



Achieving Supply Chain Excellence – Best Practice

Titanic Centre Belfast, 30th-31st January 2018

John Irwin



The Denroy Group

- Established in 1972, the group is privately owned
- Denroy Plastics Ltd & Denman International Ltd
- Sales offices in London, Boston and Amsterdam



- 2017 turnover approx. £20m of which 50% will be haircare and the remainder industrial sales including aerospace & defence, automotive, medical products and custom mouldings
- 220 staff across the group

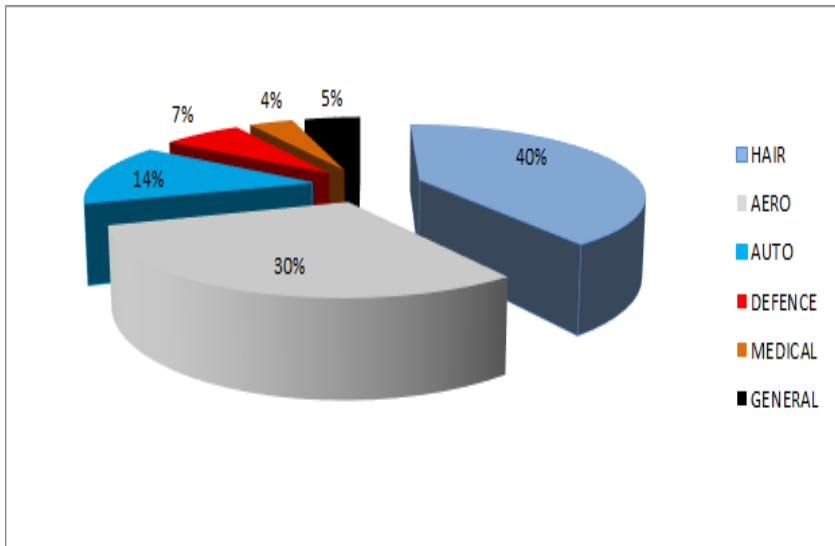
Product Examples



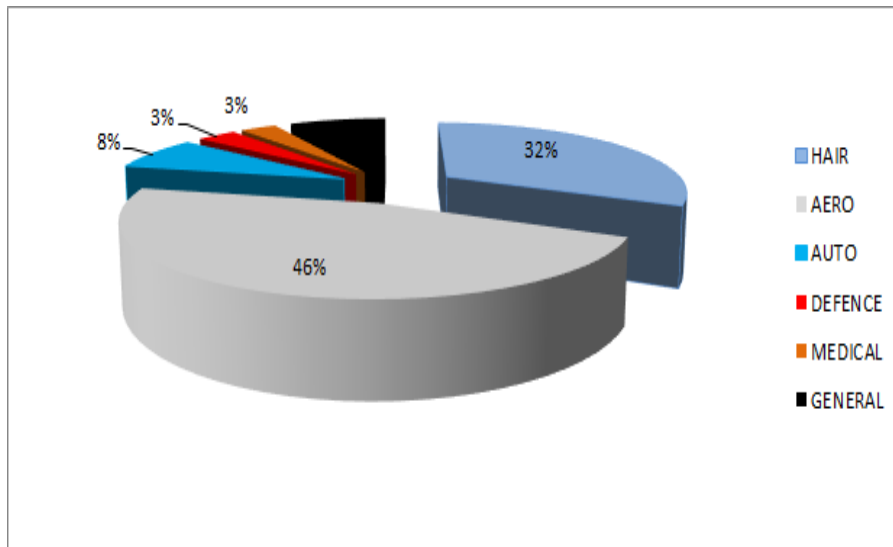
Denroy Strategy

- Increase turnover from £7.5m in 2013 to £14m by 2020 with a focus on the aerospace sector

2013: £7.5m, Aerospace 30%



2020: £14m, Aerospace 46%



Demands of the Aerospace Industry

Quality

On Time & In Full Deliveries

Competitive Pricing

Innovative Supply Chain

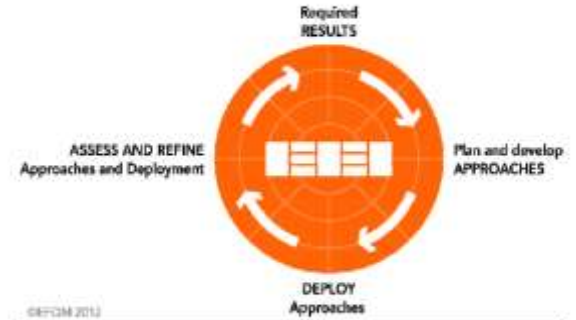
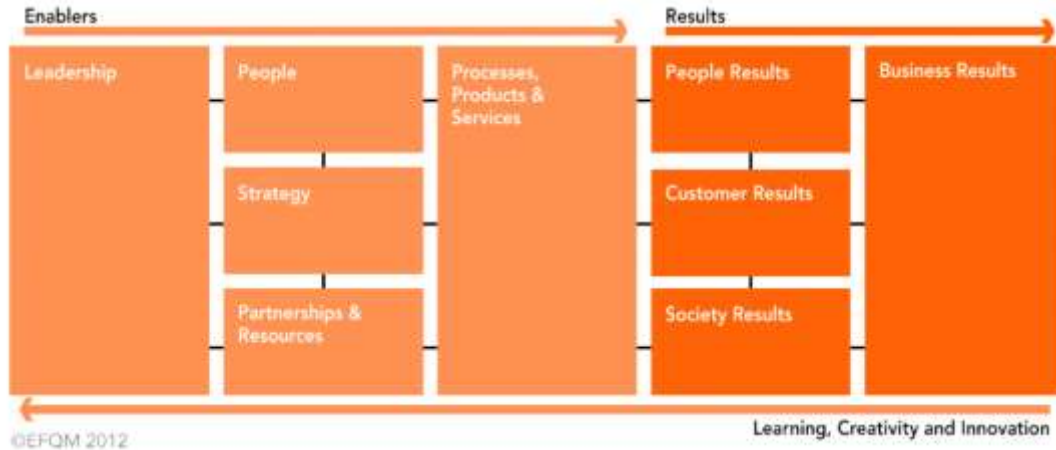


SC21

Best Practice Framework

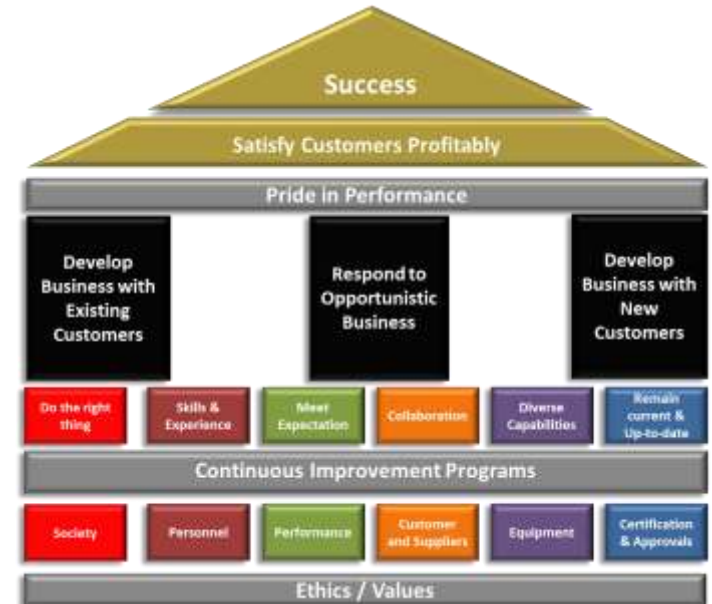
Delivers Aerospace Requirements

Business Excellence: EFQM



Strategic Planning

- The Denroy 'Strategic House'
- Set the ethics underpinning the business
- Strategic Enablers
- Results Focussed
- Culture of performance
- Culture of participation
- Culture of security and belonging
- Pride in Performance



Strategic Alignment

- Make the company strategy and objectives clear and ensure that each team member knows what these are
- Make sure people know how they contribute and how they are performing



Strategic Balanced Scorecard							
	Strategic Objective	Monthly Departmental KPI's	Responsibility For Measure	Benchmark	2017	2018	2019
Processes(Lean)	Full Implementation of DPL Lean House	Monthly 5s Audits x5	MMcC,NB,MMcG,DD,JK,PM		Complete implementation of all aspects of DPL Lean House. Use RADAR & CSIP to review & amend.	Lean - RADAR	Lean - RADAR
		WIP Stocks	PM				
		Moulding OEE	MMcG	65-70%			
		Bristling OEE	DD	65-70%			
		Supplier RMM	PM,AC				
		% Procurement Savings	PM, AC				
		Internal System audits complete	NB				
		Maintenance Downtime	MMcG				
		Tooling Downtime	MMcG				
		Relex Partner Reviews	MMcC, NB, JK, MMcG				
		Re-Processing Material Savings	DD				
		Scrap	DD				
BCP	Annual Review	JI		Complete	RADAR	RADAR	
Certification & Approvals	Maintained Level	NB		All Relevant Accreditation & Approvals	All Relevant Accreditation & Approvals	All Relevant Accreditation & Approvals	
Effective New Product Introduction	Enquiry Stage, enquiry received - build quote delivered to tech sales. On time	MMcC		On Time	On Time	On Time	
	Live Project Stage, release data submitted to tool-maker - T1 date. On time	MMcC					
	New Denman products launched	CBO		5	5	5	
Customer (Customer Results)	Maintain & Expand Existing Customer Base	Monthly Invoiced	JK		T/O 9.65m	T/O £11m	T/O £12.45m
		Orders Received	JK				
		Enquiries Received	JK				
		Customer RMM / Surveys	JK				
		New Denman Product Sales	CBO				
	Develop New Customers	Customer Visits	JK		5	5	5
		Trade Events / PR Events	JK				
		New Customers Registered	JK				
Quality & Delivery Performance	External Tooling Repairs	JK / MMcG					
	Planning Record Checks	MMcG					
R&D Projects	On Time In Full	DD	97.49%	SC21 Silver Level Standard & EFQM Gold	SC21 Gold Level Standard	SC21 Gold Level Standard	
	Number of escapes/NCR's	NB					
	Number of Live Projects	NB, MMcC		2	2	2	
Finance (Business Results)	Achieve Trading Profit	Turnover	KMN		EXXX	EXXX	EXXX
		Contribution	KMN				
		Trading profit	KMN				
		PBT	KMN				
		Cost reduction on current Denman products	CBO				
		Increase Contribution for Year	CBO				
	Achieve Rechargeable Tooling profit	Cost of Quality	NB				
		YOY Maintenance cost reduction	MMcG				
	Working Capital as percentage of Sales	Rechargeable Tooling Profit	KMN		EXXX	EXXX	EXXX
		Cycle Time, quoted vs actual.	MMcC				
Working Capital % Sales		KMN					
Debtor days (12 Month)		KMN	30-45 days	X%	X%	X%	
	Creditor days (12 Month)	KMN					
	Stock turns metric (12 Month)	KMN					
Learning & Growth (People & Society Results)	Technological Innovation (M/C Average Age)	Machinery Average Age	MMcG	9.3yrs	16	15	14
		No.Trade Shows Attended	MMcG				
		Student & Denman Tours	MMcG / CBO				
	Deliver Benefit to External Stakeholders	Customer and supplier External visits	CBO		Achieve 5 In Visitor Feedback Form	Achieve 5 In Visitor Feedback Form	Achieve 5 In Visitor Feedback Form
		School & University Linked Activity	JI, RO				
		Charity & Support for Other Organisations	JI				
		Training E/Person	RO				
	Training	Training Plan	MMcC, MMcG, DD, NB, RO, JK, PM		Right People, Right Place, Right Time	Right People, Right Place, Right Time	Right People, Right Place, Right Time
		Training hours	CBO				
		% Staff Trained	RO				
		No. Accidents	RO	23			
		Monthly H&S Audits	RO				
Safe Working Environment (No. Accidents)	Risk Assessments & SWP's Completed	RO		0	0	0	
	No. Reportable Accidents	RO	1				
	Employee Opinion Survey	RO					
Deliver Benefit to Internal Stakeholders	Cost of Casual Absence	RO	2.80%	Great Place to Work	Great Place to Work	Great Place to Work	
	Performance & Development Reviews	% Performance & Development Reviews Completed On Time	RO	Test/Review	Test/Review	Link To Reward	

Manufacturing Excellence

- The Denroy 'Lean House'
- Visual Aid Illustrating Continuous Improvement
- Incorporates All Elements of Lean Operations



Lean Approaches

CSIP

CONTINUOUS IMPROVEMENT PROJECTS - SUMMARY IMPROVEMENT TRACKER

C.I. Area	Team	Project Title	Project Lead	Start date	Project completion date	Costs to Implement - £	Tangible Benefits - £	Other Benefits	Status	Document Link
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Waste Reduction

REGRIND USAGE DEC 2017	DESCRIPTION	USAGE (KGS)	PRICE VIRGIN MATERIAL	TOTAL VALUE
RRGPABSJAZZO	ABS REGRIND	750	£1.80	£1,350.00
RRGPA00000	NYLON REGRIND	111	£1.85	£205.35
RRGPOLY00MX	POLYPROP REGRIND	965	£1.15	£1,109.75
RRGPEJAZZ	PE REGRIND	0	£1.36	£0.00
RPCPBTJAZZ	ENVIROPLAS REGRIND	0	£2.44	£0.00
AES REGRIND	AES REGRIND	0	£4.50	£0.00
RTPEJAZZ	TPE REGRIND	100	£3.17	£317.00
GRAND TOTAL				£2,982.10

Skills Matrix

Operator Name	TRIMMING SMALL	TRIMMING LARGE	DRILLING	CUTTING	ROUTER	SAIND BLAST	SAINDING	HEALTH & SAFETY	MOULD	VACUUM	ASSEMBLE	PART MARK (HAND)	PART MARK (M/C)	QA CHECKS	RIVETING	5 S	MANUAL HANDLING	7 QUALITY TOOLS	SMED	INTOUCH	DREMEL	CLIP NUT	SETTING SCALES	KPI UNDERSTANDING	7 WASTES	DRILL PEEK	VARNISH	HANDHELD SCANNER	SCOTCH BRIGHT	COSHH	RISK ASSESSMENT	SPILLS MANAGEMENT
Employee	Green	Yellow	Green	Green	Red	Red	Red	Green	Red	Red	Green	Green	Red	Green	Green	Green	Red	Red	Red	Red	Red	Green	Green	Green	Red	Green	Green	Red	Green	Red	Red	Green
Employee	Green	Yellow	Green	Green	Red	Red	Red	Green	Green	Yellow	Red	Green	Red	Green	Green	Green	Red	Red	Red	Red	Red	Green	Green	Green	Red	Green	Green	Red	Red	Red	Red	Red
Employee	Red	Yellow	Green	Red	Yellow	Green	Green	Red	Red	Green	Red	Green	Red	Green	Green	Yellow	Green	Red	Red	Red	Red	Green	Green	Green	Red	Red	Yellow	Red	Green	Red	Red	Green
Employee	Red	Green	Green	Red	Green	Red	Yellow	Green	Green	Yellow	Yellow	Green	Red	Green	Green	Red	Red	Red	Red	Red	Yellow	Yellow	Red	Green	Red	Red	Yellow	Green	Red	Red	Red	Red
Employee	Green	Red	Green	Red	Red	Red	Red	Yellow	Green	Green	Yellow	Yellow	Green	Red	Green	Red	Red	Red	Red	Red	Yellow	Yellow	Red	Red	Red	Red	Yellow	Green	Red	Red	Red	Red
Employee	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Green	Red	Red	Green	Green	Green	Green	Red	Red	Red	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red
Employee	Yellow	Yellow	Green	Red	Red	Yellow	Yellow	Green	Red	Red	Yellow	Green	Green	Yellow	Green	Red	Red	Red	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red
Employee	Yellow	Green	Green	Red	Green	Green	Yellow	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Green	Yellow	Green	Green
Employee	Red	Red	Green	Red	Red	Red	Red	Green	Red	Red	Red	Green	Green	Red	Green	Green	Red	Red	Red	Red	Red	Red	Red	Green	Green	Red	Green	Green	Red	Red	Red	Red
Fully Trained	3	3	9	3	3	3	2	9	3	3	5	1	3	9	1	9	7	0	3	1	3	2	6	8	8	3	6	8	1	3	3	3
Partly Trained	3	4	0	0	1	1	3	0	3	0	1	4	1	0	1	0	0	2	0	0	0	2	2	0	0	0	1	1	1	3	4	3
No Training	3	2	0	6	5	5	4	0	3	6	3	4	5	0	7	0	2	7	6	8	6	5	1	1	1	6	2	0	7	4	4	4

Investment



Technology

£3m + Capex Plan

Training



Factory
Extension



Relationship Excellence

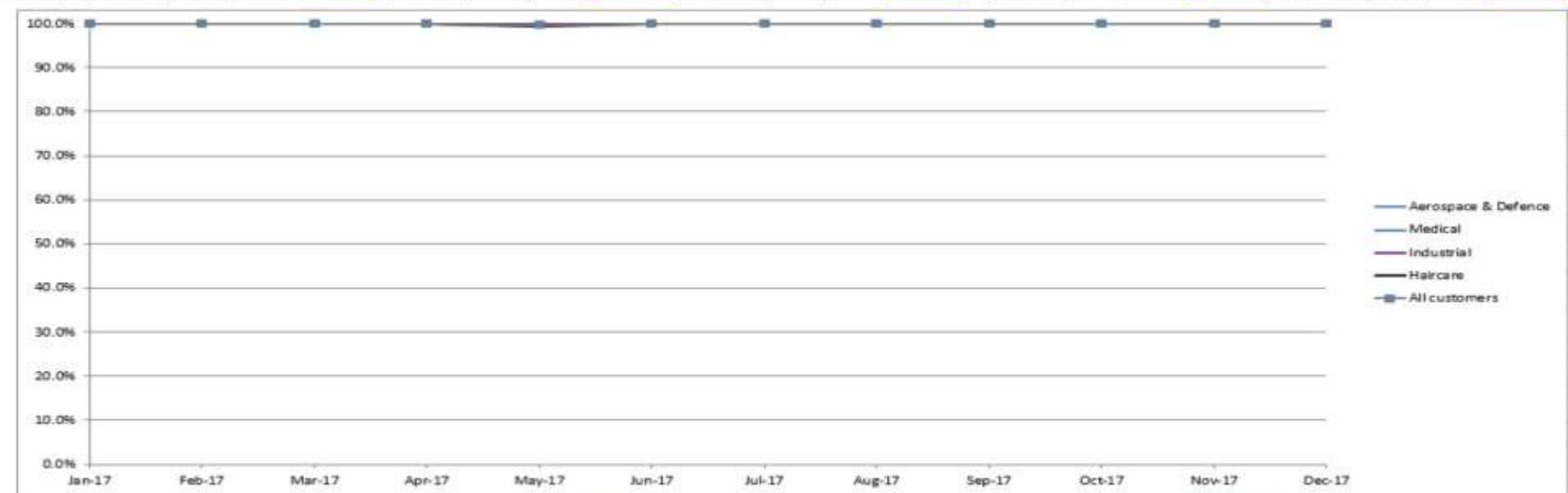
PARTNER ANALYSIS AND SELECTION MASTER LIST



Interested Party Name	Type	Strategic Alignment	Synergy	Value Adding	Assessment Score	Rating	Partner Decision Y/N	Partner Type	Assigned to	Date	Target
XXXX	Customer	3	3	3	27						
XXXX	Customer	4	3	5	60	Essential	Yes	Customer	JK		
XXXX	Customer	4	3	5	60	Essential	Yes	Customer	JK		
XXXX	Customer	3	2	3	18						
XXXX	Customer	3	4	4	48						
XXXX	Customer	4	2	4	32						
XXXX	Customer	3	3	3	27						60
XXXX	Customer	3	2	3	18						
XXXX	Customer	4	4	4	64	Essential	Yes	Customer	JK		
XXXX	Customer	5	5	4	100	Essential	Yes	Customer	JK		
XXXX	Supplier	3	4	4	48	Essential	Yes	Materials	PM		
XXXX	Supplier	2	2	3	12						
XXXX	Supplier	2	2	2	8						
XXXX	Supplier	4	3	4	48						
XXXX	Supplier	4	4	4	64	Essential	yes	Materials	PM		60
XXXX	Supplier	2	2	4	16						
XXXX	Supplier	4	4	4	64	Essential	Yes	Technology	M McC		
XXXX	Supplier	3	3	4	36			Technology	M McC	01/12/17	60
XXXX	Supplier	4	4	3	48			Technology	MMcG		60
XXXX	Supplier	3	4	3	36			Technology	SO		
XXXX	Supplier	3	4	3	36			Technology	MMcG		
XXXX	Network	2	4	3	24						
XXXX	University	2	4	4	32						
XXXX	University	4	3	4	48						
XXXX	Network	4	4	4	64	Essential	Yes	Knowledge	NB		
XXXX	Network	4	4	4	64	Essential	Yes	R & D	J I		
XXXX	Supplier	2	3	3	18						
					0						
XXXX	Supplier	5	3	4	60	Essential	Yes	Materials	J I		
XXXX	Supplier	3	3	3	27						
					0						
XXXX	Network	4	4	4	64	Essential	Yes	Capacity	J I		
XXXX	Supplier	3	3	3	27			Capacity			

DELIVERY PERFORMANCE DENROY PLASTICS LTD - SECTOR BREAKDOWN

	All customers				Aerospace & Defence				Medical				Industrial				Haircare			
	Total	Early	late	% on time	Total	Early	late	% on time	Total	Early	late	% on time	Total	Early	late	% on time	Total	Early	late	% on time
Jan-17	593471	0	420	99.9%	109544	0	0	100.0%	3900	0	0	100.0%	224227	0	0	100.0%	255800	0	420	99.8%
Feb-17	544907	0	0	100.0%	68277	0	0	100.0%	5880	0	0	100.0%	224022	0	0	100.0%	246728	0	0	100.0%
Mar-17	683320	0	0	100.0%	60970	0	0	100.0%	7680	0	0	100.0%	308985	0	0	100.0%	305685	0	0	100.0%
Apr-17	452423	0	0	100.0%	68241	0	0	100.0%	5460	0	0	100.0%	212269	0	0	100.0%	166453	0	0	100.0%
May-17	486142	1184	304	99.7%	60906	0	304	99.5%	4260	0	0	100.0%	222801	0	0	100.0%	198175	1184	0	99.4%
Jun-17	817202	0	133	100.0%	70169	0	133	99.8%	13530	0	0	100.0%	461527	0	0	100.0%	271976	0	0	100.0%
Jul-17	474675	0	0	100.0%	35284	0	0	100.0%	6080	0	0	100.0%	234156	0	0	100.0%	199155	0	0	100.0%
Aug-17	742593	0	0	100.0%	89867	0	0	100.0%	18446	0	0	100.0%	326991	0	0	100.0%	307289	0	0	100.0%
Sep-17	505837	0	0	100.0%	44379	0	0	100.0%	4457	0	0	100.0%	202432	0	0	100.0%	254569	0	0	100.0%
Oct-17	830757	0	0	100.0%	132275	0	0	100.0%	6180	0	0	100.0%	410611	0	0	100.0%	281691	0	0	100.0%
Nov-17	586093	0	0	100.0%	64207	0	0	100.0%	7462	0	0	100.0%	198122	0	0	100.0%	316302	0	0	100.0%
Dec-17	377824	0	0	100.0%	23188	0	0	100.0%	4940	0	0	100.0%	205399	0	0	100.0%	144297	0	0	100.0%
rolling year	7095244	1184	857	100.0%	827307	0	437	99.9%	88275	0	0	100.0%	3231542	0	0	100.0%	2948120	1184	420	99.9%



GOLD

99.00%

SILVER

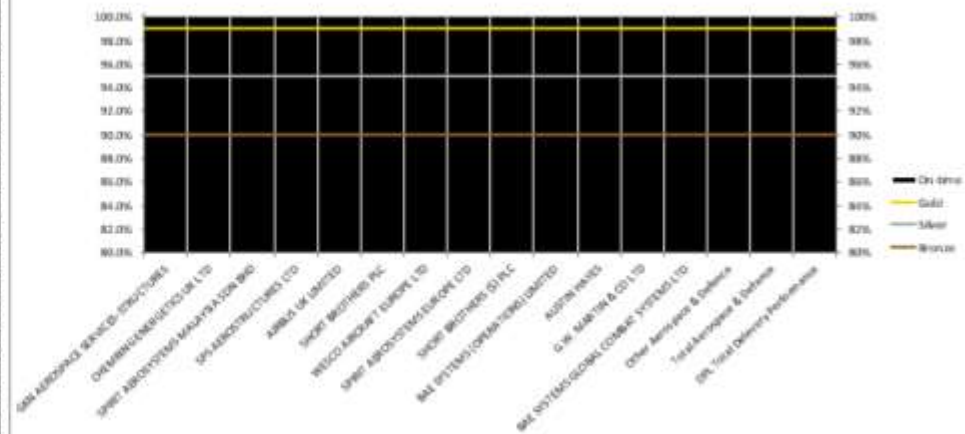
95.00%

BRONZE

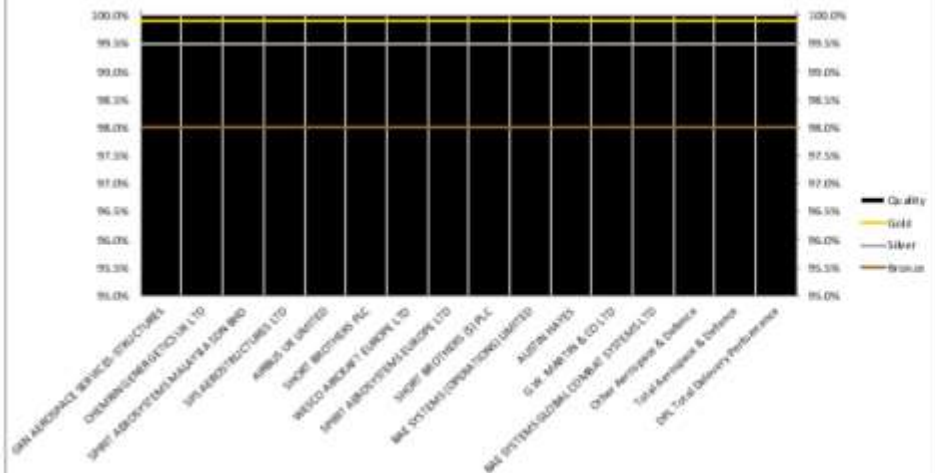
90.00%

		Parts Delivered	Early	On-time	Late	On-time	Total Rejected	Quality
GKN201A	GKN AEROSPACE SERVICES-STRUCTURES	0	0	0	0	100.0%	0	100.0%
BAE294A	CHEMUNG ENERGETICS UK LTD	290	0	290	0	100.0%	0	100.0%
BAE313A	SPIRIT AEROSYSTEMS MALAYSIA SDN BHD	4121	0	4121	0	100.0%	0	100.0%
BAE250A	SPS AEROSTRUCTURES LTD	508	0	508	0	100.0%	0	100.0%
BAE226A	AIRBUS UK LIMITED	2032	0	2032	0	100.0%	0	100.0%
SHO201A	SHORT BROTHERS PLC	58	0	58	0	100.0%	0	100.0%
BAE221A	WESCO AIRCRAFT EUROPE LTD	150	0	150	0	100.0%	0	100.0%
BAE308A	SPIRIT AEROSYSTEMS EUROPE LTD	0	0	0	0	100.0%	0	100.0%
SHO202A	SHORT BROTHERS (I) PLC	1582	0	1582	0	100.0%	0	100.0%
BAE201A	BAE SYSTEMS (OPERATIONS) LIMITED	23	0	23	0	100.0%	0	100.0%
AUS201A	AUSTIN HAYES	8736	0	8736	0	100.0%	0	100.0%
BAE325A	G.W. MARTIN & CO LTD	0	0	0	0	100.0%	0	100.0%
BAE268A	BAE SYSTEMS GLOBAL COMBAT SYSTEMS LTD	0	0	0	0	100.0%	0	100.0%
	Other Aerospace & Defence	5688	0	5688	0	100.0%	0	100.0%
	Total Aerospace & Defence	23188	0	23188	0	100.0%	0	100.0%
	DPL Total Delivery Performance	377824	0	377824	0	100.0%	0	100.0%

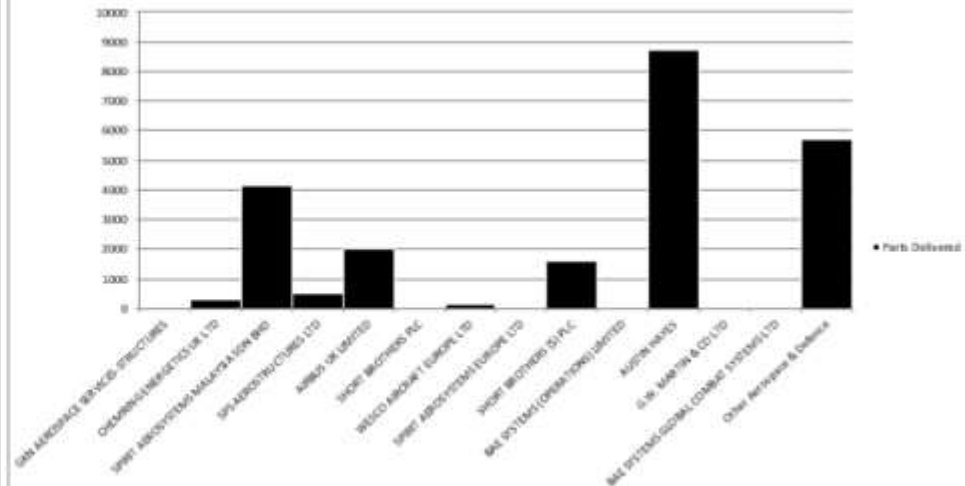
DPL Delivery Performance Month



DPL Quality Performance Month



Parts Delivered



Denroy SC21 Journey

