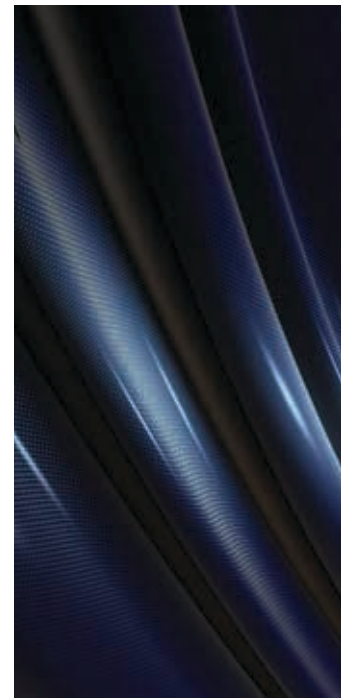


CROWN[™]
COMPOSITES



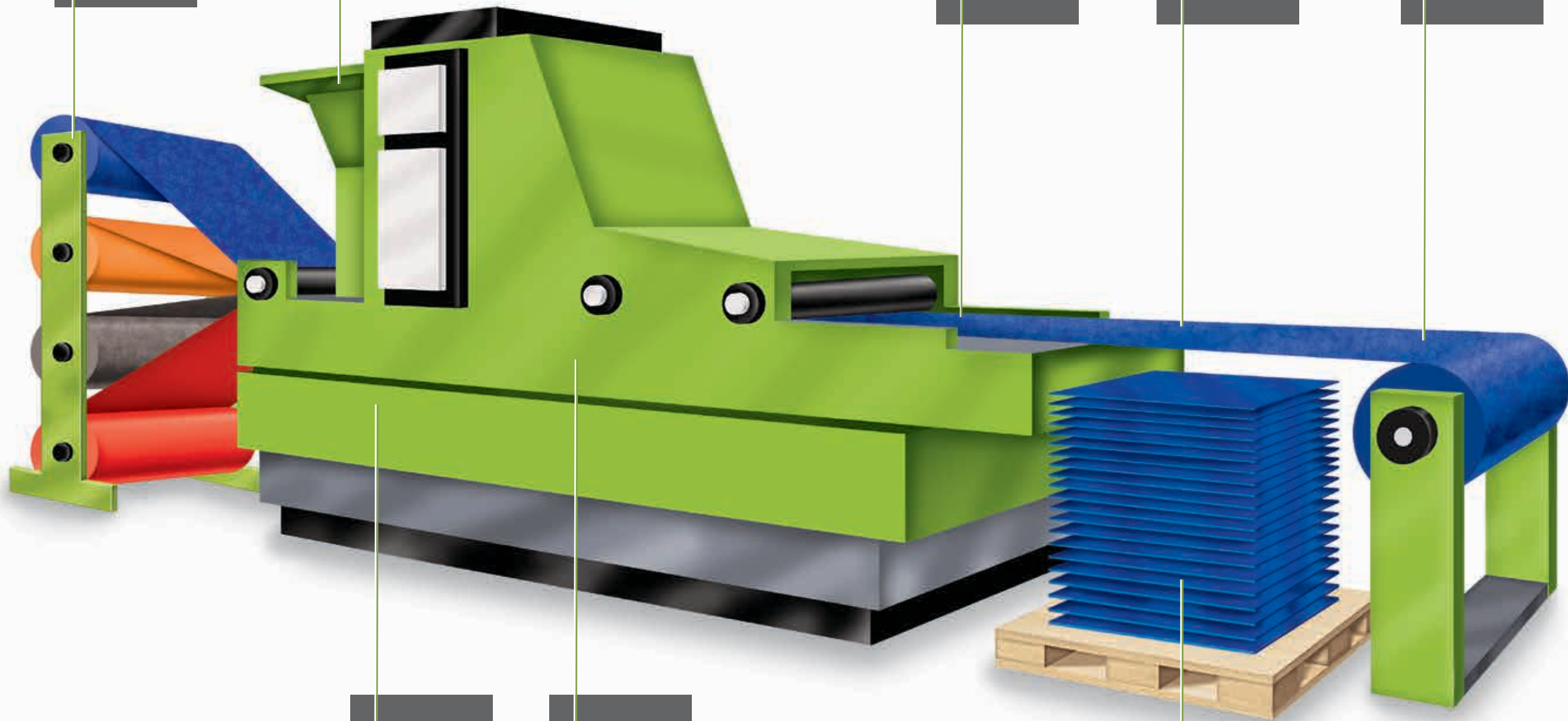
UNWIND FOR
MULTI-LAYER
LAMINATION

RESIN HOPPER FOR
THERMOPLASTIC
LAYER

PROCESS
WIDTHS
TO 60"

VARIABLE FEED
RATES
UP TO 120"/MIN.

CONTINUOUS
RUN
WIND UP
CAPABILITY



PRESSURE
CAPABILITY FROM
ATMOSPHERIC
TO >1500 PSI

PROCESSING
TEMPERATURES
IN EXCESS OF
750° F

SHEETING
CAPABILITY



Industry Applications

Crown Composites is well positioned to deliver technological value where requirements for improved strength-to-weight ratio and/or corrosion resistance are critical. Industries include:

AEROSPACE

- Interior panels
- Mounting brackets
- Electronic enclosures

AUTOMOTIVE

- Mounting brackets
- Suspension springs
- Commercial body panels
- Structural members

CONSTRUCTION

- Building products
- Marine
- Pipe
- Blast & NIJ Level requirements
- Offshore oil and gas
- Architectural armor

DEFENSE

- Soft and hard personal protection
- Light weight aircraft armor
- Light weight vehicle armor

ELECTRICAL & ELECTRONICS

- Electromagnetic shielding
- Insulating materials
- Conducting materials
- Circuit boards
- Covers and enclosures

HIGH PRESSURE TANKS

- Corrosion resistant
- Filtration tanks
- Storage tanks

MEDICAL

- Radiography machine enclosures
- Transport beds
- Imaging tables
- Surgical instruments

TECHNOLOGY VALUE

Composites Technology

Thermoplastic composites are manufactured using a thermoplastic polymer matrix reinforced with glass, carbon, aramid or metal fibers. Thermoplastic polymers are long-chain polymers that can be either amorphous or semi-crystalline in structure.

R&D COST AND FACILITATION

PRODUCT IMPROVEMENT

MANUFACTURING COST REDUCTION

NEW PRODUCT DEVELOPMENT

These long-chain, medium-to-high molecular weight polymers make thermoplastics that are tough, resist chemical attack, and have a long shelf life.

But more importantly, thermoplastics are recyclable and emit little to no VOC's, giving them significant environmental advantages over traditional thermosets.

Our Unique Advantage

Crown Composites' unique manufacturing advantage is its ability to create composite materials via long, continuous compression runs at high temperatures and pressures. With processing widths up to 60 inches, Crown Composites' production system is capable of handling both small-scale and full-width prototypes – all within the same system!

Manufacturing Services

- Cost and Facilitation
- Product Improvement
- Cost Reduction
- New Product Development

Machine Capabilities

- Continuous belt press
- Processing temperatures in excess of 750° F
- Process width: 60" continuous run with infinite length
- Pressure capability from atmospheric to > 1500 PSI
- Variable feed rates up to 120"/min
- Thick cross sectional molding (solid molded sheet)
- Up to 1.5" total thickness for surface skin lamination (example – honeycomb lamination)

Process Specializations

- Small order to large scale production
- Prototyping and pilot run capability
- Multilayer lamination
- Powdered resin molding
- Dry fiber and mat debulking
- Continuous roll handling
- Post process curing and converting capability

It is the policy of Crown Composites to provide material and service that meets or exceeds Quality Standards throughout the customer chain.

Crown Composites prides itself in delivering the highest standard of quality service through:

- Attention To Detail
- Responsiveness
- Follow Through

ISO 9001: 2008



We manufacture COMPOSITES... but our product is SERVICE!



CROWN[™]
COMPOSITES

ADVANCED THERMOPLASTIC SOLUTIONS

116 May Drive
Harrison, Ohio 45030 USA
800-368-0238
www.crowncomposites.com