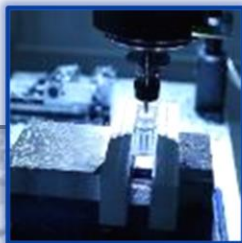


# PARKWAY

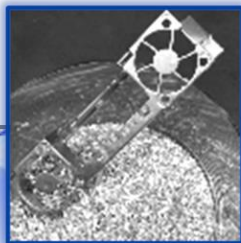
**HIGH  
PERFORMANCE  
POLYMERS**



**MACHINED  
PLASTIC  
SOLUTIONS**



**MAGNESIUM  
THIXOMOLDING**



**THERMOPLASTIC  
MOLDING**



**THERMOSET  
MOLDING**



**AGRICULTURE,  
TRUCK, OFF-ROAD**



**INFRASTRUCTURE**



**AUTOMOTIVE**



**INDUSTRIAL**



**HEALTHCARE**



**AEROSPACE &  
ELECTRONICS**

## Parkway Overview

# Company Overview

Leading North American supplier of molded product technologies

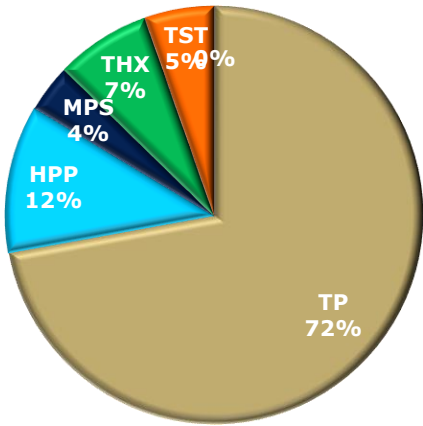
Founded 1946 in Cincinnati, OH  
(9) North American Plants, Headquartered in Greenville, SC  
2022 Projected Revenue: \$129M

Diversified Product Technologies

High Performance Polymer Molding  
Machined Plastic Solutions  
Magnesium Thixomolding  
Thermoset Molding  
Thermoplastic Injection Molding

Tooling, Assembly, Product Design, Supply Chain Management

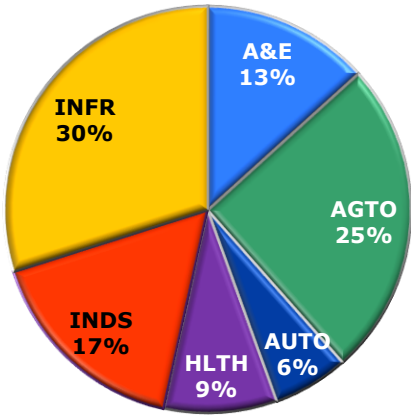
Product Mix



Targeted End Market Focus

<b>Aerospace &amp; Electronics</b>	<b>Agriculture, Heavy Truck, &amp; Off-Road</b>	<b>Automotive</b>
<b>Healthcare</b>	<b>Industrial</b>	<b>Infrastructure</b>

End Markets



Focused-Factory Operating Footprint

Asheville, NC	Saltillo, COA, MX	Atlanta, GA
Ft. Collins, CO	Seneca, SC	Loveland, CO
Greeneville, TN	Westminster, SC	Rockford, IL

(825+) Non-Union Employee Associates

A Stable, Trusted Supplier

Over 200 Active Customers with (31) \$1M+ Relationships in 2019  
Consistent Long-Term Supply Relationships with Fortune 500 OEM clients  
Adequate cash flow and financing for capital upgrades, growth and acquisitions

# Company History

# PARKWAY

Confidential – Not for External Distribution

## Chapter 1 1946-1985

**Founding  
Family  
40 Years**



- Founded April 1946 by Edward Willig
- Joined by his sons Donald & Edgar and later their sons Gary & John, David, Ed, and Joe respectively
- Single Plant in Cincinnati, OH
- 1985 Revenue: \$7M, 40-yr AAGR \$175K/yr

## Chapter 2 1986-2005

**Footprint  
and  
Product  
Line  
Expansion**



**PARKWAY  
PRODUCTS, INC**



- Executive Leadership and Ownership transitioned to Non-Family Managers
- Aerospace market presence acquired
- Commercial Product Technology portfolio assembled organically and through acquisition
- Nine operations in 6 US states and Mexico
- 2005 Revenue: \$52M, 20-yr AAGR \$2.2M/yr

## Chapter 3 2006-2014

**MBO,  
Divisions  
Formalized,  
Aerospace  
Divestiture**

**PARKWAY**  
Aerospace & Defense



**PARKWAY**  
Enterprise Molded Products



- Operated as two independent Divisions
- Recapitalized with Oxford Financial Group
- Each Division surpassed \$70M in 2013 revenue
- Aerospace & Defense divested July 2013
- 2013 Revenue: \$148M, 7-yr AAGR \$13.7M/yr

## Chapter 4 2015 – Today

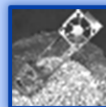
### Technologies



HPP



MPS



THX



TP



TST

### Operations



### End Markets



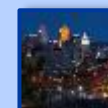
Agriculture,  
Truck  
& Off Road



Healthcare



Aerospace &  
Electronics



Infrastructure



Automotive



Industrial

**PARKWAY**

## HIGH PERFORMANCE POLYMERS (HPP)



Wear, Chemical Resistance, Strength and High Heat Specialty Applications

Custom Injection Molding, Stock Shapes & Machined Prototypes

Torlon® PAI, PEEK, Ultem® PEI, PPS, PSU

## THERMOPLASTIC MOLDING (TP)



192 Injection Molding Machines in NAFTA region, 17-1760T size

Insert Molding, Multi-shot, Overmolding and Structural Foam

All TP's & Compounds, 4 Operating Sites

## MACHINED PLASTIC SOLUTIONS (MPS)



Precision High Performance Polymer Machining

Metal-to-Polymer Conversion, Low Friction, High Heat, Wear and Strength Applications

Torlon® PAI, PEEK, Ultem® PEI, Ryton®, ABS, Lexan

## THERMOSET MOLDING (TST)



Compression, Transfer and Injection Molding 40 Machines, 50-500T size

Electrical, Structural, High Hardness and Flame Resistant Applications

Largest Custom Thermoset Molder in Mexico

## MAGNESIUM THIXOMOLDING (THX)



Semi-solid Magnesium Injection Molding

Thin Wall, Light Weight, Fine Detail, EMI Shielded, Thermally Conductive, & Durable

Precision & economics of injection molding with properties of lightest structural metal

## ASSEMBLY, FINISHING & FULFILLMENT



Low Labor Cost Country Assembly

Automated & Semi Automated, Pad Printing, Sonic & Vibration Welding

Extensive Program Transfer & LCC Repositioning Experience

## TOOLING (IN-HOUSE & CONTRACTED)



Turnkey Design & Build, experience in 1 - 128 cavity construction

On-site Repair & Maintenance

Material & Process Technology Specialists at Focused-Factory Sites

**End Market**



**Agriculture,  
Truck, Off-  
Road**



**Infrastructure**



**Automotive**



**Industrial**



**Healthcare**



**Aerospace &  
Electronics**

**Application Area**

ATV,  
Construction,  
Farm  
Equipment,  
Heavy Truck,  
Lawn Care,  
Personal  
Watercraft,  
Portable Power,  
Snowmobile

Building  
Networking  
& Systems,  
Electrical  
Metering,  
Electrical  
Switching,  
Gas  
Metering,  
Smart Grid,  
Telecom,  
Water  
Purification

Electronics,  
Vision Systems,  
Fluid Handling,  
Fuel Systems,  
Interior  
Controls,  
Powertrain,  
Suspension

Air-filtration,  
Appliance,  
Compressor,  
Food  
Processing &  
Service,  
Friction &  
Wear, HVAC,  
Textile,  
Welding

Biotech/Lab  
Equipment,  
Diagnostic  
Devices, Drug  
Delivery,  
Eyewear,  
Imagery,  
Robotics,  
Surgical

Airframe,  
Engines  
Combat Gear,  
Connectors,  
Fuel Tanks,  
Interiors,  
Propulsion,  
Missile,  
Precision  
Optical Gear,  
Semi-  
conductor  
Equipment,  
Weaponry

**Products**

HPP  
MPS  
THX  
TP

TP  
MPS  
TST

THX  
HPP  
TP

HPP  
MPS  
THX  
TST  
TP

HPP  
MPS  
THX  
TST  
TP

HPP  
MPS  
THX



# Production Operations Platform

**PARKWAY**

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Atlanta, GA (ATL)



Loveland, CO (LOV)



Rockford, IL (ROC)



Saltillo, MX (SAL)

Plant	ATL	LOV	ROC	SAL	SAL	GRN	SEN	FTC	ASH	WES
Tech	HPP	THX	HPP/MPS	TST	TP	TP	TP	TP	TP	TP
Sq. Ft. (K)	50	32	30	65	45	175	90	24	35	60
# of Machines	14 + 10 CNC Centers	8 + 10 CNC Centers	11 + 33 CNC Centers	43	23	37	46	13	25	21
Range	17-300T	220-450T	40-360T	75-500T	60-500T	55-1760T	50-720T	35-400T	60-500T	90-1650T
<100T	5	0	6	8	2	2	3	2	5	1
100-250T	4	3	4	26	12	16	26	9	10	2
250-500T	5	5	1	9	7	10	13	2	10	7
>500T	0	0	N/A	0	2	9	4	0	0	11
ISO9001: 2015	X	X	X	X	X	X	X	X	X	X
UL	X			X	X		X	X		
IATF16949: 2015	X									
ISO14001	X									
Other Certifications	Q1, AS9100		AS9100					FDA, ISO13485		



Ft. Collins, CO (FTC)



Greenville, TN (GRN)



Seneca, SC (SEN)



Asheville, NC (ASH)



Westminster, SC (WES)

9 Facilities, 606K ft<sup>2</sup>, 241 Molding Machines, 53 CNC Machining Centers

## Benefits of HPP

- High heat resistance
- Excellent wear and friction resistance characteristics
- High stiffness & strength
- Strong chemical resistance
- Ideal for metal to plastic conversion



- 100+ years of HPP molding & tooling experience on staff
- Material selection & design support
- High production molding applications
- Stock & near net shapes
- Unmatched capacity of specialized material drying, mold heating, molding & post-curing equipment

NAFTA Market Leader in the injection molding of:

- Torlon® PAI
- PEEK
- Ultem® PEI
- PPA
- PPS
- Polysulfone



## **Benefits of MPS**

- Wide range of high performance & engineering grade materials
- Complex part geometry and non-moldable part features
- Close tolerance requirements
- Low volume production and assemblies
- Cradle to grave program production



- Onsite Markforged X7 3D printer for design concept validation and custom fixturing
- In process Keyence Measuring Systems for optical measurements
- Automated machining cells for high volume machined plastic production
- AS9100 certified for Aerospace components and assemblies

## Latest Inspection Techniques:

- Real-time SPC data collection
- Cpk Tracking
- CT Scanning



- Comparable process to plastic injection molding using semi-solid magnesium alloy

## **Thixo vs. Cast Metals**

- Thinner walls (0.020"/0.5mm)
- 34% lighter than aluminum, 76% lighter than steel
- Cosmetic quality surface finish
- Lower porosity
- Tighter, more repeatable process
- Less energy consumed, no by-products

## **Thixo vs. Engineering Thermoplastics**

- Thermally & electrically conductive
- Higher stiffness & strength
- EMI/RFI shielded without secondary plating
- Stability at higher temperatures
- Metallic aesthetics & end-user perception



## Materials

- Polyester Compounds
- Epoxy Compounds
- Phenolic Compounds
- Melamine Compounds

## Forms

- Bulk Molding Compound (BMC)
- Sheet Molding Compound (SMC)
- Granular / Pelletized
- Heavily Filled BMC Grades  
*Dough/Thick Molding Compound (TMC/DMC)*

## Processes

- Injection Molding (150-500T)
- Compression Molding (75-500T)
- Transfer Molding (75-250T)



- Injection/ compression/ transfer capabilities, 40+ presses under one roof
- Integrated thermoplastic, thermoset & assembly operation
- Mexico low cost country advantage





## Processes

- Injection Molding
- Vertical Insert Molding
- Structural Foam Molding
- 2-Shot Molding

## Capacity

- 100+ Molding Machines
- 17-1760 Ton Single Shot Injection Molding Machines
- 80-160 Ton 2-Shot Injection Molding Machines
- In-house engineering & tooling repair



What questions do you have for us?