

# Introducing Composite Idler Rolls

## Composite Idler Roll Advantages

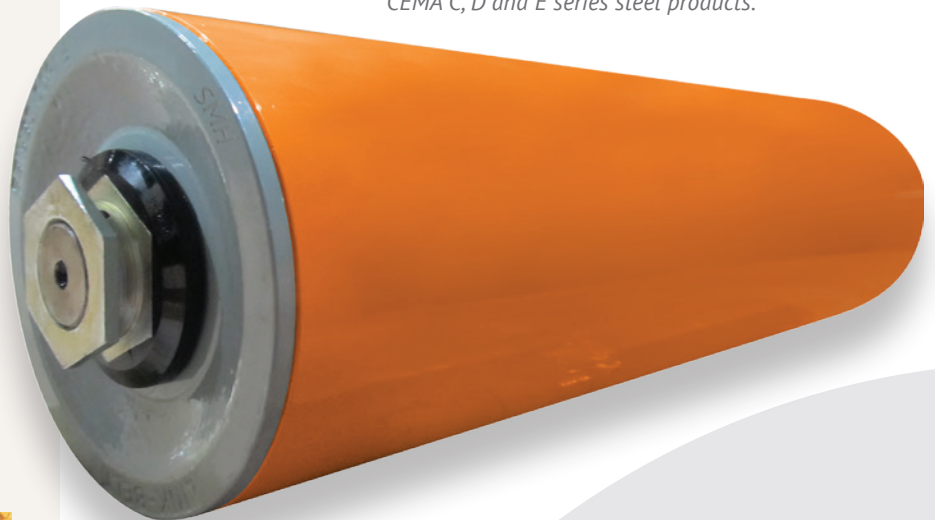
- Excellent Strength
- Lighter Weight
- Superior Toughness
- High Corrosion Resistance
- High Abrasion Resistance
- Reduced Material Build-Up
- Low Coefficient of Thermal Expansion
- Environmentally Friendly



*Composite Idler Rolls are Ideal for replacement of steel rolls in corrosive environments.*

- Combats roll degradation typically found in corrosive and abrasive environments
- Longer lasting rolls reduces conveyor downtime
- Lighter weight rolls – “Field Friendly” for maintenance and installation personnel
- Prolongs belt life by reducing material build-up

*Dimensional specifications match our CEMA C, D and E series steel products.*



**Made in U.S.A.**

## Composite Idler Rolls Technical Data

### What are Composite Idler Rolls?

- Syntron Material Handling introduces a revolutionary new idler roll made with state-of-the-art glass reinforced polyurethane.
- This tubing is a composite material consisting of layers of high quality glass fabric saturated with a two part thermoset polyurethane resin.
- Syntron Material Handling offers a 5" and a 6" diameter x 1/4" wall tubing size suitable for CEMA C, D and E roll applications (Syntron Material Handling C/D3500, C/D3600 & E4600 Series).
- Roll lengths are available for troughing, return, picking and V-return idlers with belt widths ranging from 18" to 72".
- Polyurethane pultruded composite tubing offers excellent mechanical properties similar to steel and superior to many traditional plastic resin roll products. The recommended operating temperature range is -40°F to +200°F.
- Syntron Material Handling composite rolls are extremely versatile and are suitable for many material handling applications\*.
- Standard color: Traditional "Syntron Material Handling Orange"

\*Currently not suitable in combustible environments, where possible static charge can cause an explosion hazard.



*Is corrosion eating away your profits?*

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### Features/Benefits

- **Excellent Strength**  
Comparable tensile and flexural strength (lengthwise) to steel and aluminum. High strength-to-weight ratio.
- **Lighter Weight**  
Material verses material: 75% lighter than steel and 30% lighter than aluminum. Approximately 50% lighter than traditional steel rolls. Easier installation, "Field Friendly" for maintenance and installation personnel, energy savings, and reduced noise.
- **Superior Toughness**  
This glass fabric distributes loads to prevent surface damage. No permanent deformities. High impact strength. Crack resistant.
- **High Corrosion Resistance**  
Superior resistance to a broad range of chemicals. Excellent in acid, alkali and salt spray environments. Low water absorption. Protective Polyurethane topcoat is suggested if exposed to UV rays during a long term storage.
- **High Abrasion Resistance**  
Superior wear resistance to traditional thermoplastic resin rolls, resulting in longer shell life, longer belt life, and less maintenance.
- **Reduced Material Build-Up**  
Polyurethane resin resists material build-up on the surface of the roll, thereby prolonging belt life.
- **Low Thermal Coefficient of Expansion**  
Low coefficient of thermal expansion, comparable to steel, reducing differential expansion between shell, shaft, and the pressed head.
- **Environmentally Friendly**  
Self extinguishing when exposed to flame in a horizontal position. Low carbon footprint compared to thermoplastic rolls. VOC Free.