



BOYD
TRUSTED INNOVATION

Engineered Materials and Thermal Management Solutions

Boyd Confidential

Boyd Overview

Global innovator of sustainable engineered materials and thermal solutions that make products safer, faster, better, and more reliable

 **~100 years**
of leading innovation

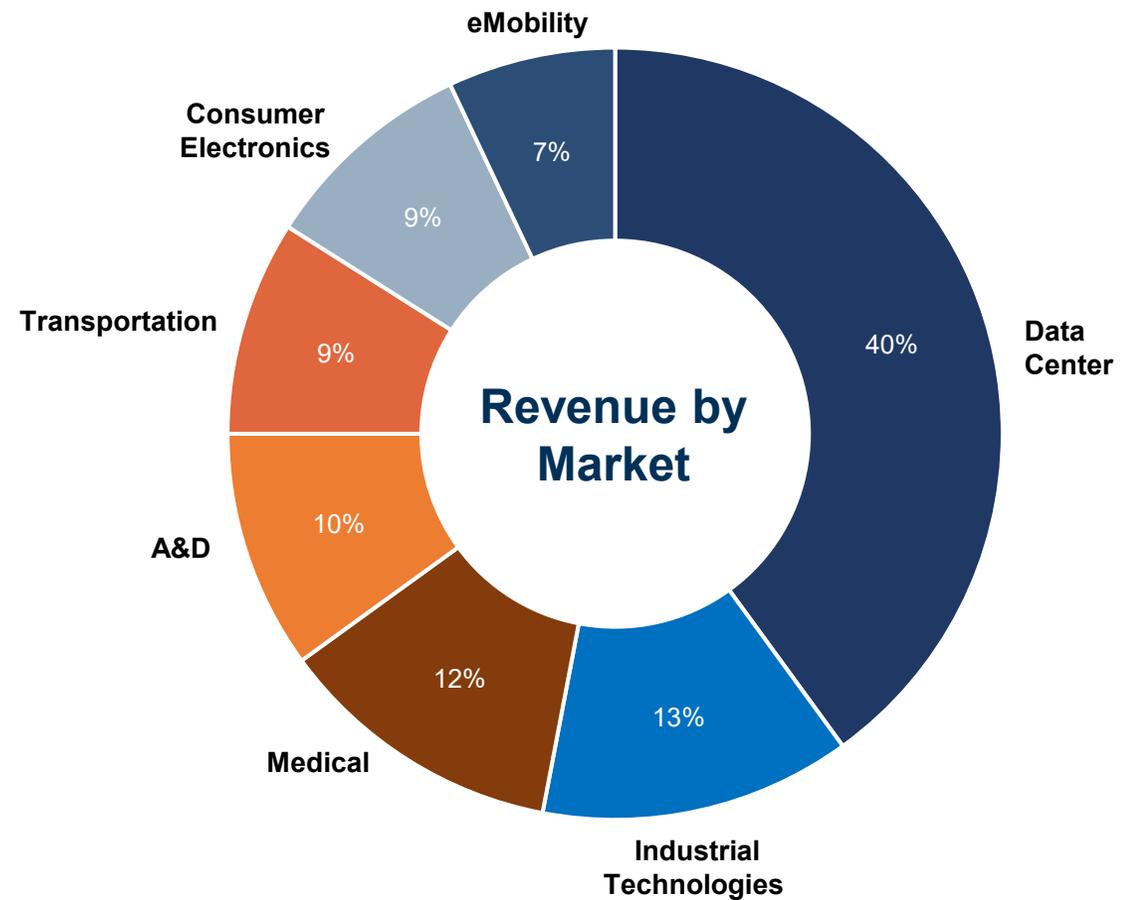
 **\$1.5 Billion+**
Global Revenue

 **40+**
Facilities Worldwide

 **7500+**
Employees Globally

 **~300**
Total Patents

 **700+**
Engineers



Global Footprint

Mass production sites across continents for localized in-region production, responsiveness to geopolitical impact and regionalization strategies

★ Corporate HQ ● Manufacturing facility ■ Design Center ▲ Embedded Manufacturing Facility and Design Center



North America

18 manufacturing facilities

7 design centers

Facilities in CA, MA, MI, NC, NH, OR, PA, SC, WA, Mexico and more

Europe

7 manufacturing facilities

3 design centers

Facilities in Czech Republic, Italy, Germany, Poland, Belgium, and the UK

Asia

12 manufacturing facilities

8 design centers

Facilities in China, Vietnam, India, Singapore, Taiwan, and Thailand

Boyd Highlight Sites

Mass production sites across continents for localized in-region production, responsiveness to geopolitical impact and regionalization strategies



Seattle, WA

HMI Solutions



Elkhart, IN

Plastic Extrusions



San Jose, CA

Labels



Juarez, Mexico

Extrusions Rubber and Plastic
Precision Materials
Converting Solutions



Grand Rapids, MI

O-Rings and Molded Rubber



Gaffney, SC

Molded Rubber
Precision Materials



Syke, Germany

O-Rings and Molded Rubber



Monroe, NC

Graphic products



Shenzhen / Hong Kong

O-Rings and Molded Rubber

Taiwan, China, Thailand, Vietnam

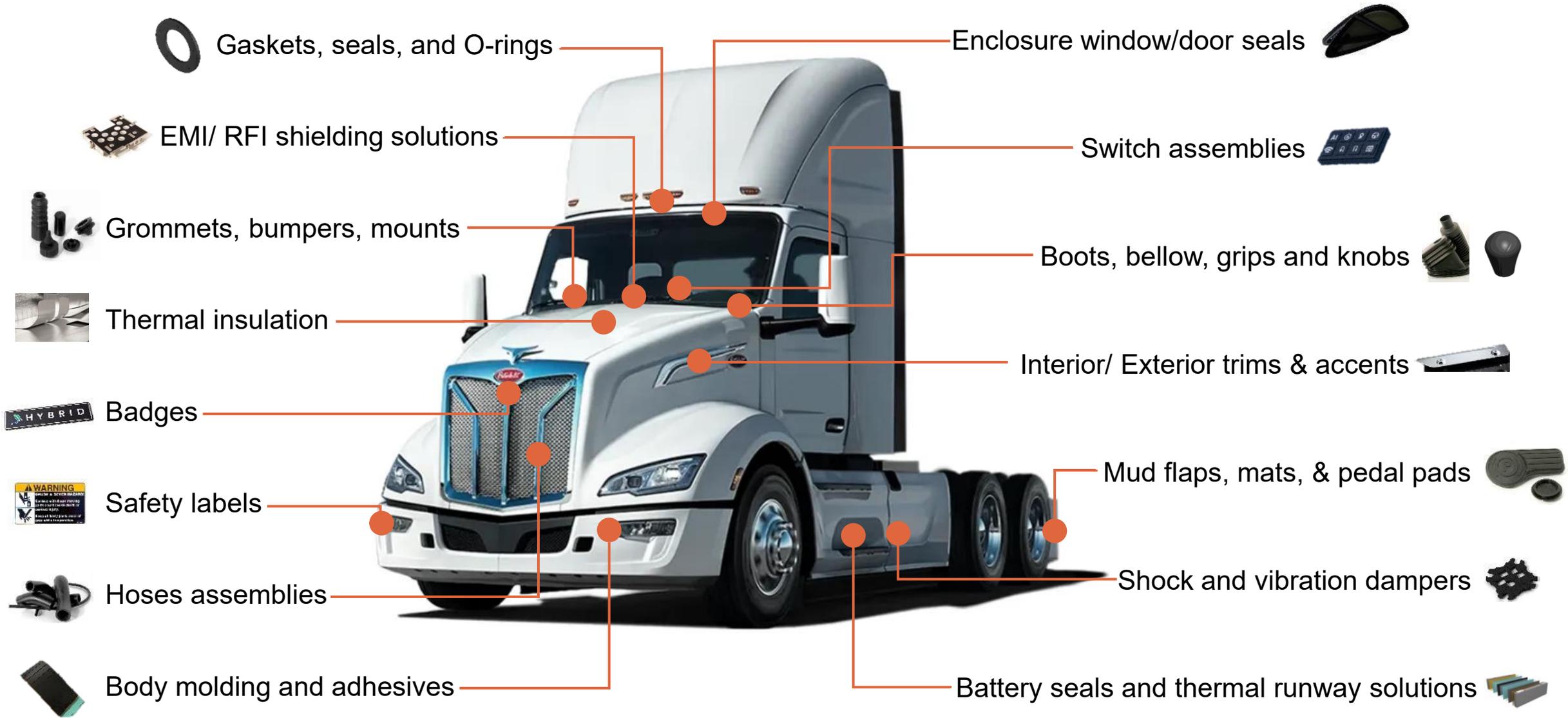
Sealing Solutions Group (SSG) factories

Certifications & Compliance:

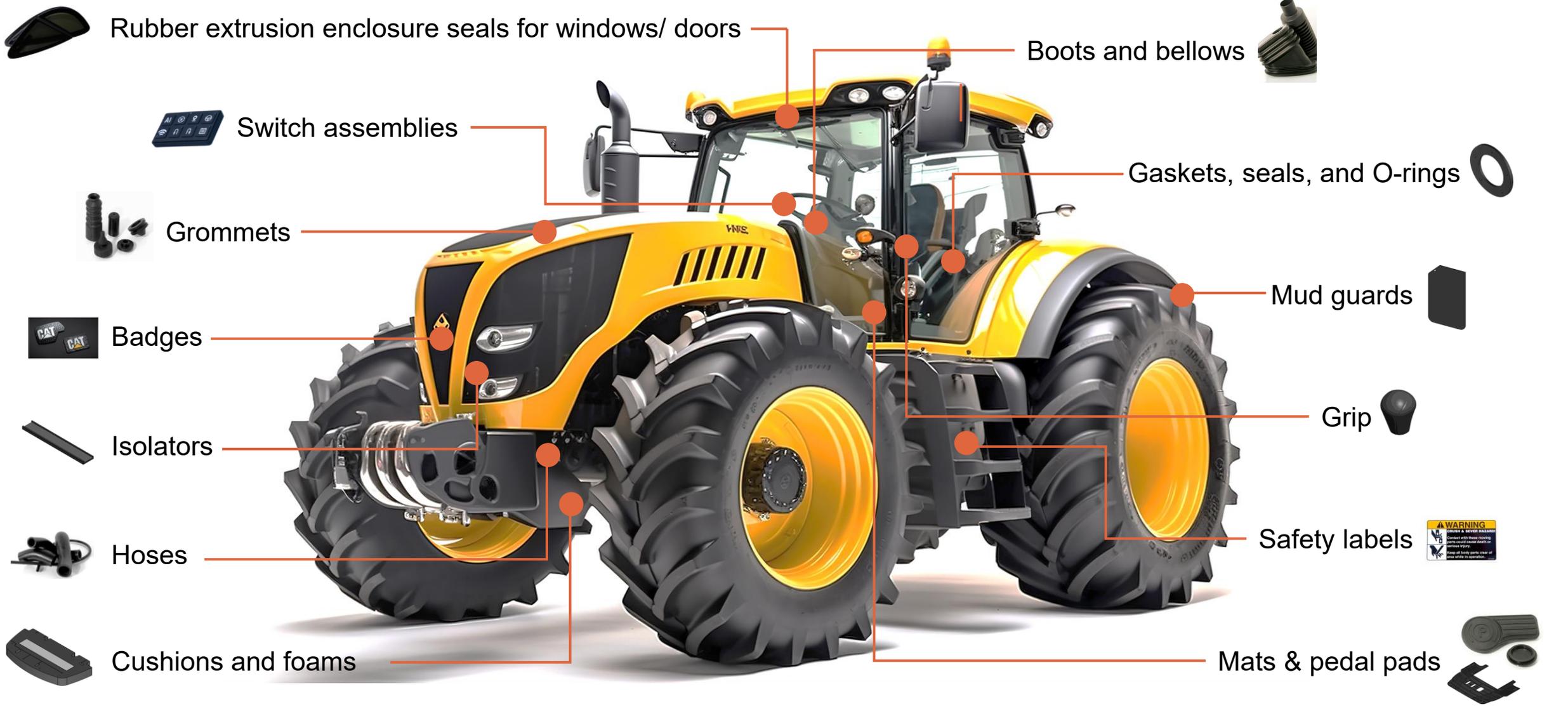
- ISO 9001
- AS9100
- IATF 16949
- ISO 14001
- OHSAS
- UL Listing
- RoHS and REACH

- Manufacturing Facility
- Distribution / Logistics Facility

Engineered Materials Solutions for Heavy Duty Trucks



Boyd Solutions for Agriculture Equipment



Boyd Solutions for Industrial Equipment



Boyd Solutions for ATVs

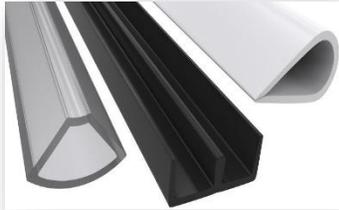
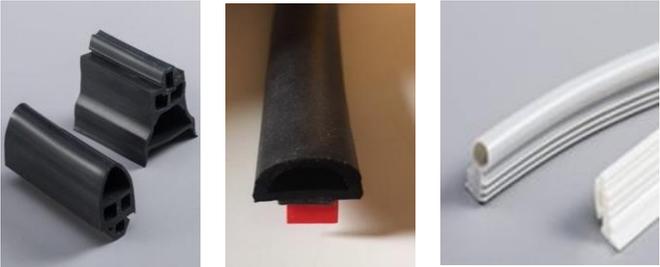
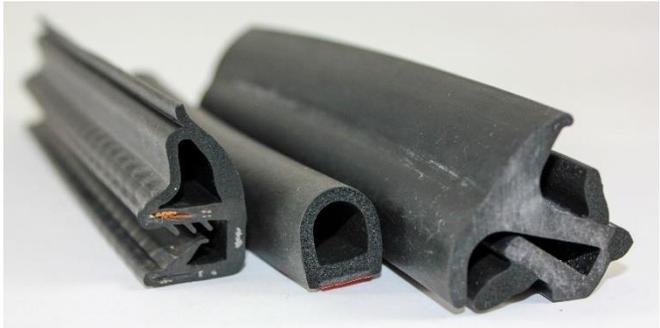


Boyd Solutions for Lawn Mowers

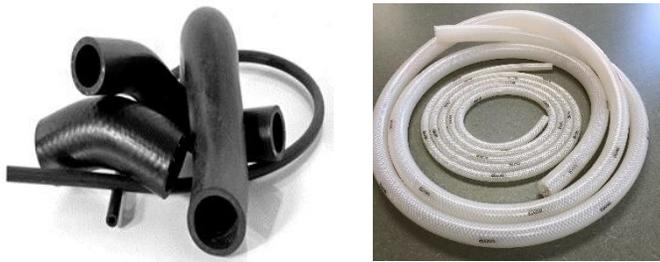
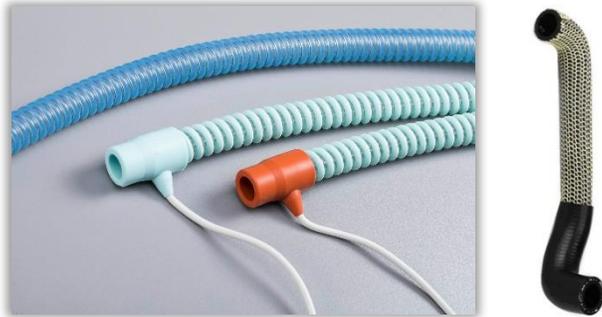


Extrusion Products

Extrusion Profiles



Tubes and Hoses



Frame Seals



Extrusion Capabilities

Single Material Extrusion

Rubber (Dense or Foam) or Plastic



Multiple Materials Co-Extrusion

Rubber + Foam



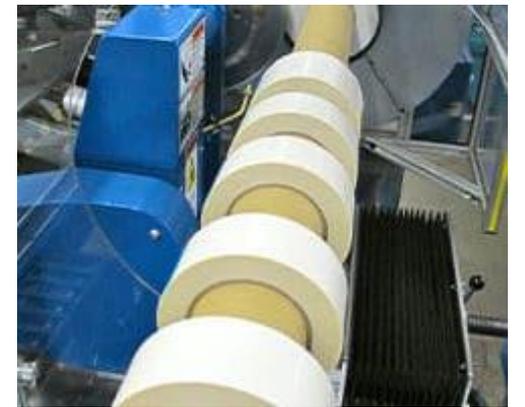
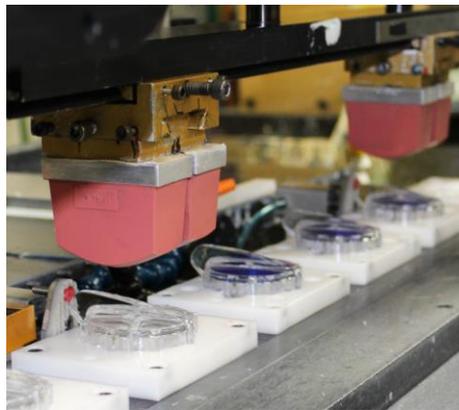
Extrusion with Structures

Rubber + Foam + Plastic



Value-Added Capabilities

- Cut-to-length, splicing with secondary die-cutting or other finishing options
- Corner molding and bonding for frame seals
- Printing and Pantone (PMS) color matching
- Heat-activated and pressure-sensitive adhesives
- Single/dual durometer, tri & quad extrusions featuring multiple materials in one extrusion process
- Urethane slip and plasma coating for non-stick seals
- Custom assemblies and kitting



Extrusion Base Materials Processed

Rubbers

- Silicone HCR
- Fluorosilicone
- Viton (FKM)
- Vamac (AEM)
- Neoprene (CR)
- Nitrile (NBR, Buna-N)
- EPDM
- HNBR (HSN)

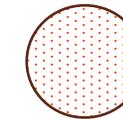
Plastics

- TPE (Santoprene)
- TPU
- TPV
- TPO

Materials Legend



Dense Rubber



Sponge Rubber

Available densities depend on material and profile choice

Material Suppliers

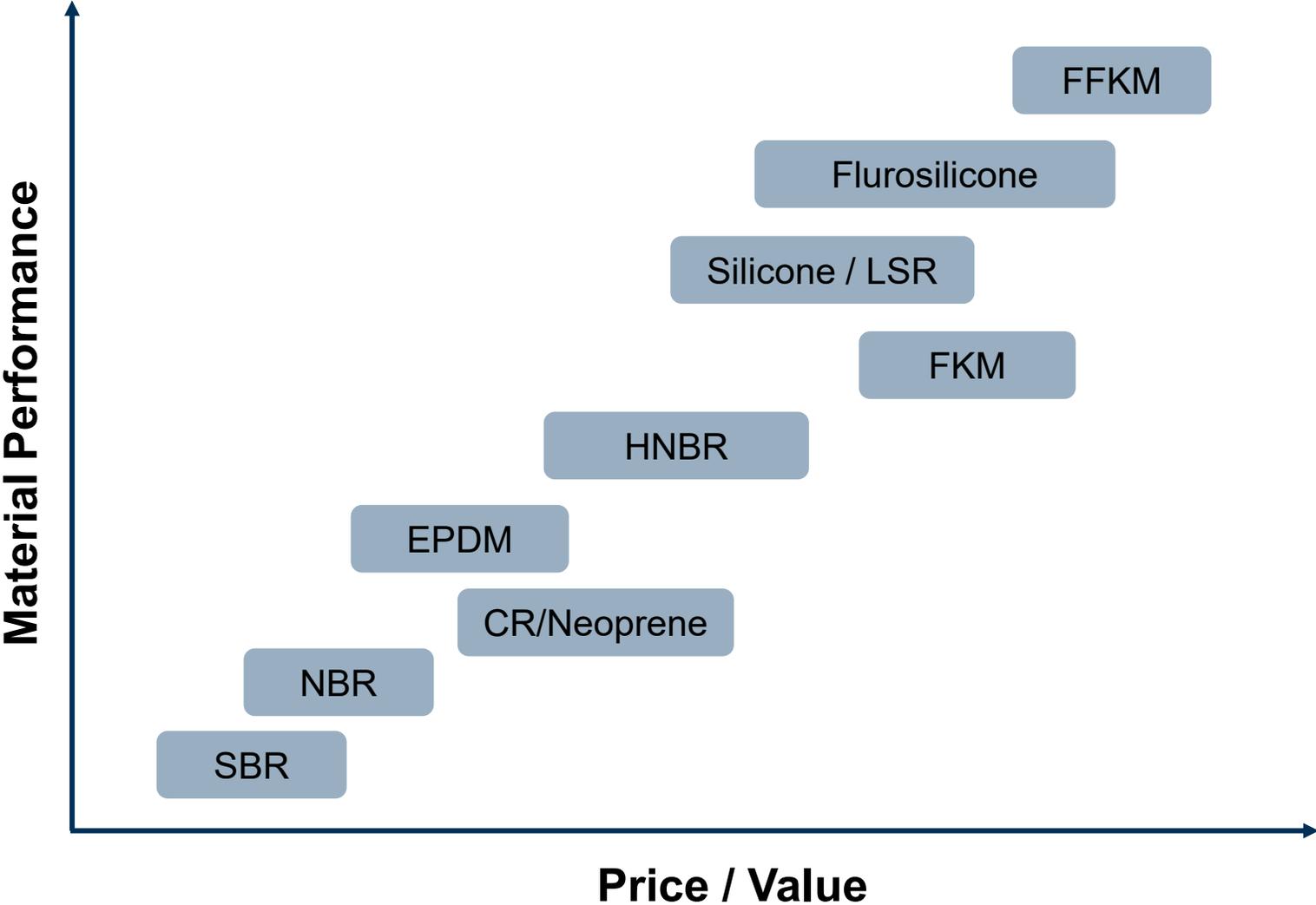


Chemours™



O-Rings / Molded Rubber

Material Product Performance vs. Relative Price / Value



Material Suppliers

A collection of logos for material suppliers, arranged in two columns. The suppliers include Dupont, Dow, Hexpol, Chemours, Zeon, Wacker, Momentive, Solvay, Daikin, and ShinEtsu.

Elastomer Technology in Transportation

Molded rubber seals: proprietary formula dual durometer door seal with highly engineered compression performance for long life waterproofing



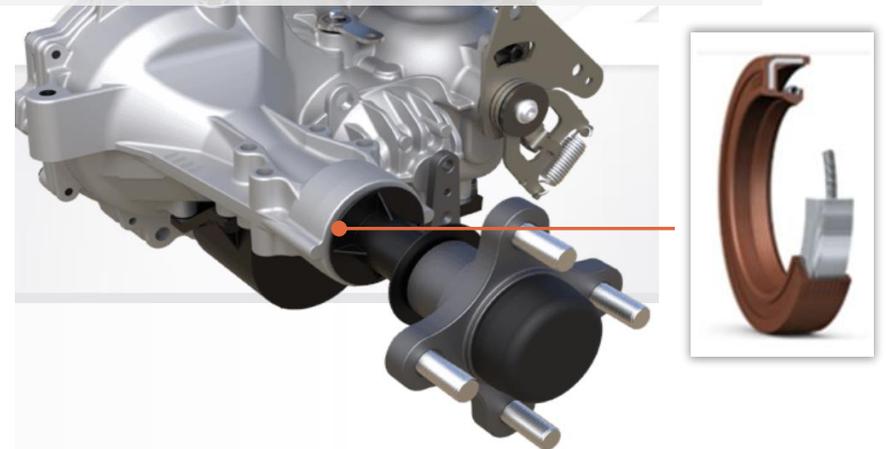
Molded seal: patented dual durometer slide-out seal engineered to waterproof, remove debris, and absorb vibration with long life flex performance



Molded rubber seals: ingress protection with proprietary compounds engineered to withstand UV, chemicals, and harsh environments



Compound seal: proprietary rubber molded over metal structure engineered for leak-free performance with robust structural strength and integrity



Insulation and Shielding

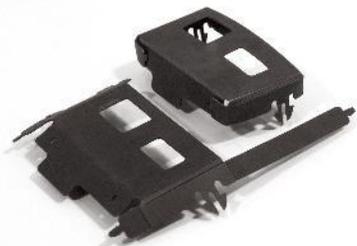
Acoustic Insulation



Thermal Insulation & Shielding



Electrical Insulation



EMI/ RFI Management



Environmental Sealing and Protection

Shock and NVH Damping



Chassis & Enclosures



Particle & Fluid Ingress Protection



Bonding Solutions



Sealing and Protection Solutions

Seals, Gaskets, and O-Rings



Surface Protection Solutions



Ingress Protection



Air and Liquid Flow Containment



Branding and User Interface

Improve product performance, minimize wear and tear, prolong product lifecycle, maintain environmental purity and enhance user experience

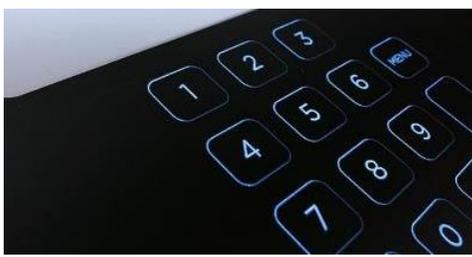
Nameplates



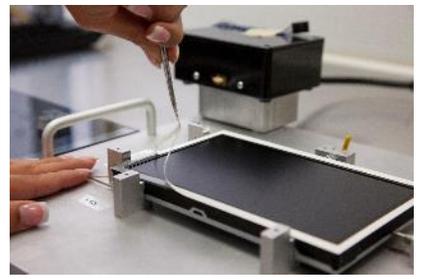
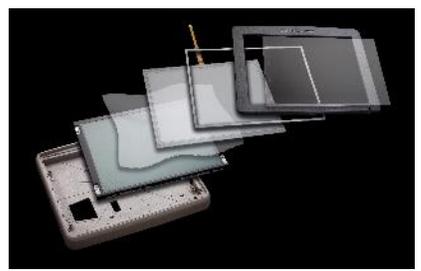
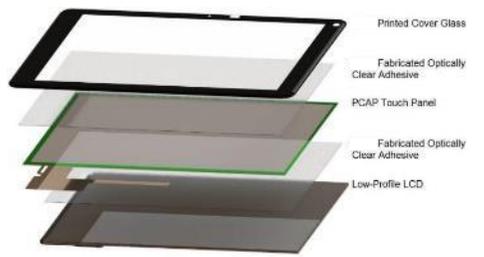
Labels and Overlays



Switch Technologies



Displays and Enhancement Films



Quality Certifications

bsi. 

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - AS9100D AND ISO 9001:2015

This is to certify that: **Boyd Corporation**
Av. Manuel Talamas Camandari 8555
A1 Lote Bravo II
Ciudad Juarez
Chihuahua
32695
Mexico

Holds Certificate No: **FM 760797**

and operates a Quality Management System which complies with the requirements of AS9100D (technically equivalent to EN9100:2018 and JISQ 9100:2016) and ISO 9001:2015 and is assessed in accordance with AS9104/1 for the following scope:

Converting and assembly of foam, rubber, plastic and other resilient material components.

For and on behalf of BSI: 
Carlos Pitarco, Chief Operating Officer, Assurance - Americas

Original Registration Date: 2022-04-25
Latest Revision Date: 2022-06-29

Issue Date: 2022-04-25
Expiry Date: 2025-04-24

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This certificate remains the property of BSI and shall be returned immediately upon request. An electronic certificate can be authenticated at www.bsigroup.com/ClientDirectory. Printed copies can be validated at www.bsigroup.com/ClientDirectory to be used in conjunction with the scope above or the attached appendix. Further clarifications regarding the scope of this certificate and the applicability of IATF 16949 requirements may be obtained by consulting the organization. IATF Certified Office: BSI Assurance UK Limited, registered in England under number 3095233 at 389 Chiswick High Road, London W6 4AL, UK. American Headquarters: BSI Group America Inc., 17950 Warkgate Drive, Suite 800, Herndon, VA 20170-4007 USA. A Member of the BSI Group of Companies.

bsi. 

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - IATF 16949:2016

This is to certify that: **Boyd Corporation**
Av. Manuel Talamas Camandari 8555
A1 Lote Bravo II, Cd.
Ciudad Juarez
Chihuahua
32695
Mexico

USI: YMZGLS

operates a Quality Management System which complies with the requirements of IATF 16949:2016 for the following scope:

Manufacture and assembly of mechanical components including rubber, plastics, other flexible materials and fabrication and assembly of custom thermal transfer systems

Permitted Exclusions: Product Design

For and on behalf of BSI: 
Carlos Pitarco, Managing Director, Assurance, Americas

BSI Certificate Number: 766017
IATF Number: 0483949

Certification Date: 2023-09-26
Latest Issue: 2023-09-26
Expiry Date: 2026-09-25

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Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 13485:2016

This is to certify that: **Boyd Corporation**
Av. Manuel Talamas Camandari 8555
A1 Lote Bravo II, Cd.
Ciudad Juarez
Chihuahua
32695
Mexico

Holds Certificate Number: **FM 752791**

and operates a Quality Management System which complies with the requirements of ISO 13485:2016 for the following scope:

Manufacture, assembly, and packaging of sterile and non-sterile flexible sealing components, dressing wound care bandages, biohazardous fluid solidification material and thermal transfer systems for CT scan and MR machines for the medical industry.

For and on behalf of BSI: 
Graeme Tunbridge, Senior Vice President Global Regulatory & Quality

Original Registration Date: 2022-01-12
Latest Revision Date: 2024-10-15

Effective Date: 2025-01-12
Expiry Date: 2028-01-11

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This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract. An electronic certificate can be authenticated at www.bsigroup.com/ClientDirectory. Printed copies can be validated at www.bsigroup.com/ClientDirectory. Information and Contact: BSI Group The Netherlands B.V., John M. Koyroplein 1, 3966 EP Amsterdam, The Netherlands | Tel: +31 20 3460 740 BSI Group The Netherlands B.V. is registered in The Netherlands under number 32006261. A Member of the BSI Group Holdings B.V. American Headquarters: 17950 Warkgate Drive, Suite 800, Herndon, VA 20170-4007 USA.

 **Responsible Business Alliance**
Advancing Sustainability Globally

Closure Validated Audit Report

Audit Reference Number	VAR-20241119-MEX-01802-1
Audited Facility	Boyd Corporation Juarez
Overall Audit Score	100.00%

Disclaimer: To the knowledge of RBA, the APSCA number listed is accurate as of the date hereof. Listing of the APSCA number herein is not in any way an endorsement by RBA of APSCA. RBA is not an affiliate of APSCA, and RBA is not liable for any losses, expenses or damages of any nature, including without limitation, special, incidental, punitive, direct, indirect or consequential damages or lost access or profits, resulting from or arising out of reliance on or use of the APSCA number.

Overall Score	Conformance	Risk of NC	Minor NC	Major NC	Priority NC	Opportunity for Improvement	Total Scored Questions	Not Applicable Questions
100.00%	75	0	1	1	0	0	77	0

*NC: Non-conformance to RBA Code of Conduct

Audit Information		Facility Information	
Audit ID	01-AU-10003242	Company Name	Boyd Corporation Juarez
QC Completed Date	12-11-2024	Facility Name	Boyd Corporation Juarez
Audit Start Date	11-19-2024	RBA Facility ID	CF-FA-10003035
Closing Meeting Date	11-19-2024	Facility Address	Ave. Manuel Talamas Camandari # 8555
Audit Type	Closure Audit	Facility City	Juarez, Chihuahua 32695
Audit Firm	Intertek	Facility Country	Mexico
Audit Category	VAP	Facility Point Of Contact	carlos.pitarco@boydcorp.com
VAP Version	RBA Protocol 7.0.1 - September 2023	Total Number of Workers	418
Auditor Information	Auditor: SRT, Auditee: 1465		

Boyd Corporation Juarez - Juarez, Mexico




Audit Score: 100.00%

Audit Score Comparison (avg last 2 years)

Category	Score
Facility	100.00%
Country	100.00%
Industry	100.00%
All audits	100.00%

Important Notice: RBA CONFIDENTIAL - Internal use ONLY. The information in this report is strictly confidential and subject to the RBA Validated Audit Agreement.

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Certified in AS9100



Certified in IATF 16949



Certified in ISO13485



Certified in RBA (Responsible Business Alliance)



Introduction to Boyd Juarez

Integrated solutions for insulation, sealing and protection solution



Facility Size:

400,000 sq. feet facility size

Employees:

700+ employees

Quality Certifications:

9001,13485,14001 AS9100D, IATF16949

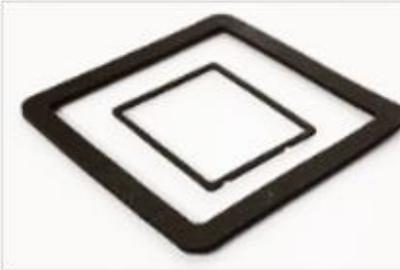
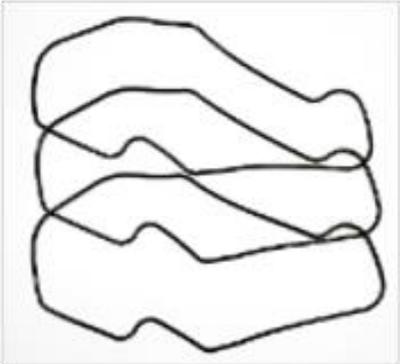
Logistics: 30 mins by truck to US border

Core Solutions

- Precision converted polymeric seals and gaskets
- Display bonding laminates
- Ingress protection port, door and opening sealing

Manufacturing Capabilities:

- WJ, CNC Routing, Extrusion,
- Advanced rotary and flatbed die cutting
- Laminating and slitting
- Quick turn prototyping



Why Boyd?



Scalable, Innovative and Integrated solutions

Increase performance lifetime, efficiency, and safety while reducing size, weight, maintenance, and operating costs



Access to Global Material Innovation

Get your hands on the most advanced materials through our material science innovation and strategic partnerships



Supply Chain Consolidation

Minimize manufacturing costs, downtime, and delays with streamlined sourcing and holistic solutions



Decades of experience and expertise

Technical design and engineering teams to help with material selection, DFM, prototyping, etc.



Globalization – Think Global, Act Local

Enhance global agility and business continuity with regional manufacturing redundancies

www.boydcorp.com

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TRUSTED INNOVATION