graph). Overall growth in this segment is estimated at 4.6%.



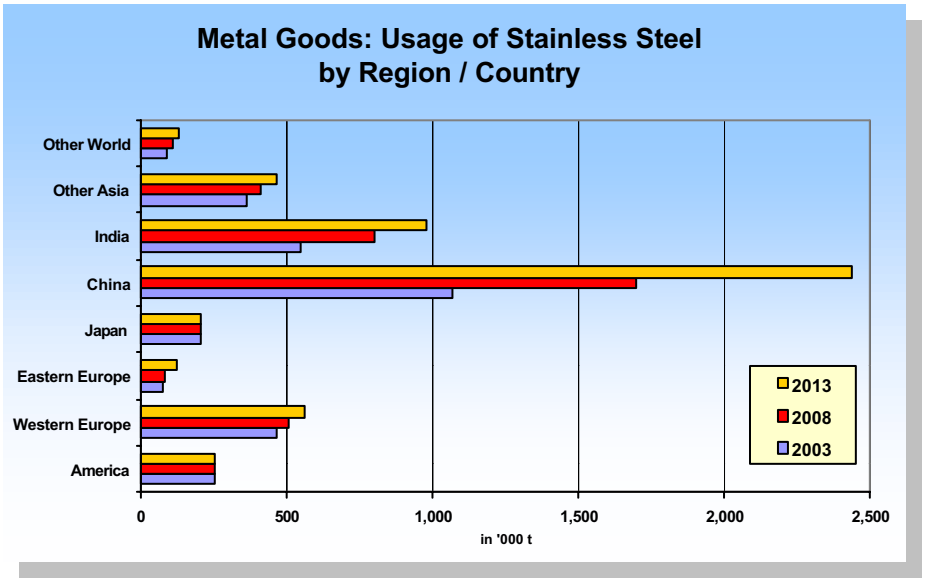
- **Building & Construction**

This stainless steel market is again one on which most expectations are laid. The overall forecast shows a possible growth of 6.5% worldwide, in which this time also the European market is expected to partake with a growth above 6% per year until 2013. Again, Asia with China and India would play the most important role, while the market growth of the US/North American area is not expected to show a similar development (3.8%).



- **Metal Goods**

This market without doubt is dominated by Asia, and the countries apart from Japan are expected to nearly double their demand in this segment in the 10 years to come. The according graph speaks for itself.



Part III – Analysis of Company Information

Having set the scene in the first two parts of the report, Part III now gives the background to the preparations of the visits and the visits themselves.

In the preparations 1,350 companies were contacted, of which 778 responded, of which again 78 were prepared to answer the questions – 75 in a personal visit. These 75 companies were located in the areas of North America, W. Europe and Asia. Names of the companies are given in the next table:

Visited Companies by Area / Country

500/15/T1(4)

North America	Asia	Western Europe		
- United States	*- China / Hong Kong*	*- Italy*	*- Germany*	*- United Kingdom*
Autofry	Artsstar	Alessi	Blanco	Alumask Grundy
Beverage Air	Chigo	Becchetti	Blefa	Counterline
Bon Chef	Kangbao	Candy	Blomberg	GDA
CDC	Rixing	Electrolux	Hupfer	Hiram Wild
Elkay	Rongsheng	Enofrigo	Krones	Olympic
Insinkerator	Wah Keung	ELICA	Meiko	Pland Stainless
Lambertson Industrie	Wei Yit	Foinox	Mueller	Viscount
Marlo Manufacturing	*- Malaysia*	IME	Pott	*- Netherlands*
MG Newell Corp.	BT Engineering	LSI	Rational	ATAG
Moyer Diebel / Champion	Jinhui	Merloni	Rösle	Hendi
National Bar Systems	Juramatics	Ronda	Schmolz & Bickenbach	Ifö-Kampri
Perlick Corporation	Kim Ban	Smeg	Schrader	Roba
Polar Ware	*- South Korea*	Whirlpool	Wiegand (GEA)	SSP Lichtenvoorde
Spartanburg Stainless	INI Steel	Zani	*- Switzerland*	
Vollrath Company LLC	Tong Yang Moolsan	*- France*	Franke	
Wells / Bloomfield		Charvet	Forster	
		Fours Fringand	Hamo	
		SEB	Stöcklin	
Total 16	Total 13	Total 46		

The **Synopsis of Visits** gives an overview on the companies, their product line as well as stainless steel usage. It also points out which companies were not interested in the idea of being supplied with BPSFC's.

- **Western Europe**

Of the 46 companies visited, only 24 showed an interest in the BPSFC opportunities. The table with the details follows on the next page.

	Prospective Customers	Not Interested
Italy	Alessi	Becchetti
	Candy	Elica
	Electrolux	Foinox
	Enofrigo	IME
	Merloni	LSI
	Smeg	Ronda
	Whirlpool	Zani Serafino
France	Charvet	Fours Fringnand
	SEB Group	
Germany	Blanco	Blefa
	Hupfer	Blomberg
	Meiko	Krones
	Rational	Müller
	Rösle	Pott
		Schmolz+Bickenbach
		Schrader
		Wiegand (GEA)
Netherlands	ATAG	Roba
	Hendi	
	Ifö-Kampri	
	SSP Lichtenvoorde	
Switzerland	Franke	Hamo
	Forster	
	Stöcklin	
UK	Alumask Grundy	GDA
	Counterline	Hiram Wild
	Pland Stainless	Olympic Catering
		Viscount Catering
TOTAL	**24 Companies**	**22 Companies**

- **North America**

Out of sixteen, ten companies were open to discussion on the BPSFC subject (as shown in the next table).

	Prospective Customer	Not Interested
North America	Autofry	Elkay
	Beverage Air	In-Sink-Erator
	Bon Chef	MG Newell
	CDC	National Bar Systems
	Lambertson	Perlick
	Marlo	Spartanburg Stainless
	Moyer Diebel	
	Polar Ware	
	Vollrath	
	Wells / Bloomfield	
TOTAL	**10 Companies**	**6 Companies**

- **Asia**

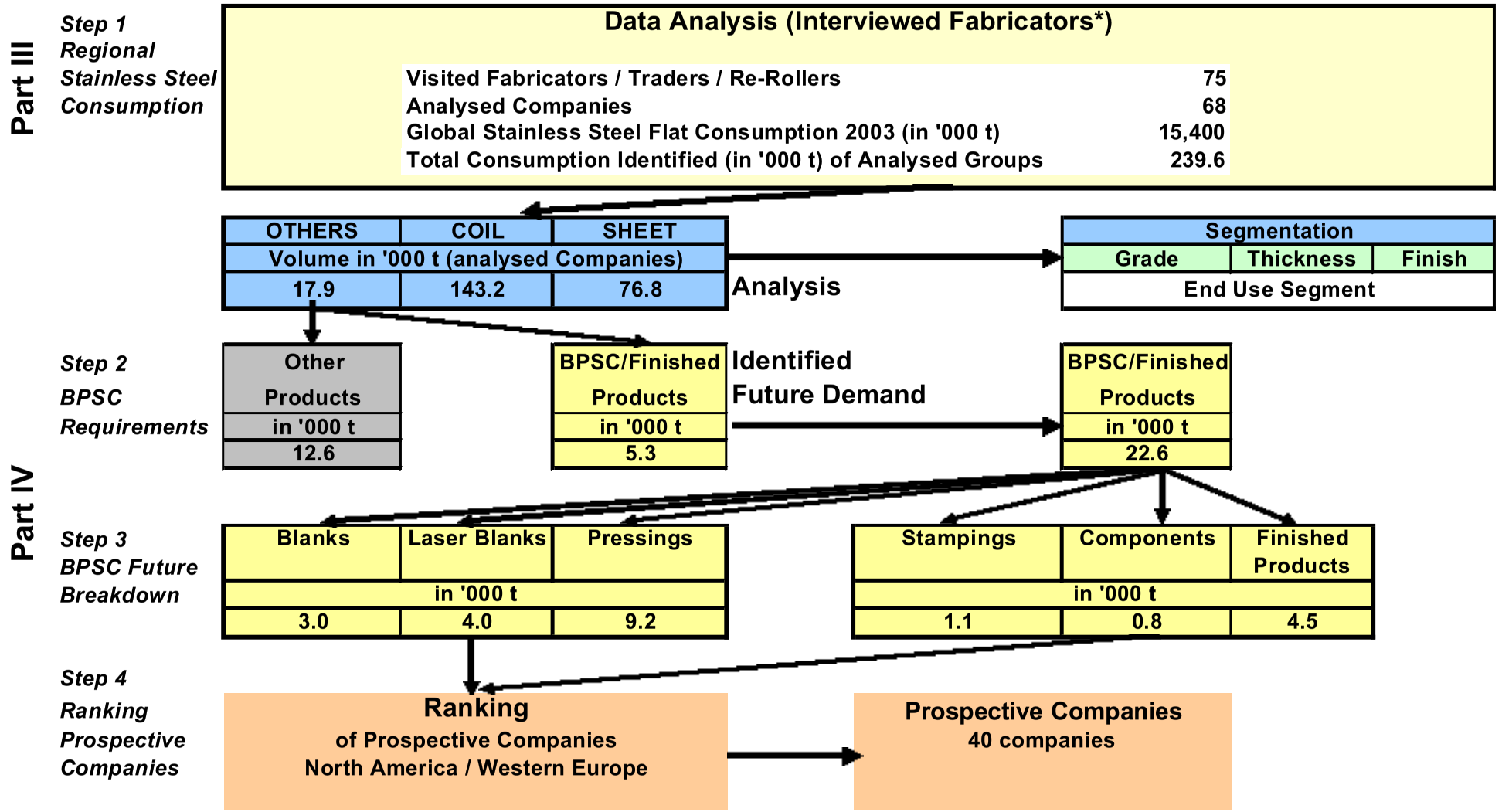
The visits to Asian companies were done with the knowledge that South African companies would possibly not be able to offer them any advantages in the BPSFC market but rather compete against them in the world market. Therefore it was not astounding that none of the companies visited showed any interest in offers for supply from South Africa, but rather tried to find opportunities to export to South Africa themselves. Details on these visits are not included in this report but will be found in the special report section made available to IDC/SASSDA/DTI after the visits. The following table gives the names of the companies visited:

	Prospective Customer	Not Interested
China / Hong Kong		Artsstar
		Chigo
		Kangbao
		Rixing
		Rongsheng
		Wah Keung
		Wei Yit
Malaysia		BT Engineering
		Jinhui
		Juramatics
		Kim Ban
South Korea		INI Steel
		Tong Yang Moolsan
TOTAL		**13 Companies**

The „Company Demand Analysis“ has been done on the basis of 75 overall visits respectively of the 40 companies that showed interest in being supplied with BPSFCs. The structure of the analysis, which **stretches from Part III/Chapter 3 into Part IV** of this report is shown in the following graph.

Basic Structure of Part III & IV

500/20/T1



*) selected fabricators excluding traders and producers

The companies visited use alltogether some 240,000 t of stainless steel per year. The product mix is shown in the next table, followed by a further breakdown into the enduse markets.

Consumption Structure of Interviewed Companies

Product Mix (in '000 t)									
Product Form		Grade		Thickness		Surface Finish		End Use	
Item	in '000 t	Item	in '000 t	Item	in '000 t	Item	in '000 t	Item	in '000 t
Coil	*143.2*	*304*	*137.3*	*0.5 - 0.7*	*133.8*	*No.1*	*2.3*	*Metal Goods*	*79.1*
Sheet	*76.8*	*316*	*3.2*	*0.8 - 1.0*	*46.1*	*IIIb*	*4.5*	*Electro*	*126.4*
Others	*17.9*	*430*	*88.5*	*1.2 - 2.0*	*42.7*	*IIIc*	*78.8*	*Engineering*	*11.6*
		Others	*8.9*	*2.5 - 4.5*	*15.3*	*IIId*	*136.6*	*Building &*	
						No.3/4	*15.7*	*Construction*	*24.2*
Allocated	238.0		238.0		238.0		238.0		241.3
Non-Allocated	1.7		1.7		1.7		1.7		0.0
Total	239.6		239.6		239.6		239.6		241.3

500/21/T1

Distribution by Major Segments

500/01/T1

Structure by	Metal Goods	Electro & Electronic	Engineering	Building & Construction	Total
in t					
Product Type *)					
Sheet	16,882	48,470	7,471	4,010	76,833
Coil	53,605	70,000	0	19,640	143,245
Others	7,318	5,970	4,089	500	17,877
TOTAL	77,805	124,440	11,560	24,150	237,955
Grade					
304	61,846	43,249	9,310	22,902	137,307
316	790	380	1,790	250	3,210
430	9,005	78,980	100	460	88,545
Others	6,164	1,831	360	538	8,893
TOTAL	77,805	124,440	11,560	24,150	237,955
Thickness *)					
0.5 - 0.7 mm	22,219	102,220	704	8,705	133,848
0.8 - 1.0 mm	21,514	16,190	955	7,477	46,136
1.2 - 2.0 mm	26,978	5,950	1,821	7,968	42,717
2.5 - 4.5 mm	7,094	80	8,080	0	15,254
TOTAL	77,805	124,440	11,560	24,150	237,955
Surface Finishes					
No. 1	1,003	0	1,290	0	2,293
IIIb/2D	3,772	350	356	50	4,528
IIIc/2B	44,930	17,154	7,975	8,753	78,812
IIId/BA	25,453	97,158	50	13,987	136,648
No. 3/4	2,647	9,778	1,889	1,360	15,674
TOTAL	77,805	124,440	11,560	24,150	237,955

*) deviations: not all details available from interviewed companies

In the next step, the tonnages of the end uses were allocated to the companies canvassed.

Part IV – BPSFC

The companies visited have been classed into three groups:

- prospective companies
- companies without future BPSFC supply options
- other interesting companies.

To the prospective companies of **chapter 1.1** belong 40 companies, which are shown in the following table.

Distribution of Prospective Companies by Segment

Metal Goods	Engineering
Alessi Alumask American Metal Fab´s Bon Chef CDC Charvet Counterline Enofrigo Stöcklin Hendi Hupfer Ifö Kampri Lambertson Industries Marlo Manufacturing Pland Polar Ware Rational Rösle SEB Vollrath TOTAL 20	Bunn-O-Matic Millard Manufacturing SSP TOTAL 3
Electro & Electronic	**Building & Construction**
Candy ATAG Autofry Beverage Air Braun BSH Hausgeräte Electrolux Meiko Merloni Moyer Diebel SMEG Whirlpool Wells / Bloomfield White Consolidated TOTAL 14	Franke Forster Blanco TOTAL 3

500/15/T2(2)

The companies without further supply options are found in **chapter 1.2**. It is not expected that these companies will be interested at all in BPSFC supply. They were not dropped completely, however, as in some interviews information was obtained for other business opportunities of stainless manufacturers. The detailed interview information is lodged with the IDC/SASSDA/DTI.

Other interesting companies mentioned in **chapter 1.3** are those that refused an interview. Due to their size and market standing, however, there might still be chances to develop this or other business in the future.

The companies of **chapter 1.2 and chapter 1.3** are no longer included in the analysis from here on.

With **chapter 1.4** starts the analysis of the "prospective companies" sample. For both, Western Europe and America, a detailed breakdown explains the present and possible future demand of BPSFCs for each of the companies. The according tables are following further down.

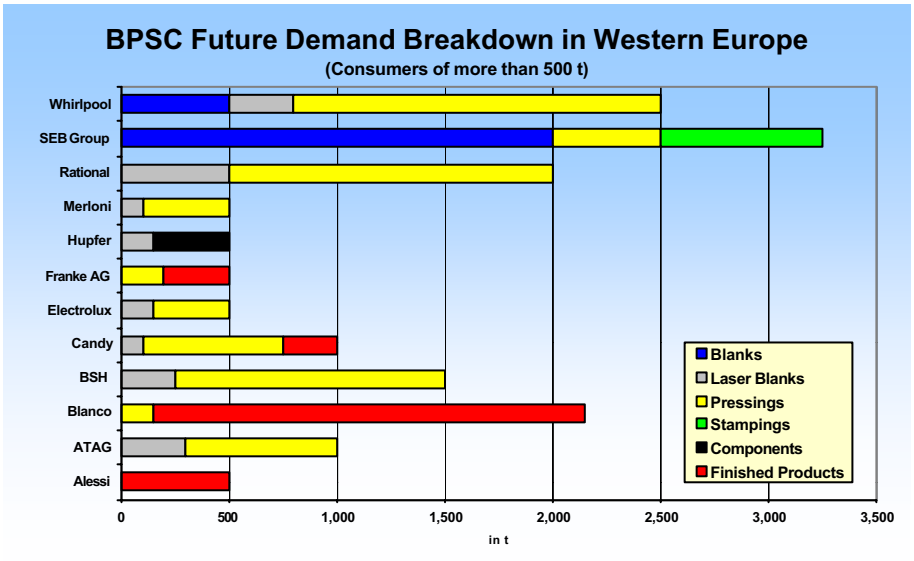
BPSFC Demand - 2003(e) and 2008(f)
Western Europe

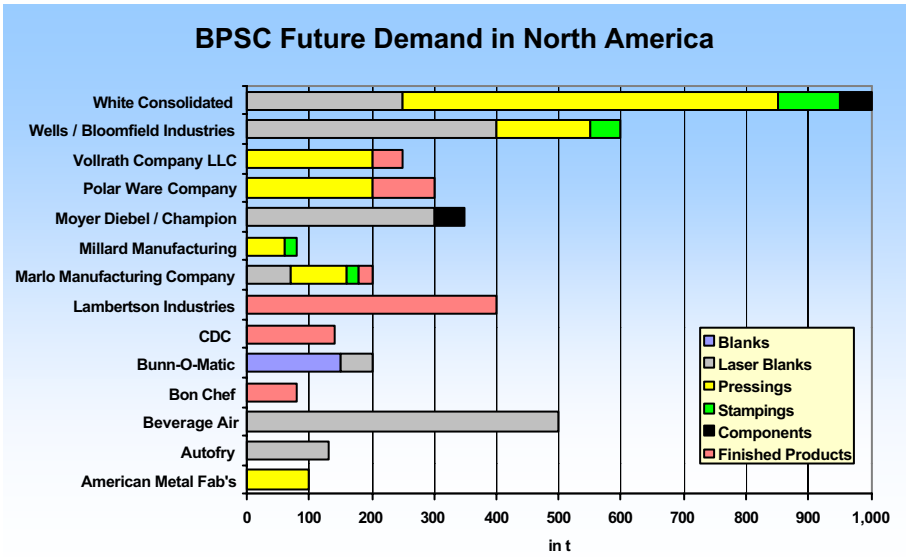
500/IDC/Tables/3

Company	End Use Sectors	BPSC *) 2003(e) in t.p.a	BPSC *) 2008(f) in t.p.a
Blanco	Building & Construction	100	2,150
Forster	Building & Construction	10	50
Franke AG	Building & Construction	100	500
Pland Stainless	Building & Construction	50	100
Braun **)	Electro & Electronic	10	100
BSH **)	Electro & Electronic		1,500
Candy	Electro & Electronic	500	1,000
Electrolux	Electro & Electronic	100	500
Meiko	Electro & Electronic	100	300
Merloni	Electro & Electronic		500
Smeg	Electro & Electronic		200
Whirlpool	Electro & Electronic	500	2,500
SSP	Engineering	200	250
Alessi	Metal Goods	200	500
Alumask	Metal Goods	300	300
ATAG	Metal Goods	200	1,000
Charvet	Metal Goods	50	200
Counterline	Metal Goods	50	75
Enofrigo	Metal Goods	10	50
Hendi	Metal Goods	150	300
Hupfer	Metal Goods	100	500
Ifö-Kampri	Metal Goods	25	40
Rational	Metal Goods	200	2,000
Rösle	Metal Goods	50	200
SEB Group	Metal Goods	400	3,250
Stöcklin	Metal Goods	150	200
TOTAL		**3,555**	**18,265**

*) including finished products

**) Non pusrueable prospects due to internal policy restriction





BPSFC Demand - 2003(e) and 2008(f)
North America

Company	End Use Sector	BPSC *) 2003(e) t.p.a	BPSC *) 2008(f) t.p.a
Autofry	Electro & Electronic	100	130
Beverage Air	Electro & Electronic	200	500
Moyer Diebel / Champion	Electro & Electronic	50	350
Wells / Bloomfield Industries	Electro & Electronic	100	600
White Consolidated	Electro & Electronic	500	1,000
Bunn-O-Matic	Engineering	100	200
Millard Manufacturing	Engineering	50	80
American Metal Fab's	Metal Goods	50	100
Bon Chef	Metal Goods	50	80
CDC	Metal Goods	120	140
Lambertson Industries	Metal Goods	150	400
Marlo Manufacturing Company	Metal Goods	80	200
Polar Ware Company	Metal Goods	100	300
Vollrath Company LLC	Metal Goods	50	250
TOTAL		**1,700**	**4,330**

*) including finished products

In order to paint an even better picture of the future supply possibilities, the possible demand for BPSFCs is broken down into product forms for each of the companies (see table on page 18/19).

BPSFC Future Demand Breakdown / 2008
Western Europe

500/IDC/Tables/3

Company	End Use Sectors	Blanks	Laser Blanks	Pressings	Stampings	Components	Finished Products	Total
		in t.p.a						
Blanco	Building & Construction			150			2,000	2,150
Forster	Building & Construction				50			50
Franke AG	Building & Construction			200			300	500
Pland Stainless	Building & Construction						100	100
Braun *)	Electro & Electronic				100			100
BSH *)	Electro & Electronic		250	1,250				1,500
Candy	Electro & Electronic		100	650			250	1,000
Electrolux	Electro & Electronic		150	350				500
Meiko	Electro & Electronic		150	150				300
Merloni	Electro & Electronic		100	400				500
Smeg	Electro & Electronic		150	50				200
Whirlpool	Electro & Electronic	500	300	1,700				2,500
SSP	Engineering						250	250
Alessi	Metal Goods						500	500
Alumask	Metal Goods	300						300
ATAG	Metal Goods		300	700				1,000
Charvet	Metal Goods		120			80		200
Counterline	Metal Goods						75	75
Enofrigo	Metal Goods			50				50
Hendi	Metal Goods		60	130		110		300
Hupfer	Metal Goods		150			350		500
Ifö-Kampri	Metal Goods			40				40
Rational	Metal Goods		500	1,500				2,000
Rösle	Metal Goods						200	200
SEB Group	Metal Goods	2,000		500	750			3,250
Stöcklin	Metal Goods					200		200
TOTAL		**2,800**	**2,330**	**7,820**	**900**	**740**	**3,675**	**18,265**

*) Non pusrueable prospects due to internal policy restriction

BPSFC Future Demand Breakdown
North America

Company	End Use Sector	Blanks	Laser Blanks	Pressings	Stampings	Components	Finished Products	Total
		in t.p.a						
Autofry	Electro & Electronic		130					130
Beverage Air	Electro & Electronic		500					500
Moyer Diebel / Champion	Electro & Electronic		300			50		350
White Consolidated	Electro & Electronic		250	600	100	50		1,000
Bunn-O-Matic	Engineering	150	50					200
Millard Manufacturing	Engineering			60	20			80
American Metal Fab's	Metal Goods			100				100
Bon Chef	Metal Goods						80	80
CDC	Metal Goods						140	140
Lambertson Industries	Metal Goods						400	400
Marlo Manufacturing Company	Metal Goods		70	90	20		20	200
Polar Ware Company	Metal Goods			200			100	300
Vollrath Company LLC	Metal Goods			200			50	250
Wells / Bloomfield Industries	Metal Goods		400	150	50			600
TOTAL		**150**	**1,700**	**1,400**	**190**	**100**	**790**	**4,330**

The potential consumers by product form are shown in **chapter 1.4.1**. The tables "Potential Blank/Laster Blank/Pressing/Stamping/Component/Finished Products Consumers" are following:

Potential Blank Consumers

Company	Consumption *Annual Tonnage*	Products
Alumask Grundy	300	Beer barrel disks
Whirlpool	500	Drum / disk blanks
SEB Group	2,000	Hollowware disks
TOTAL	**2,800**	

Potential Laser Blank Consumers

Company	Consumption *Annual Tonnage*	Applications
Hendi	60	Bain marie parts
Marlo	70	Trolleys, doors parts
Candy	100	Shell, internal cut-outs
Merloni	100	Doors, hobs
Charvet	120	Diverse components
Autofry	130	Cabinet shells, doors
Bunn-O-Matic	50	Cabinet shells
Electrolux	150	Cooker tops, doors
Hupfer	150	Trolleys cut-outs
Meiko	150	Interior boxes, others
Smeg	150	Cooker parts, doors, handles
BSH	250	Cooker parts, doors, handles
White Consolidated	250	External fittings
ATAG	300	Hobs, doors
Moyer	300	Doors, shells
Whirlpool	300	Cooker tops, doors
Wells	400	Cabinet shells, doors
Beverage Air	500	Refrigerator shells, doors, racks
Rational	500	Cabinet shells
TOTAL	**4,030**	

Potential Pressing Consumers

Company	Consumption *Annual Tonnage*	Applications
Ifö-Kampri	40	Food pans / bar sinks
Bunn-O-Matic	50	Dispenser pressings
Enofrigo	50	Food pans
Smeg	50	Cooker parts / handles
Millard	60	Lids, bowls
Marlo	90	Bowls
American Metal	100	Sink bowls
Hendi	130	Food pans
Blanco	150	Food pans
Meiko	150	Interior boxes / others
Wells	150	Dispenser pressings
Franke AG	200	Sanitary / bowls / others
Polar Ware	200	Food pans
Vollrath	200	Food pans
Electrolux	350	Cooker tops
Merloni	400	Hobs / handles
SEB Group	500	Various pressings
White Consolidated	600	External fittings
Candy	650	Cooker tops, washer pressings
ATAG	700	Cooker tops
BSH	1,250	Cooker parts / handles
Rational	1,500	Deep drawnparts
Whirlpool	1,700	Cooker tops, handles
TOTAL	**9,270**	

Potential Stamping Consumers

Company	Consumption *Annual Tonnage*	Products
Marlo	20	Trolleys / doors / bowls
Millard	20	Lids, bowls
Forster	50	Facade parts
Wells	50	Cabinet shells / doors / pressings
Braun	100	Small appliances
White Consolidated	100	External fittings
SEB Group	750	Appliances
TOTAL	**1,090**	

Potential Component Consumers

Company	Consumption *Annual Tonnage*	Applications
White Consolidated	50	External fittings
Moyer	50	Boosters vessels
Charvet	80	Diverse components
Hendi	110	Bain marie parts
Stöcklin	200	Lids, rack legs
Hupfer	350	Trolleys, shelves

Potential Finished Product Consumers

Company	Consumption *Annual Tonnage*	Applications
Marlo	20	Trolleys
Vollrath	50	Hollowware / cutlery
Counterline	75	Stabilisation parts
Bon Chef	80	Chafers
Pland	100	Sanitary ware
Polar Ware	100	Hollowware
CDC	140	IBC's
Rösle	200	Tableware / pots
Candy	250	White goods
SSP	250	Racks
Franke AG	300	Sanitary / bowls / others
Lambertsons	400	Sinks / basins / tissue holders
Alessi	500	Tableware / cutlery
Blanco	2,000	Bain maries
TOTAL	**4,465**	

Although the analysis shows a considerable interest in the BPSFC the question remains, just how much of the annual tonnage might be an available market for manufacturers from South Africa. This question is being followed in **chapter 2** with a ranking of the possible target companies. In the following table the companies that do not qualify are termed “without Future BPSFC Supply Options” and will subsequently not be part of the further analysis of companies of interest for the South African industry.

Ranking of Market Size, Interest in Receiving and Suitability in Applying South African BPSFC's

Western European Consumers

500/22/T1

Ranking	Company	Future Market Size *)	Interest	Suitability	Total
Prospective Companies for BPSFC Supply					
1	Blanco	10	8	8.5	26.5
2	SEB	10	8	8	26
3	ATAG	9	7.5	9	25.5
4	Rational	10	7	8	25
5	Whirlpool	10	7	8	25
6	Candy	9	7	7.5	23.5
7	Franke	6	7.5	8	21.5
8	Hupfer	6	7.5	7.5	21
9	Hendi	4	8	8	20
10	Forster	6	8	6	20
11	Alessi	6	7	7	20
12	SSP	4	8	7	19
13	Electrolux	6	6	7	19
14	Pland	3	8	7	18
15	Charvet	4	7.5	6.5	18
16	Roesle	4	7	7	18
17	Stöcklin	4	7	6.5	17.5
18	Meiko	4	6.5	7	17.5
19	Counterline	2	7.5	6.5	16
20	Merloni	6	4	6	16
21	BSH	10	1	5	16
22	Smeg	4	5	6	15
23	Ifö-Kampri	1	6.5	6	13.5
24	Alumask	4	4	5	13
25	Braun	3	2	6	11
26	Enofrigo	1	5	5	11
No Supply Option for BPSFC Manufacturers					
27	Hamo	0	6	5	11
28	GDA	0	5	6	11
29	Schrader	0	6.5	4	10.5
30	IME	0	5	5	10
31	Viscount	0	5	5	10
32	Zani	0	5	5	10
33	Roba	0	7	2.5	9.5
34	Schmolz & Bickenbach	0	5	4	9
35	Pott	0	5	3	8
36	Krones	0	4	4	8
37	Olympic	0	4	4	8
38	ELICA	0	3	5	8
39	Blomberg	0	3	5	8
40	Ronda	0	3	5	8
41	Foinox	0	3.5	4	7.5
42	Mueller	0	2.5	3	5.5
43	Wiegand	0	2.5	3	5.5
44	Becchetti	0	2.5	2.5	5
45	Blefa	0	2.5	2.5	5
46	Fringand	0	2.5	2.5	5
47	LSI	0	2.5	2.5	5
48	Hiram Wild	0	2.5	2.5	5

*) BPSFC Future Market Size 0 t for as Critical Criteria to Rate a company as "Prospective"

Ranking of Market Size, Interest in Receiving and Suitability in Applying South African BPSFC's

North American Consumers

500/22/T2

Ranking	Company	Future Market Size *)	Interest	Suitability	Total
Prospective Companies for BPSFC Supply					
1	Lambertson Industries	5	8	6.5	19.5
2	CDC	5	6	7	18
3	Marlo Manufacturing Company	4	6.5	6.5	17
4	Wells / Bloomfield Industries	6	6	5	17
5	Beverage Air	6	5	6	17
6	Bon Chef	2	7.5	6	15.5
7	Autofry	3	5.5	7	15.5
8	Vollrath Company LLC	4	5	5	14
9	White Consolidated	9	2	2	13
10	Moyer Diebel / Champion	4	4	4	12
11	Bunn-O-Matic	4	2	2	8
12	Polar Ware	4	2	2	8
13	American Metal Fab's	3	2	2	7
14	Millard Manufacturing	2	2	2	6
No Supply Option for BPSFC Manufacturers					
15	Spartanburg Stainless Products	0	5	3	8
16	Perlick Corporation	0	4	3	7
17	MG Newell Corporation	0	4	2.5	6.5
18	Elkay	0	3.5	2	5.5
19	Insinkerator	0	2	2	4
20	National Bar Systems Manufacturing	0	2	2	4

Chapter 3 of this part takes a closer look at the different subjects that might influence the opportunities, South African suppliers can take advantage of in this market. This chapter points out the environment the target companies are finding themselves in.

The level of mechanisation **(chapter 3.1)** in Europe and the United States can vary considerably from company to company. Some companies here offer situations one would actually connect to “sweat shop” conditions in underdeveloped countries. Other companies are fully equipped to the highest standard. A similar situation, however, also applies for China/Korea. Especially in China the level of mechanisation in the business sector of BPSFCs can be envied in many cases – due to the level of investment in this industry that has taken place over the last ten years. It is therefore conceivable that any newcomer from South Africa will have to look at the China experience in order to be able to compete.

Product quality – **chapter 3.2** - is one of the most important factors for the successful entering of the market. As many of the possible customers for BPSFCs are wellknown brand names, they will only accept high quality product execution.

Labour is discussed in **chapter 3.3**. The cost connected to European and US labour is the highest mentioned by the industry (between € 1,000. - to € 3,500 per month in Europe, approx. US$ 3,200 per month in the US). Both areas however, have in their favour that the productivity and quality of work is very high. Chinese companies reportedly pay US$ 70 – 100 per month, while the Korean worker is asking somewhere between US$ 800 and 1,600 per month.

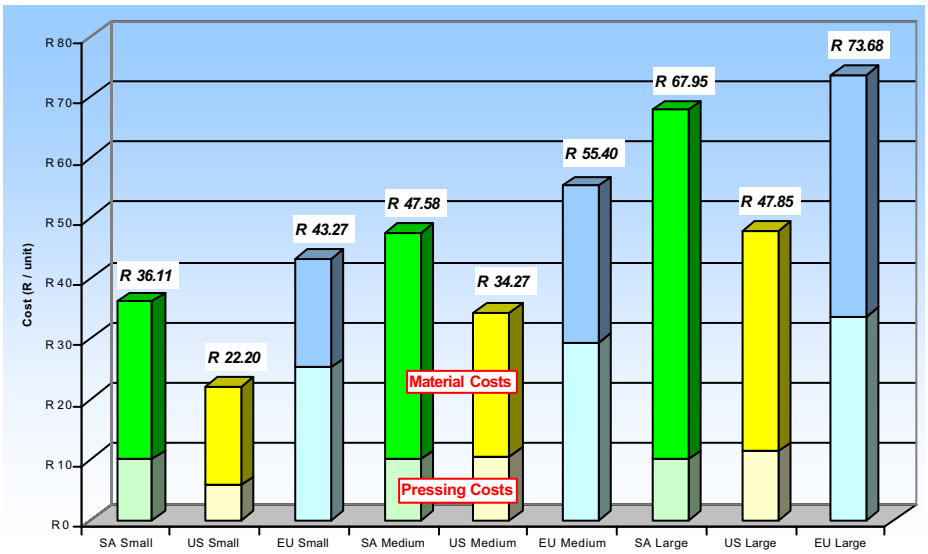
For three product types the **chapter 3.4** supplies a cost comparison:

- pressings
- laser-cut parts / blanks.

a. pressings

The comparison of costs in Europe and USA against the same product fabricated in South Africa, shows that a South African product might have a difficult stand in competition to the other fabrication areas. The table and graph following further down, describe this situation. The “Market Entry Discount Chart” stresses this situation.

Comparison of Prices for Holloware Pressings



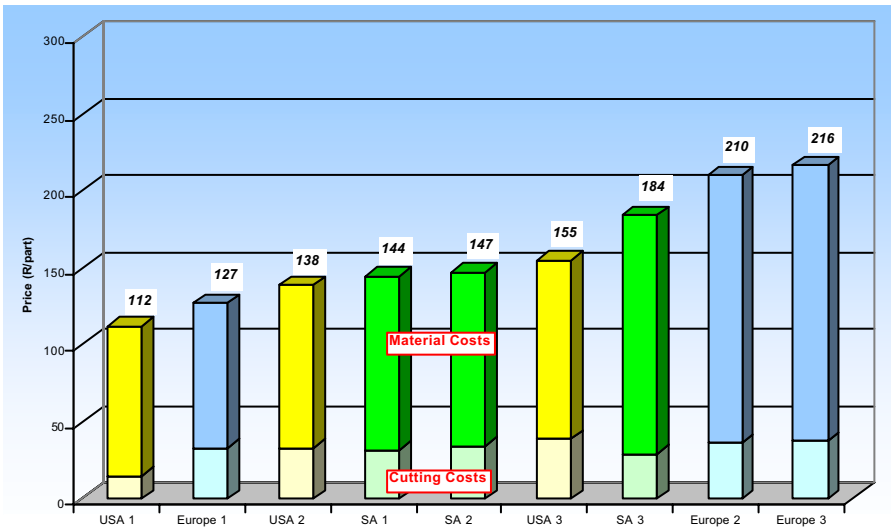
Comparative Deep Drawing Prices

	Pressing (R each)	Material Price (R/kg)	(R each)	Total
South Africa				
Pressing 1	R 10.00	R 23.80	R 26.11	R 36.11
Pressing 2	R 10.00	R 23.80	R 37.58	R 47.58
Pressing 3	R 10.00	R 23.80	R 57.95	R 67.95
USA				
Pressing 1	R 5.74	R 15.00	R 16.46	R 22.20
Pressing 2	R 10.59	R 15.00	R 23.68	R 34.28
Pressing 3	R 11.33	R 15.00	R 36.52	R 47.85
Europe				
Pressing 1	R 25.20	R 16.46	R 18.07	R 43.27
Pressing 2	R 29.40	R 16.46	R 26.00	R 55.40
Pressing 3	R 33.60	R 16.46	R 40.08	R 73.68

b. laser-cut parts/blanks

Prices achievable for these parts in the European and US markets seem to be very hard to match by South African Producers. The following table and graph explain this situation.

Comparison of Prices for Door Cut-outs



Comparative Laser Blank Prices

	Cutting	Material Price [1]		Total
	(R each)	*(R/kg)*	*(R each)*	
South Africa				
Supplier 1	R 31.92	R 20.82	R 112.45	R 144.37
Supplier 2 [2]	R 34.30	R 20.82	R 112.45	R 146.75
Supplier 3	R 28.79	R 24.28	R 155.38	R 184.17
USA				
Supplier 1	R 15.00	R 17.99	R 97.14	R 112.13
Supplier 2	R 32.88	R 19.50	R 105.30	R 138.18
Supplier 3	R 38.57	R 18.15	R 116.16	R 154.73
Europe				
Supplier 1	R 32.76	R 17.42	R 94.08	R 126.84
Supplier 2 [2]	R 35.78	R 17.42	R 174.22	R 210.00
Supplier 3	R 37.20	R 17.90	R 179.00	R 216.20

1 – Suppliers worked on different sheet sizes resulting in different yields
2 – Material Prices assumed from previous supplier

In **chapter 3.4.3** a comparison of worldwide stainless steel prices, labour rates for the metal fabrication industry, tax rates, freight costs and duties finishes off with the picture awaiting a South African manufacturer bound to export his product into the discussed target markets.

Comparison of Worldwide Stainless Steel Prices

	Material Cost	
	US$ per ton	*% Premium [2]*
European Union	2,127	4.2%
United States of America	2,733	33.8%
China	2,042	0.0%
South Korea	2,083	2.0%
South Africa [1]	2,160	5.8%

1 Local market price minus 10% export rebate
2 Premium to Chinese price

Comparison of Labour Rates for the Metal Fabrication Industry

	Labour Cost *US$ per month*	Working Hours *Hours per week*	Hourly rate *US$ per hour*
Netherlands	3,534	40.0	20.4
Germany	3,314	38.6	19.8
USA	3,240	41.4	18.1
Canada	3,007	39.5	17.6
France	2,859	38.3	17.2
Switzerland	2,750	41.5	15.3
Italy	2,388	40.6	13.6
UK	2,480	43.3	13.2
South Korea	1,781	49.1	8.4
South Africa	610	40.0	3.5
Malaysia	497	40.0	2.9
China	148	44.9	0.8

Comparison of Statutory and Effective Tax Rates

	Statutory Tax Rate	Effective Tax Rate
	% of Gross Profits	
Germany	47.5%	24.3%
USA	42.8%	17.7%
France	41.6%	16.7%
Japan	40.9%	25.8%
Belgium	40.2%	13.7%
Portugal	37.4%	13.2%
Italy	37.0%	26.4%
Spain	35.0%	13.3%
Netherlands	35.0%	17.1%
Greece	35.0%	n.a.
Austria	34.0%	9.9%
Denmark	34.0%	19.0%

Table cont.

	Statutory Tax Rate	Effective Tax Rate
	% of Gross Profits	
Ireland	32.0%	n.a.
United Kingdom	31.0%	n.a.
South Africa	30.0%	n.a.
Sweden	28.0%	13.0%
Finland	28.0%	19.2%
Malaysia	28.0%	n.a.
South Korea	27.0%	n.a.
China	24.0%	n.a.

General 20' Container Freight Costs to the West

	To the European Union		To the United States	
	US$	*US$ per ton* [1]	*US$*	*US$ per ton* [1]
European Union	–	–	1,733	116
USA	1,775	118	–	–
China	2,183	146	5,104	340
Korea	1,936	129	5,075	338
RSA	1,388	93	3,781	252

1 Based on a 15 ton load by Maersk

Ad Valorum Import Duties in Europe and the USA

	Import Duties - Metal Goods		Import Duties - Parts	
	EU	USA	EU	USA
	%			
EU	–	2.0%	–	2.6%
USA	3.2%	–	2.7%	–
China	3.2%	2.0%	2.7%	2.6%
Korea	3.2%	2.0%	2.7%	2.6%
RSA	2.4%	0.0%	0.0%	0.0%

Chapters 3.5 and 3.6 discuss in a lose way subjects that might be of interest: logistics, trust and government support:

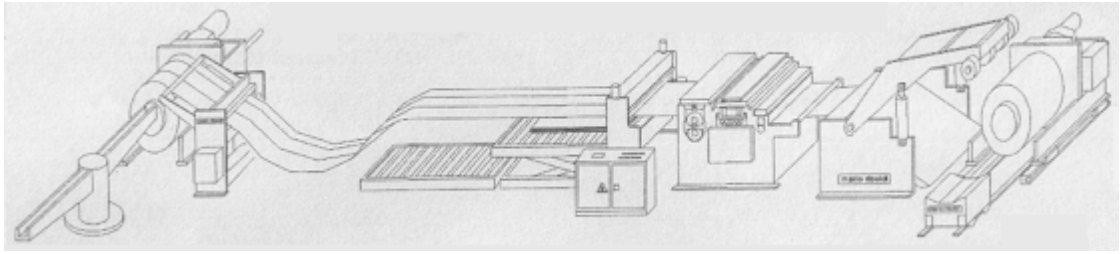
not to be underestimated is the delivery time expectations of the customers. The time frame for transport from South Africa to the US for example puts S Africa at a 25 days disadvantage in comparison to a domestic supplier. These points have to be very carefully looked at.

trust is important in any business, and also here it has to be there from the beginning but also be earned new with every business deal.

government support of export business seems to be a normal situation. Especially the Asian companies, and here China in particular, have the full support for any export business they want to set up. One example is the company Rixing, which has developed to one of the most modern and competitive suppliers on BPSFCs in the world.

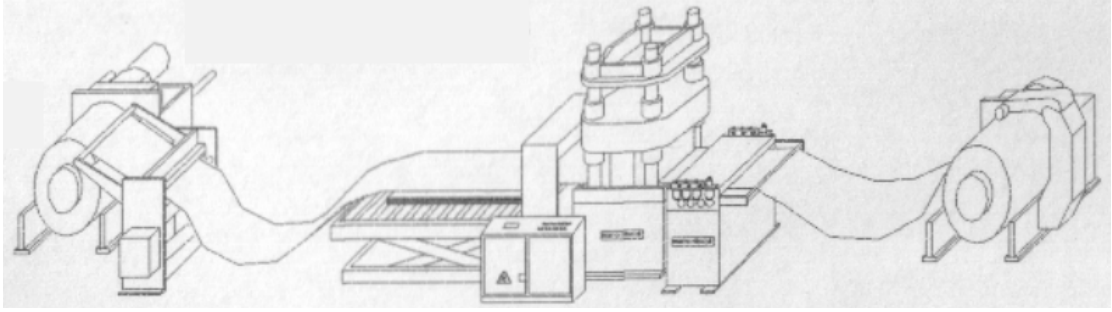
Chapter 3.7 closes Part IV with information on equipment usually used in this industry. The following graphs depict such equipment.

Combination Cut-to-Length / Slitting Line [1]



1 Example from the company Mario Riboldi

Press Line with Skeleton Recoiler [1]



1 Example from the company Mario Riboldi

Part V – Profiles of Prospective Companies

Short and basic information on the prospective companies has been pulled out from the overall visiting files available at IDC/SASSDA/DTI . This will make it easy to get acquainted with the companies under discussion and their views, possibilities expressed during the meetings.

Part VI – Recommendations

The report finishes with the recommendations chapter which contains the following parts:

- Contribution of Interested Companies
- Factors of Market Influence
- The Buyers Role in the BPSFC Market
- The Suppliers Role in South Africa
- SASSDAs Possible Role

A supplier has to display competence in communication and rapid responses are expected to requests, then some level of confidence is immediately established with the client. It is therefore important to prepare different information packages before contacting a potential client, e.g. shipping cost and time, material price and some form of brochure.

Drawing the potential client in by limiting original commitment (produce small samples, phasing in the supply) will eventually lead to large orders if the initial experience is satisfactory and the price is right. Competitors can be kept at bay by differentiating the product in a way difficult to copy and by adding further (client) processes to the product.

Overseas clients not only require good quality products, but also an assurance of continued good quality. Samples, photographs, trial production batches and on-site inspections may assist to put a client's mind at rest.

Meeting the client is potentially a very powerful sales opportunity. Visits to potential clients are very useful, while an industry fair, if approached in the right way, may present some opportunities to meet clients as well.

If an agent also for BPSFCs can be found, this may open the door to a successful export future. In some cases, clients may also be enticed to visiting South Africa – a perfect opportunity to cement relationships.

Quality, price and on-time delivery are required to keep the business, but good relationships will go a long way to keep it and even grow it.

Once a regular delivery schedule is established and kept, the client will have great security knowing for example that one shipment has landed and the next one is already "on the water".

If a supplier of BPSFC's can succeed in supplying successfully into W. Europe and the US, while price, quality and delivery remain competitive, threats of backward integration, purchasing finished products from Asia and switching to a local supplier should lose its threat. Although the market is strategically vulnerable, there are many successful suppliers operating with great success in exactly such markets.

When looking at the supply of stainless steel to the prospective BPSFC producers, it has to be kept in mind that people and loyalties can change rapidly in corporations, and with it long held promises and unwritten agreements. Since manufacturing BPSFC's is virtually a stainless steel trading business - as are many other products such as stainless steel tube - a very exact definition of the place and role of the manufacturer and the stainless steel supplier is required to avoid problems.

Any further narrowing of the target product range (as a result of either customs judgements or Columbus' definitions) may well result in manufacturers finding that no satisfactory product and regional combination has sufficient synergies to justify the business. But, if the issues of pricing, quality and delivery can be contractually addressed to the satisfaction of both parties, Columbus' "strong bargaining position" would not continue to be a threat to a BPSFC manufacturer.

It needs to be remembered that in countries of Asia, and here especially China, the over-proportionally growing markets partly are due to the government support enjoyed. Also in South Africa DTI/IDC has some instruments available for stimulating a market and, especially, SASSDA as the industries' organisation is a strong partner.

SASSDA may be well placed to organise background information for new exporters of fabricated stainless steel products from South Africa – namely in the field of questions related to freight subjects, documentation for products to be exported, payment arrangements, insurance of exported products, export financing.

If a certain number of interested parties can be pooled, SASSDA may even be in a position to think about certain ways of market representation in W. Europe and the US for South African fabricators.

The need to bolster any interest in South African products can be helped with preparing in-depth information on companies active in stainless steel fabrication in South Africa, which could also be distributed on fairs, by the South African Foreign Trade Offices, trading houses etc. Resources for this might be pooled in a BPSFC Interest Group which can then become active in support of this export thrust.