



Flexible Packaging

Technology tailored for flexibility and superior ROI

dsX flex-pack™ 300 designed for emerging markets

Extrusion Coating Systems

About Davis-Standard



Who We Are

Davis-Standard is a global leader in the design, development and manufacture of extrusion and converting technology. Our systems encompass over 10 product lines to support manufacturing applications and customers in a wide variety of industries, including automotive, building & construction, consumer products, medical, and packaging.

With more than 1,400 employees worldwide and a network of independent sales agents and suppliers in nearly every country, Davis-Standard is committed to engineering systems for you that are cost-effective, environmentally friendly, and offer a high return on investment. The company has manufacturing and technical facilities in the United States, Canada, China, Germany, Finland, Switzerland and the United Kingdom.

Our Purpose

We exist to help you produce products that improve everyday life. Though we are removed from final production of your end products, we are central to the manufacturing of many of the world's essential, or even life-altering, products. Many of these products would not exist without us. Like you, we take that responsibility seriously.

Our Promise

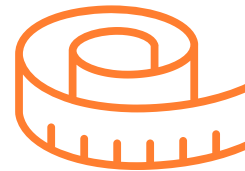
We optimize our customers' productivity and profitability by providing the best total solution (product + support). We serve our customers from a unique perspective. While our competition generally focuses on machine technology, we focus on providing the best total solution. That means, we supply the best combination of product and support services to help customers achieve their business goals.

Davis-Standard Offers

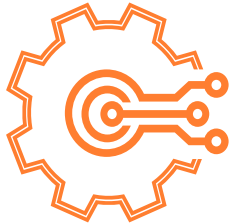
Proven equipment technology used by market leaders for the fastest payback due to increased productivity



Experience



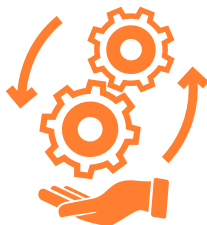
Tailored Design



Technology



Global Support



Total Solutions

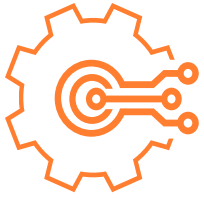
Let us tell you how...





Process & Application Experience

- Adapt & design to customer's structure and requirements
 - Equipment design to match technical & business needs
-
- Extruder package
 - Web handling
 - Reduce waste
 - Winder
 - Optimum roll quality
 - Coater
 - Dryer
 - Laminator
 - Controls & drives
 - Ancillary equipment



Case Study - dsX flex-pack™ 300S/T Flexible Packaging Line

Extrusion Coating Systems - Flexible Packaging

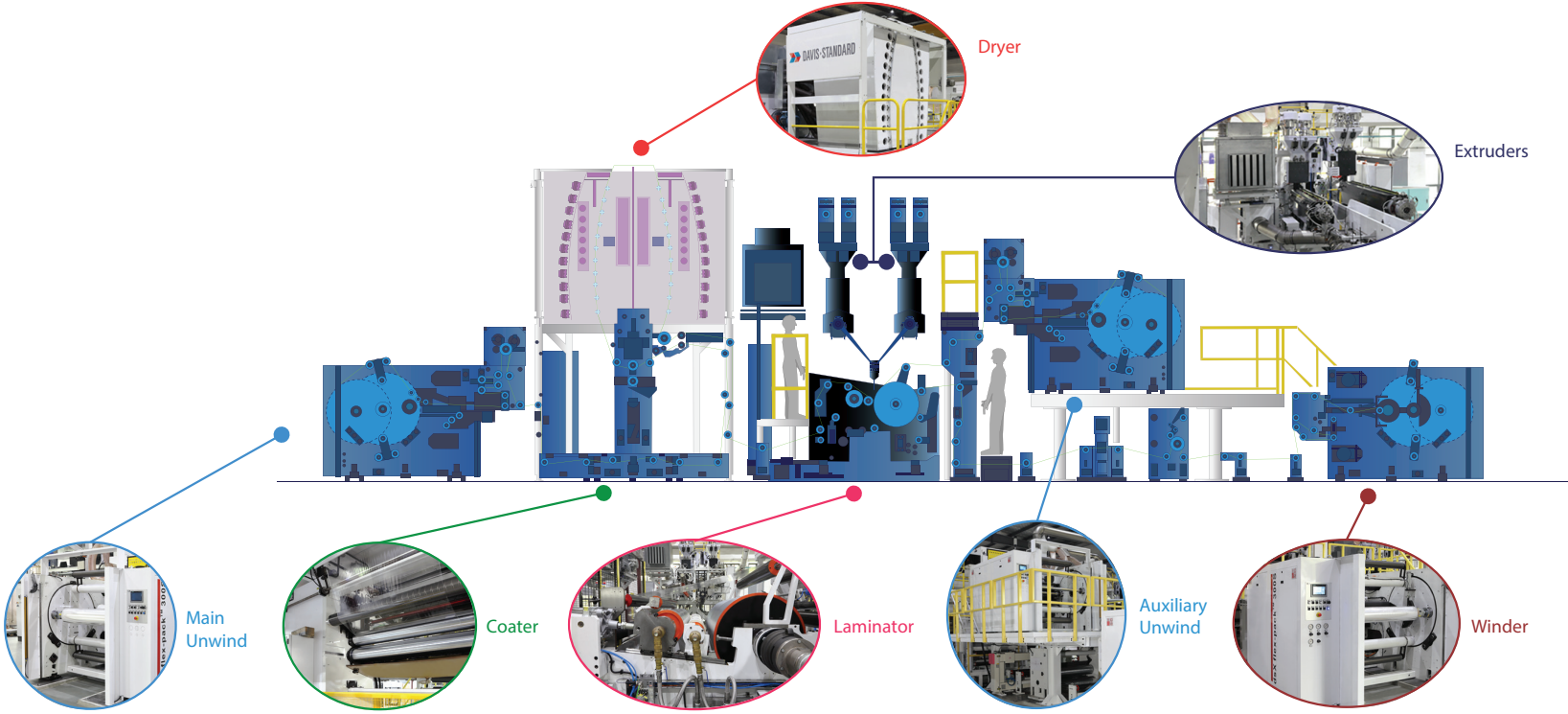
Flexible Packaging Line

- Tailored design for diverse structures, regulatory & business needs
- Technology for optimum speed, machine footprint, quick change and reduced waste
- Davis-Standard global design, manufactured at Suzhou facility with local after-sales support / service centers

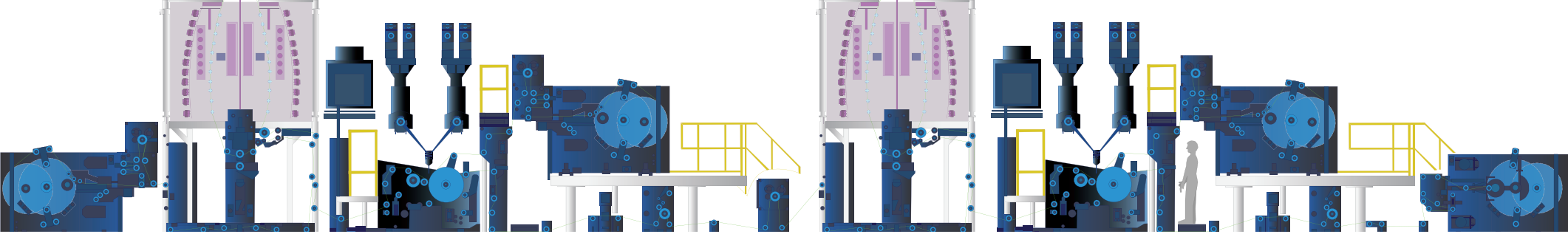


- Designed for emerging markets
- Maximum web width - 1350 mm (53 inches)
- Minimum web width - 650 mm (26 inches)
- Machine line speed - Up to 300 mpm (984 fpm)
- Maximum roll diameter - 1000 mm (39 inches)
- Machine footprint - 21.0 x 12.4 x 5.5 meters (300S)
- 34.7 x 13.5 x 5.5 meters (300T)
- Web tension range depends on substrate and width

dsX flex-pack™ 300S Flexible Packaging Line

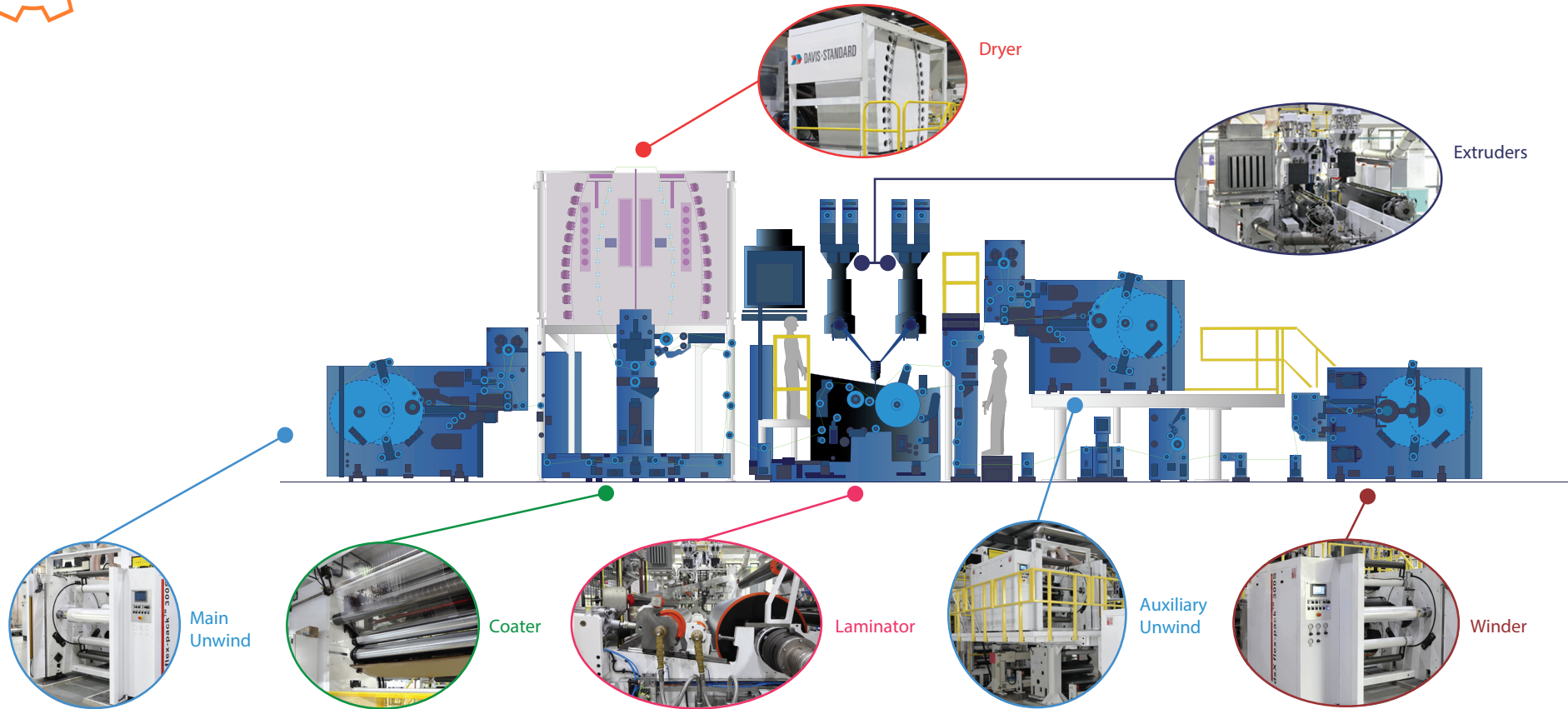


dsX flex-pack™ 300T Flexible Packaging Line





Technology Extrusion Coating Systems – Flexible Packaging



300S Typical Product Structure

17 μ BOPP / Ink / Primer / 12 μ LDPE / 17 μ Met BOPP

17 μ BOPP / Ink / Primer / 12 μ LDPE / 12 μ Met PET

12 μ BOPET / Ink / Primer / 12 μ LDPE / 25 μ Met CPP

12 μ BOPET / Ink / Primer / 12 μ LDPE / 6.3 μ AL foil

10 μ BOPET / Ink / Primer / 12 μ LDPE / 17 μ Met BOPP

300T Typical Product Structure

20 μ BOPP / Ink / Primer / 12 μ coex LDPE - white MB / 9 μ AL foil / 20 μ coex LDPE

12 μ BOPET / Ink / Primer / 15 μ coex LDPE - white MB / 7 μ AL foil / 30 μ coex LDPE

12 μ BOPET / Ink / Primer / 15 μ coex LDPE - white MB / 7 μ AL foil / Primer / 15 μ coex LDPE / 30 μ PE

12 μ BOPET / Ink / Primer / 15 μ coex LDPE / 12 μ MetPET / 30 μ coex LDPE

20 μ BOPET / Primer / 20 μ coex LDPE / 20 μ EVA



Unwind



Selected Features

- High speed dual direction splicing
- Stub roll capability
- Minimize tail length for reduced waste

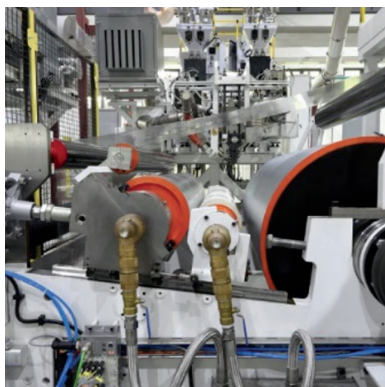
Winder



Selected Features

- Dual direction turret design with auto splicing
- Minimize air entrapment for quality roll build up

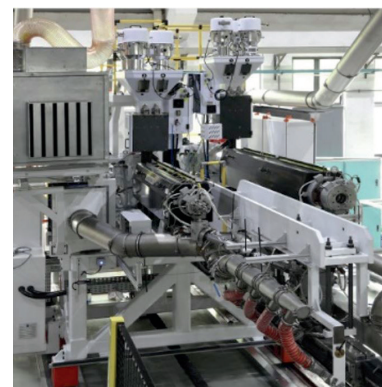
Laminator design



Selected Features

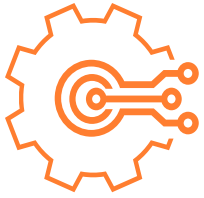
- Superior adhesion - 3 roll linear design
- Quick change design for increased productivity
- Handle thin gauge metalized film and pre-printed substrates
- Motorized teflon system for easy web width changes

Extruder and screw design

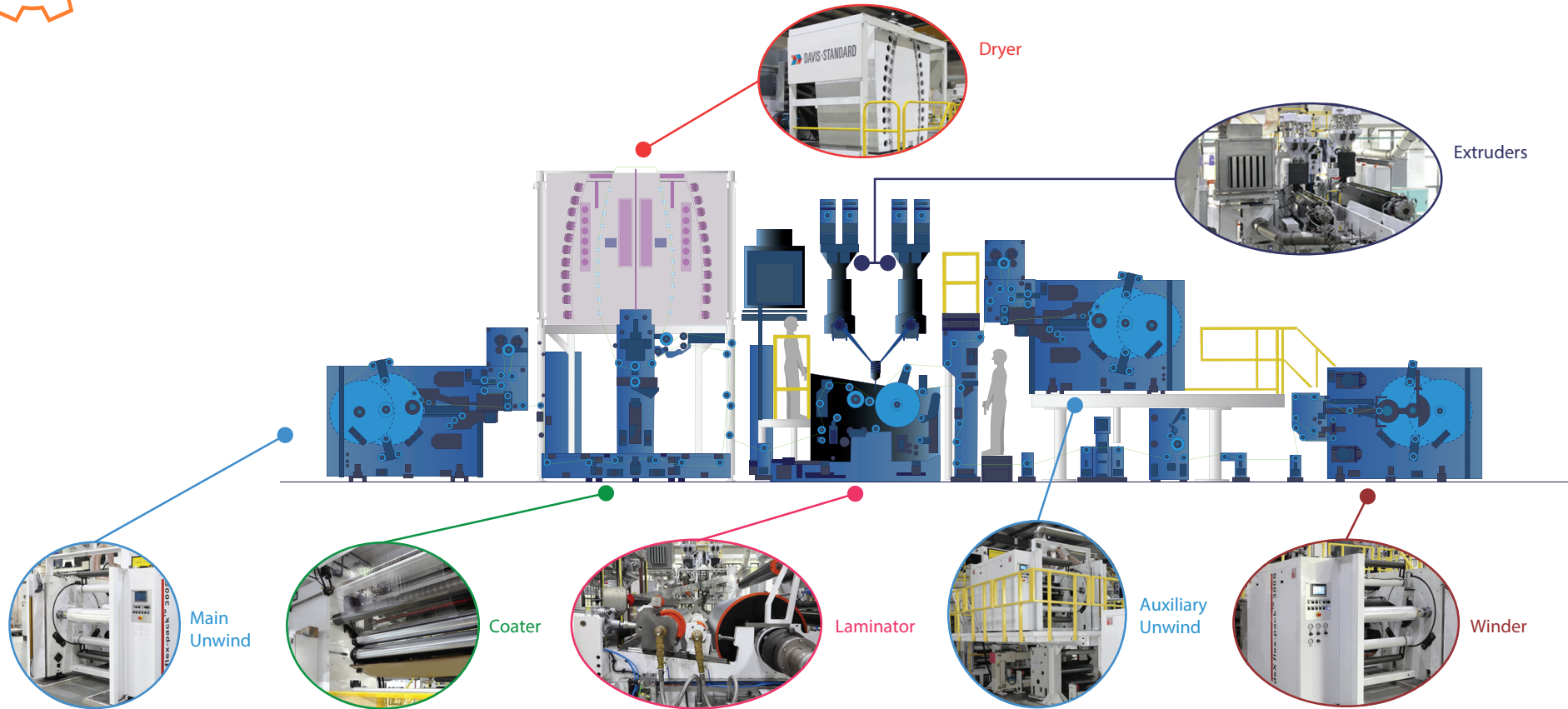


Selected Features

- Screw design for wide range of resins
- Extruder base designed to move with thermal expansion
- Temperature control for melt quality
- Gauge control and uniformity



Technology Extrusion Coating Systems – Flexible Packaging



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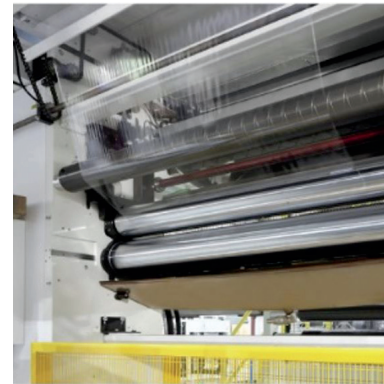
EXACT-S visualization system



Selected Features

- Recipe capability for repeatability
- Custom controls for drives, pressures & gauging system
- Compatible with all industry analog & digital drives controls
- Historical data capture

Coater



Selected Features

- 2 roll direct gravure design
- Quick change for web widths with speedwell system
 - Nip roll sleeve
 - Gravure roll sleeve

Dryer



Selected Features

- Configure to substrate - 5.5m dryer length
- 2 zone temperature control
- Web tension control

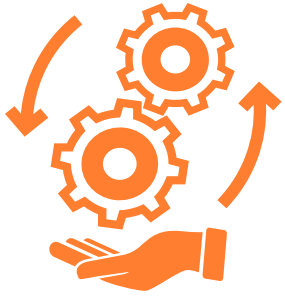
Web handling



Selected Features

- Best-in-class speed from start to finish
- Flexibility to handle diverse materials
- Precision tension control for quality rolls





We Offer a Total Solution



Stewardship - Start to Finish

1

PRE-SALE SUPPORT

- Tailored design based on customer technical & business needs
- Pricing, timing and delivery options presented

2

PROJECT MANAGEMENT

- Workflow, process integration to track build & delivery time
- Frequent 2 way communication

3

INSTALLATION & COMMISSIONING

- Davis-Standard teams are the most experienced/skilled in the industry
- Operator & maintenance training

4

AFTERMARKET

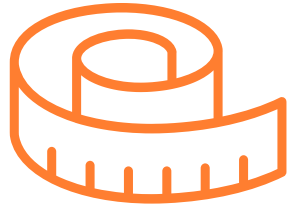
- Low cost of total ownership
- Regional locations for quick spares & support



24/7 Emergency Support Request +1 844 MY DAVIS (+1 844-693-2847)

Collaborative Partner for your Entire Line





Tailored Solutions

Partnership to take standard offering & tailor to customer's business & technical needs

Innovation Starts Here

Davis-Standard has mastered the art of working with progressive customers and industry partners to break old paradigms and develop extrusion and converting product platforms that provide a competitive advantage.

Customization Is Key

Major components of our extrusion lines are often tailored to address specific customer needs. This can be as simple as combining existing design elements in a unique way or developing a new solution to enhance existing capabilities.

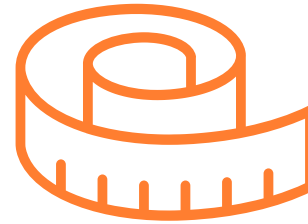
Packaged Solutions

From concept to reality, experienced engineering teams turn specific objectives into high performance manufacturing solutions. Well-equipped extrusion pilot facilities enable customers to test and prototype concepts, building a foundation of confidence.

Technology Leadership

By consistently reviewing technology fundamentals, Davis-Standard addresses major industry trends of industry 4.0 & productivity improvements.



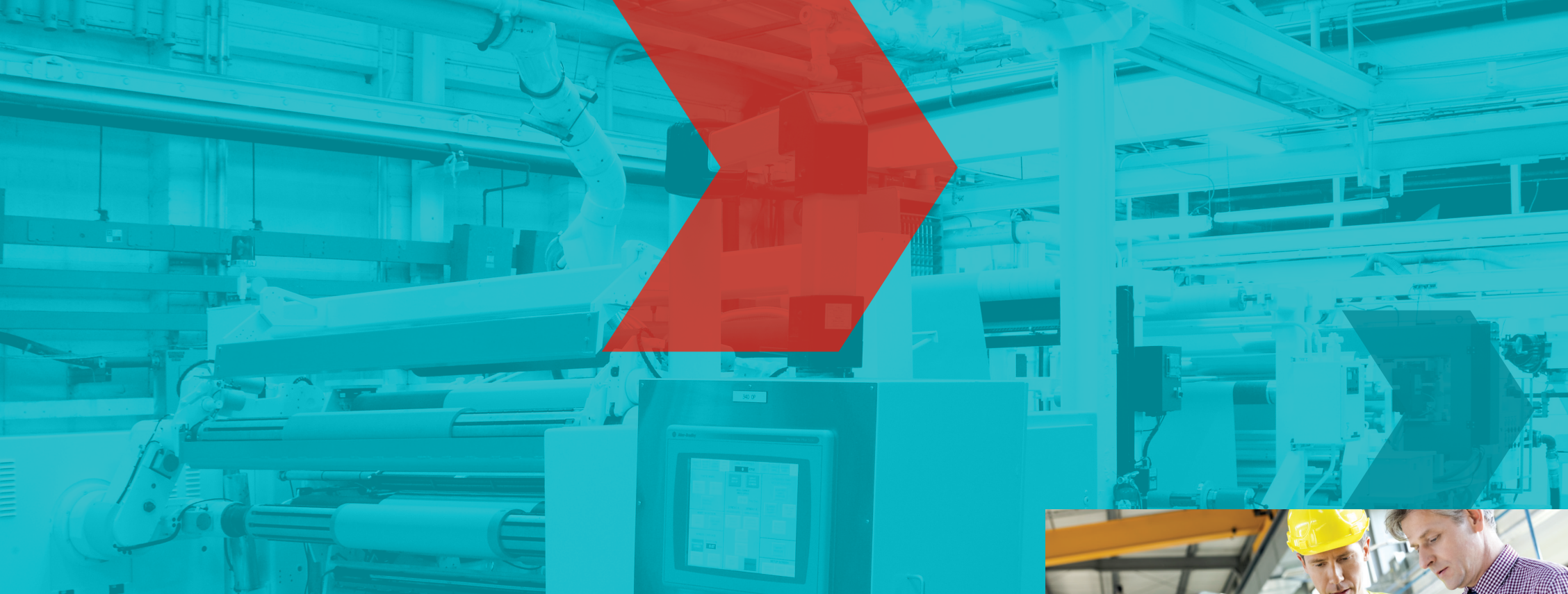


Research and Technical Centers

Extruder List

- 3/4 inch extruder
- 1 inch extruder
- 2.5 inch direct drive extruder
- 2.5 inch high speed extruder
- 2.5 inch Helibar extruder
- 3.5 inch extruder (smooth & grooved feed)
- 4.5 inch extruder

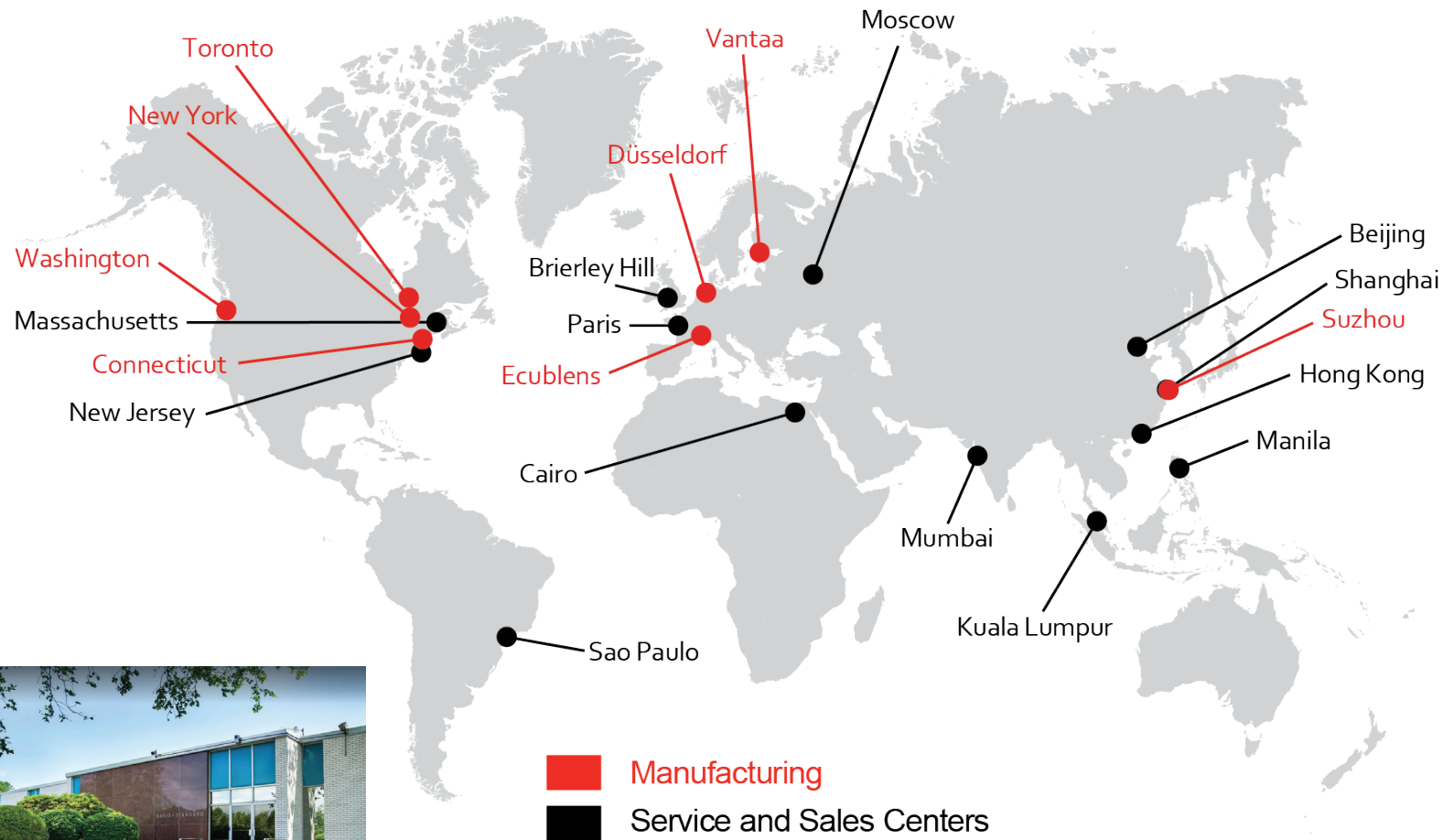






Davis-Standard - A Global Company

Production Across Three Continents - Quick Response Parts & Service



Fulton, New York, USA



Suzhou, China



Pawcatuck, Connecticut, USA



Erkrath/Düsseldorf, Germany

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PUT US TO WORK FOR YOU.

We strive to do whatever it takes to ensure that you are able to produce a superior end product, at a superior profit. Contact us today to learn how we can help you succeed.



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 **DAVIS › STANDARD**
Where your ideas take shape.