

LAPP NORTH AMERICA

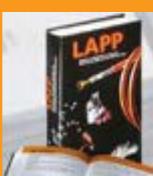
TOTAL QUALITY MANAGEMENT
OUR COMMITMENT TO ISO 9001: 2015











LAPP NORTH AMERICA WELCOME TO OUR QUALITY TEAM

WELCOME ABOARD...

We are delighted to have you join our **Quality Management Team.** The role that you play within the organization will certainly make us simply "the best".

The Lapp Group recognize the importance of making each employee a decision maker. They are **committed in providing** their employees good working conditions, opportunities for advancement, and an atmosphere that encourages **professional and personal growth**.

Your department manager has developed a process approach to manage your daily activities. Your input in reviewing and monitoring the process is important. Continual **improvement** is needed to stay competitive and ensure that we remain the "Vendor of Choice". Your contributions and talents will make us "the best in the market-place".

The Lapp Group rely on their customers, therefore, we must **understand the customer needs**, meet the customer requirements and satisfy their requests now and in the future. We value our customers success and are committed to listen to their voice. Our customer's opinions form the foundation of our plans for **continual improvement**.

The Lapp Group made a commitment to continually improve their processes and provide their customers excellence in their service and products. They depend on their employees and customers to help create a quality system that is truly the best in place.

Quality is a never-ending journey that involves all employees. Let your journey begin...

WHAT IS ISO?

The international Organization for Standardization (ISO) was established in 1947 and is (currently) an association of 175 members, which each represent their own country.

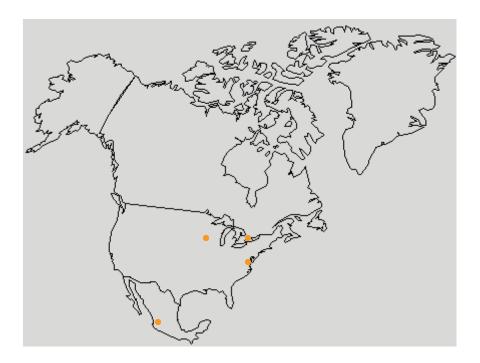
<u>The ISO Survey of Certification</u> - reveals certification activity around one or more ISO's management system standard in 175 countries becoming essential tools of the world economy. ISO employs a system of Technical Committees, Sub-committees and Working Groups to develop International Standards. Besides the National Standards Bodies, ISO permits other international organizations that develop standards to participate in its work, by accepting them as liaison members. ISO works in accordance with an agreed set of rules of procedure, the *ISO/IEC Directives*, which also include requirements on the presentation of standards.

ISO 9001 is a series of VOLUNTARY INTERNATIONAL STANDARDS. These standards were issued and developed by the Technical Committee 176 of the International Organization for Standardization (ISO).

These standards are used to develop and maintain a (QSM) QUALITY MANAGEMENT SYSTEM ISO9001 for companies that are involved with manufacturing products or providing services for their customers. A proactive quality management system is essential to remain profitable in today's competitive market.

LAPP NORTH AMERICA SIMPLY THE BEST

Open communication and innovative ideas from our internal and external customers provide the foundation for continual improvement in our processes and products at the LAPP Group.



Lapp USA
Lapp Holding, N.A.
Lapp Cable Works
Lapp Systems

Corporate Headquarters, NA 29 Hanover Road Florham Park, NJ 1-973-660-9700

Atlanta Distribution Center

2402 Tech Center Parkway, Suite 300 Lawrenceville, GA 30043

Lapp Tannehill

8675 Eagle Cree Parkway Savage, MN 55378, USA

Lapp Mexico

S de R.L de CV Del Bosque 1205-1 Las Pintas de Abajo 45619 Tlaquepague, Jalisco, Mexico

Lapp Canada

3585 Laird Road, Unit 14 Mississauga, Ontario L5L 5Z8 Canada

LAPP NORTH AMERICA REASONS FOR ISO CERTIFICATION

ISO Certification provides:

Product and Process Efficiency

Operational and Customer Related Benefits

Increase Market Share

Increase Sales

ISO 9001:2015

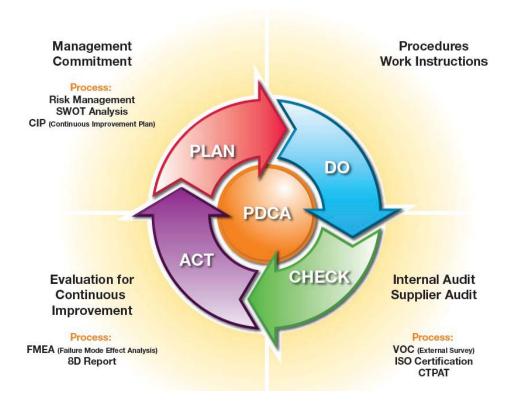
Focus on the customer - Listening to the VOICE OF THE CUSTOMER.

LAPP developed a process to listen on the "voice of their customer". Surveys are sent and results monitored to both internal and external customers. Corrective measures are put in place to ensure that continual improvement is an on-going process.

Identification of risks in the Organization - Measurable TARGETS set by Lapp Holding, AG each financial year. Objectives must be measured and improvement plans implemented. Targets are discussed monthly during the Quality Meeting. Continual Improvement Plans are tracked and modified as required.

Training effectiveness: Providing training is not enough. An evaluation of training effectiveness is required.

ISO 9001:2015 is a process-oriented structure. It includes a PLAN-DO-CHECK-ACT process model.



Documentation requirements are less prescriptive and allow greater flexibility. Managers at the LAPP GROUP are responsible for mapping out their critical processes. Managers develop department goals to meet the overall objectives of the company. Individual goals are set for each employee at the LAPP GROUP.

LAPP NORTH AMERICA CERTIFICATE OF APPROVAL



Certificate of Approval

This is to certify that the Management System of:

LAPP Holding, N.A.

29 Hanover Road, Florham Park, NJ, 07932, United States

has been approved by LRQA to the following standards:

ISO 9001:2015



Cliff Muckleroy - Area Operations Manager Americas Issued by: Lloyd's Register Quality Assurance, Inc.

This certificate is valid only in association with the certificate schedule bearing the same number on which the locations applicable to this approval are listed.

Current issue date: 1 August 2019

Expiry date: 31 July 2022

Certificate identity number: 10204231

Original approval(s): ISO 9001 – 6 July 1995

Approval number(s): ISO 9001 - 0011149

The scope of this approval is applicable to:

Design, Development and Manufacture of Custom Cable, Cable Assemblies and Harnesses.

Cutting to Size of Wire and Cable and Tubing. Distribution of Wire Cable, Cable Accessories, and Assemblies,
Connectors and Tools. Value Added Services which include Stripping, Dyeing, Twisting and Printing of
Wires.





Current issue date: Expiry date: Certificate identity number: 23 October 2019 31 July 2022 10226123 Original approval(s): ISO 9001 - 6 July 1995

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Cliff Muckleroy

Area Operations Manager Americas

Issued by: Lloyd's Register Quality Assurance, Inc.



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Certificate Schedule

Activities Location

Head Office:

LAPP Holding, N.A.

29 Hanover Road, Florham Park, NJ, 07932, **United States**

Location:

LAPP USA

29 Hanover Road, Florham Park, NJ, 07932, United States

LAPP Cable Works

29 Hanover Road, Florham Park, NJ, 07932, **United States**

LAPP Systems

29 Hanover Road, Florham Park, NJ, 07932, **United States**

LAPP Tannehill

8675 Eagle Creek Parkway, Suite 900, Savage, MN, 55378, **United States**

ISO 9001:2015

Design, Development and Manufacture of Custom Cable, Cable Assemblies and Harnesses. Cutting to Size of Wire and Cable and Tubing. Distribution of Wire Cable. Cable Accessories, and Assemblies, Connectors and Tools. Value Added Services which include Stripping, Dyeing, Twisting and Printing of Wires.

ISO 9001:2015

Design and Development of Custom Cable, Cutting to Size of Wire and Cable, Distribution of Wire, Cable, Cable Accessories. Connectors and Tools.

ISO 9001:2015

Development and Manufacture of Wire and Cable.

ISO 9001:2015

Development and Manufacture of Cable Assemblies and Harnesses.

ISO 9001:2015

Distribution of Wire & Cable, Accessories and Tools, and Value Added Services including Stripping, Dyeing, Twisting, Printing of Wire, Respooling and Cutting of Wire to Length, and Cutting and Marking of Tubing.



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Certificate Schedule

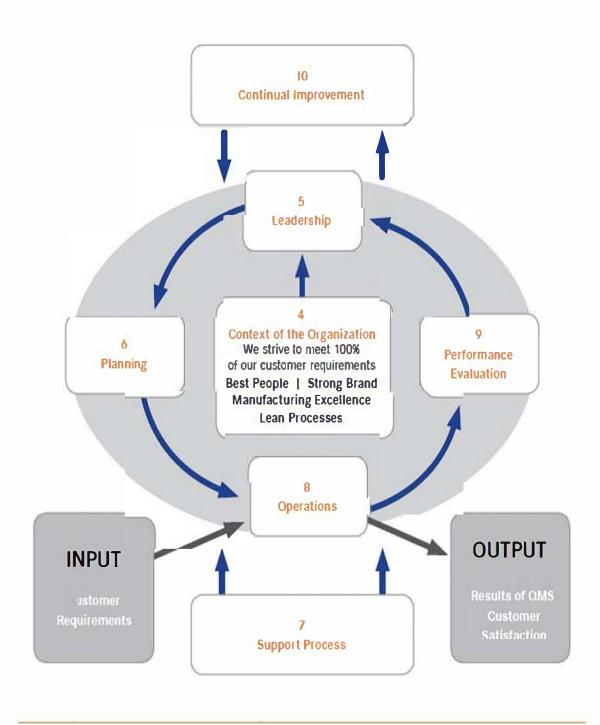
Location **Activities Atlanta Distribution Center** ISO 9001:2015 Cutting to Size of Wire and Cable, Distribution of Wire and 2402 Tech Center Parkway, Suite 300, Lawrenceville, GA, Cable. 30043, United States LAPP CANADA ISO 9001:2015 Sale of Custom Cable, Wire, Cable, Cable Accessories 3585 Laird Road, Unit 14, Mississauga, L5L 5Z8, Ontario, and Tools. Canada **LAPP Mexico** ISO 9001:2015 Sales and Distribution of Wire, Cable, Cable Accessories Del Bosque 1205-1 Las Pintas de Abajo, 45619 Tlaquepaque, and Tools. Mexico





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ISO9001:2015 Conspectus



Policy Statement: 5.2

Policy Statement:

LAPP Holding N.A. will strive to meet 100% of our customer requirements.



Lapp stands for:

- Best People
- · Manufacturing Excellence
- · Strong Brands
- · Lean Processes
- Continually Improving Our Customer Complaints, Customer Service Rate, Supplier Service Rate, and Cost of Quality
- · Achieving Category 1A in Lapp's 2007 Audit

Quality Policy is found on back of your Company's ID Badge

Lapp Holding N.A. Quality Policy: 5.2

Policy Statement, Lapp Group N.A.:

Lapp Group, N.A. will strive to meet 100% of our customer requirements through open communication, innovative ideas, and continual improvement. We will continually seek to improve environmental performance by reducing and preventing environmental hazards and impacts of our operations and products, from design to customer use and disposal.

Subsidiaries of the Lapp Group, N.A. are committed to continually improving their key performance indicators - by reducing customer complaints, improving the customer service rate, reducing supplier incidents, and increasing the supplier service rate - to ensure that our internal and external customers' requirements are fully satisfied.

LAPP NORTH AMERICA SURVEYS DETERMINING CUSTOMER SATISFACTION

Lapp's leadership ensures that customer needs and requirements drive the action of all employees. Customer feedback and voice of the external customer is captured on a regular basis through customer surveys, customer visits and more informally through field feedbacks.

Feedback collected covers but is not limited to the following areas:

DELIVERY

QUOTATION

HELPFULNESS/KNOWLEDGE OF STAFF

PRODUCT QUALITY

PRICE STRUCTURE

PACKAGING

ACCEPTABLE TIMEFRAME FOR DELIVERY

ACCEPTABLE TIMEFRAME FOR QUOTES

LAPP decisions and improvements are based on the voice of our internal and external customers. In-formation and data is routinely analyzed to ensure that we remain the **vendor of choice**.

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LAPP NORTH AMERICA

CONTINUOUS IMPROVEMENT: CORRECTIVE ACTIONS, SWOT (8D REPORT, FMEA), RISK ANALYSIS

We maintain corrective procedures to insure that major quality concerns are investigated and actions taken to prevent occurrence or recurrence. SWOT Analysis are performed and become a foundation for the formulation of our yearly Continual Improvement Plan.

CAR: CORRECTIVE ACTION REQUEST

The objective of corrective action is to prevent the cause of a problem from recurring. The reason why the problem was not detected must be disclosed in 8D reports. The corrective action is not closed until effectiveness is proven.

- After the fact: Correction action reports involve a breakdown in the QMS; repetitive errors or system breakdown.
 - 1. Root causes must be identified and corrective action implemented.
 - 2. Internal auditors monitor open and closed CARS for effectiveness during assessments.
 - 3. Records are maintained to show effectiveness of correction action after implementation.

CIP-CONTINUAL IMPROVEMENT PLANS

SWOT Analysis: Strength, Weaknesses, Opportunities and Threats

SWOT are used as the foundation in developing yearly Continual Improvement Plans. Lapp Holding, AG (our parent company) strategically develops targets for Key Performance Indicators. Key Performance Indicators and monitored on a monthly basis to insure continual improvement initiatives are being met. Documented information on the quality objectives are reviewed monthly and posted. There are six Key Performance Indicators: Customer Complaints, Customer Rate, Technical Complaints, Supplier Service Rate, Customer Service Rate, and Supplier Quality Incidents.

FMEA- RISK AND OPPORTUNITIES

Lapp promotes the use of the process approach with risk based thinking: Process and Design FMEA

• Ensure the risks and opportunities that can affect conformity of products and services and the ability to enhance customer satisfaction are determined and addressed. Each department identifies interested parties, and department risks and ways to mitigate the risks. Each risk is assess and opportunities related to its purpose, its business strategy, and the expectations of interested parties to ensure the QMS meets its objectives. FMEA are used for processes and design DFMEA on new products.



LAPP NORTH AMERICA MANAGEMENT TOOLS

Lapp employs different methods in monitoring quality and customer satisfaction. These methods demonstrate the ability of the processes to achieve planned results.

🥯 VENDOR RATING SYSTEM; PRODUCT QUALITY, DELIVERY, AND RESPONSIVENESS

o desktop audits: surveys, questionnaires

PERFORMANCE RATING – ONTIME DELIVERY

DOCUMENT CONTROL - PROCEDURES AND WORK INSTRUCTIONS

🥝 CONTROL DOCUMENTS - REVISIONS CONTROL - CATALOGUES,ETC.

KPI: CUSTOMER COMPLAINTS / RETURNS

CUSTOMER SERVICE RATE

SUPPLIER SERVICE RATE

SUPPLIER INCIDENTS

COST OF QUALITY

CUSTOMER RETURNS (PPM)

ON A MONTHLY BASIS, KPI (KEY PERFORMANCE INDICATORS) ARE REPORTED TO LAPP HOLDING AG. THESE INDICATORS ARE MONITORED TO INSURE GOALS ARE MET AND CONTINUAL IMPROVEMENT IS ACHIEVED.



LAPP NORTH AMERICA EMPLOYEE TRAINING AND GOALS SETTING

TRAINING AND AWARNESS IN THE ISO 9001:2015 STANDARD

Training requirements in ISO 9001:2015 are specific. Resource Management is geared to training and related issues.

Training needs are identified before an employee is hired. Employee competence is emphasized in ISO:9001:2015 and at LAPP, it is critical to our success.

The added emphasis in ISO 9001:2015 is with VALIDATING TRAINING. A COMPANY IS REQUIRED TO VALIDATE AND DOCUMENT THE EFFECTIVESS OF TRAINING.

* Managers at the LAPP use the SMART METHOD in developing GOALS.

Specific

Measurable

Attainable

Relevant

Time-bound

During annual reviews, training needs are reviewed by departments managers. Training is validated and documented in the Employee Training Records.

GOALS AND TARGETS ARE MEASURABLE:

Managers and their teams analyze goals periodically

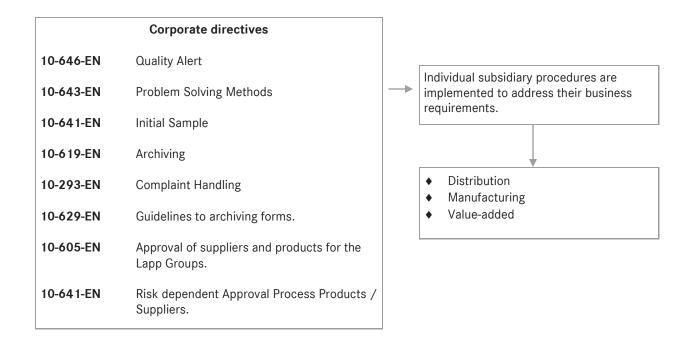
Determine changes that effect performance

Adjust targets to achieve objectives



LAPP NORTH AMERICA CORPORATE DIRECTIVES AND PROCEDURES

Corporate directives are implemented worldwide at all Lapp subsidiaries to provide consistency in practice.



Corporate directives are implemented and incorporated in the QMS at all LAPP HOLDING NORTH AMERICA subsidiaries. Compliance to Corporate Directives is verified at time of internal audit.

Corporate Directives set the standard and provides consistency in process.

CORPORATE DIRECTIVES FROM LAPP HOLDING, AG

CORPORATE				Incorporated in
NUMBER	Valid Date	Version	TITLE	Procedure of Lapp USA, Inc. (Contact Support AG)
				(Contact support Ad)
10-250-EN	7/1/2018	5.1	Creation of Comprehensive Corporate Directive of Lapp Holding, AG	N/A - Explains how Corporate Directives are authored
			Attachments - Change lot - Introduction Letter	
	-1.1			
10-250-EN	7/1/2018		Form Sheet 1-4 Form Sheet 5	
	4/1/2018		Form Sileer 5	
0-293-EN	7/1/2017	4.1	Complaint Handling procedure for Lapp companies regarding UI deliveries	NJSOP-0244 Complaint Handling for material returned to German
	4/1/2017		Form sheet- Complaint Announcement	
10-303-EN	11/1/2012	2.1	Access Authorization - Lapp Identity Card	
	, -,			
10-304-EN	4/1/2017	1.1	New process & Process Change Requests for SAP 6.0	
	8/1/2013		Enclosure 1 - Change Request	
	4/1/2017		Enclosure 2 - Business Process Owner	
	8/22/2013		Form Sheet -Change Request CAB	
0.005.51	40/4/2000		Disabases of two stress and filling of Datasets	
.0-305-EN	10/1/2009 4/1/2017	4	Disclosure of Inventions and Filing of Patents Form Sheet 1 Invention Disclosure	
	7/1/201/		Tomorest I mention bisdoute	
0-601-EN	7/1/2011	1	Handling and safe keeping of Lapp Group Company Shares	
0-602-EN	2/1/2016	3	Procedure for purchase and approval of machines for production and warehouse	NJSOP-0245 Procedure for purchase & approval of machines
	2/1/2016	3	Attachment Guidelines for commissioning and acceptance of machines for production & wareho	ouses according to Corporate Directive 10-602-EN
L0-603-EN	2/1/2016	2.3	Business Traveling Procedure	NJSOP-0232 Travel & Entertainment Policy
	7,7,			
10-605-EN	7/1/2018	4.2	Approval of Supplier	NJSOP-0029 Selection & Approval of New Vendors
10-609-EN	3/1/2016	1.2	Guidelines to archiving forms and periods of preservation	NJSOP-0235 Record Retention & Distribution
	7/1/2011		Attachment: Directory of Preferable Records and Documents	NJSOP-0236 Paper Record Retention Purge & Archiving
10-612-EN	5/1/2018	9	Official Company Information Lapp Group	NJSOP-0246 Company Info (Allowed Communication to 3rd Part
10 012 114	5/1/2010		ometal company information capp group	18301 6240 company into (Anowed communication to start are
10-613-EN	7/1/2016	1.1	Investment Process - Lapp group Form Sheet A/Form Sheet B	
	7/31/2013		Form A Lapp Invest Analysis <250 TEUR	
	7/1/2016		Form B Lapp Invest Analysis >250 TEUR	
	7/1/2013 11/1/2011		Form Sheet C Investment Application Form Form Sheet D template business plan	
	11/1/2011		i dimonecto template pasiness pian	
10-619	4/1/2018	3	Archiving of Tax-related Data	NJSOP-0235 Record Retention & Destruction Policy
			Enclosure 1 thru 3	
10-620-EN	1/1/2016	2	Release Process of New Catalogs in the Lapp Group	
10 020 214	1/1/2010		nerease Frocess of New Catalogs in the Eapp Group	
10-621-EN	7/1/2014		Product Names and Marking of Cables	
	40/45/0047	2	Appendix - Form Sheet Approval	
	10/15/2017	2	Approval Form	
10-623-EN	11/1/2017		Product Owner in the Lapp Group - Rights- Duties-Qualification	NJSOP-0247 Product Owner according to CD10-623-EN
	11/1/2017		Attachment Product Categories	
	8/1/2017 11/1/2017		List of Qualified Product Owners Project Life Cycle	
	11/1/2017		Attachment 4 - Qualification of Product Owners	
	. ,			
10-625-EN		5.1	Creating and Changing of Customer Master Data in SAP R/3	Invalid as per 01.02.2018 regarding SAP/r3
		5.1	Enclosure 1	New version for SAP ECC 6.0 is in preparation
10-626-EN	8/15/2016	3.2	Electronic Banking Usage Appendix - Payment Mgt System	
	8/15/2016		Appendix - Payment Management System	



Circle of Excellence Recognition Award Program Circle of Excellence Recognition Award Program recognizes the "excellence" of work of Lapp Holding, N.A. employees. The award recognition acknowledges superior accomplishments that have lasting impact, demonstrate high level of workmanship, and delivery results that are perceived as exceptional by both internal and external customers. Circle of Excellence in Quality Recognition Award Program is held every quarter and involves all of the N.A. subsidiaries/service centers.

Online Process Makes Entry Easier

Our Circle of excellence forms can be found on the Public Drive.

AWARD CATEGORIES

- Productivity Exceeds requirements (measurable standard); i.e., cuts/orders
- Creativity in new and innovative methods and procedures
- Excellent customer service Feedback internal/external customers
- Superior Performance Exceed requirements (measurable standard); i.e., \$\$ quota
- Initiative for product excellence Prevented a customer return
- Safety Achievement
- Respect for Product

Feedback from Focus Group – What the employees liked about the Circle of Excellence:

Recognition – Getting a certificate for their merit – Certificates are proudly displayed in their office/cubicles. Participation includes all N.A. Subsidiaries: Lapp Canada/Lapp Tannehill/LUSA/Mexico/LCW/Lapp Systems - Service Centers: Atlanta, Houston, Las Vegas

REWARD: Quality Pin, Shirt/Fleece embossed with **Circle of Excellence in Quality** on sleeve, Lunch Box with embossed Circle of Excellence in Quality on Bag/Container

N.A. Recognition – Picture of all winners displayed at facilities – Enhances Team Spirit!

«Circle of Excellence in Quality»

EXAMPLE 1 I. A. Subsidiaries



Employee Name	Company	Departmen	<u>Accomplishment</u>
Micha el Allen	Lapp USA	Warehouse	Order was very heavy and entered as overnight Mike caught error saving company a lot of \$\$. Mike helped diagnosed issues with pallet scale.
Jean Marie Dumas	Lapp USA	Warehouse	Diagnosedissues with mainpallet scale resulting in savings with transitire-weigh fees
Ben Missaggia	Lapp USA	Warehouse	Maintain RGAlog to create efficient process
Ramona Filipescu	Lapp USA	Finance	Volunteered on UltiPro (outside scope of responsibilities
Diana Velasquez	Lapp USA	Sales	Went beyond to assist during absenteesm
Scott Gorman	Lapp USA	Sales	Achieved 2018 sales quota - Avg 120% in Q3!
Francheska Portuguez	Lapp USA	Cus Service	Credit customer servie request have been
			handled expertly and in a timely fashion
Candice Little	Lapp USA	Cus Service	Excellent with helping out others – Great team work
Laura Locchetta	Lapp USA	Cus Service	Thorough & professional analysis – Great
	••		quality of Customer Service
Dawn Sconzo	Lapp USA	Business Dev	Excellent follow-up leading to additional new opproutnites for Lapp – No quit attitude
Christian Abambari	DLFLEX CONNECT	г	led to opening of 3 doors at Mondelez Food! Efficient production planning/scheduling enabling on-time deliveries for VESTAS
Onofiio Frequenza	ÖLFLEX CONNECT		Kitting on schedule for VESTAS orders



Notes:



Power and Control Cables

SKINTOP®

Cable Glands

SILVYN®

Conduit

ETHERLINE®

Industrial Ethernet

EPIC®

Connectors

UNITRONIC®

Data Cables

FLEXIMARK®

Marking Systems



Fiber Optic Cables

