



Accurate Temperature Management in a Precision Engineered Roll

For more than 40 years, Webex has been the industry's first choice in maintaining consistent and cost-effective temperature management with its Precision Engineered Heat Transfer Rolls.

Our Engineers rely upon industry experience and a proprietary analysis process to predict exactly what the heat transfer results will be (to within $\pm 1^\circ \text{F}$) across the face of the roll, prior to manufacturing. In addition, we specialize in rolls with ultra-tight tolerances, special plating and finishing.

To meet your exact application parameters, every Webex Heat Transfer Roll is designed for optimum balance between heat transfer, minimal pressure drop inside the roll, correct fluid velocity and minimum temperature rise across the roll face. Whatever roll size or specification you need, Webex is the most proven source for heat transfer roll performance.



INFORMATION YOU'LL WANT TO KNOW WHEN SPECIFYING

- Web characteristics (size, material, layers, etc.)
- Line Speed
- Web tension
- Amount of web wrap
- Size limitations, if any, on roll length and diameter
- Roll finish
- Flow rates and fluid temperature
- Web incoming temperature
- Desired exit temperature

KEY FEATURES

- Engineered for a wide range of cooling or heating applications
- Machined beyond industry norms to meet exacting requirements
- Single and multiple chill roll stands available
- Unique gain pitch design provides exacting control over temperature differentials and overall roll performance
- Concentricity and straightness held within 0.002" (much tighter tolerances available)
- Each roll receives detailed stress and deflection analysis to assure safety
- Complete chill stands available to suit your machine specifications

WEBEX HEAT TRANSFER ROLL

NOMENCLATURE

Inner Shell

Machined smooth for clear fluid flow and precise spiral placement.

Fluid Cross Flow

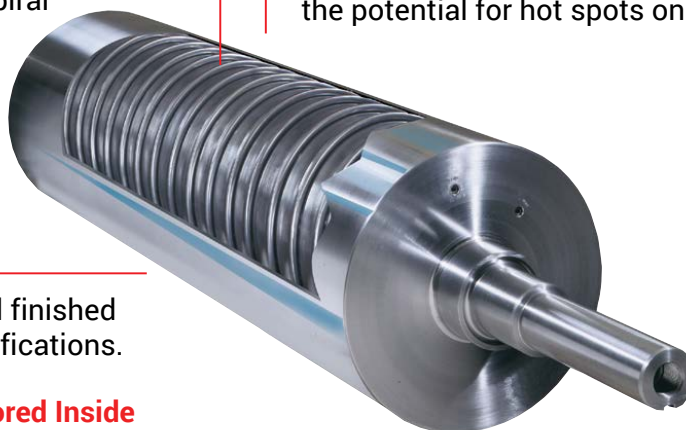
A precisely calculated space between the spiral and the outer shell eliminates the potential for hot spots on the web.

Outer Shell

Machined and finished to exact specifications.

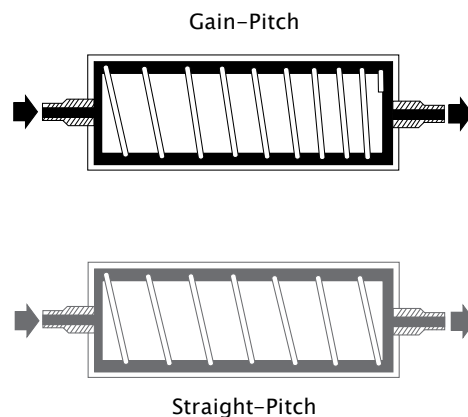
Outer Shell Bored Inside

Improves heat transfer by ensuring consistent temperature through the outer shell.



The Webex Gain-Pitch Roll can increase operating efficiencies over the straight-pitch roll design, given the same process conditions.

- For any identical web temperature and speed, the Gain-Pitch Roll requires a lower fluid flow rate (gal/min) than a Straight-Pitch Roll. You'll use less water while maintaining the same heat transfer requirements
- Heat transfer fluid increases in velocity (ft/sec) as it travels through the Gain-Pitch Roll, while fluid velocity remains constant in a Straight-Pitch Roll.
- As fluid velocity increases within the Gain-Pitch Roll, heat transfer improves, allowing the fluid to exchange higher levels of heat than possible with a Straight-Pitch Roll. This is evidenced in greater temperature differences between input and output of the Gain-Pitch Roll heat transfer fluid.
- Increased heat transfer of the Gain-Pitch Roll reduces the web temperature difference across the roll surface, from inlet to output side.



NORTH, CENTRAL AND SOUTH AMERICA

Tel +1.920.729.6666
Fax +1.920.729.9992
sales@webexinc.com
www.maxcessintl.com

INDIA

Tel +91.22.27602633
Fax +91.22.27602634
india@maxcessintl.com
www.maxcess.in

EUROPE, MIDDLE EAST AND AFRICA

Tel +49.6195.7002.0
Fax +49.6195.7002.933
sales@maxcess.eu
www.maxcess.eu

JAPAN

Tel +81.43.421.1622
Fax +81.43.421.2895
japan@maxcessintl.com
www.maxcess.jp

CHINA

Tel +86.756.881.9398
Fax +86.756.881.9393
info@maxcessintl.com.cn
www.maxcessintl.com.cn

KOREA, TAIWAN AND SE ASIA

Tel +65.9620.3883
Fax +65.6235.4818
asia@maxcessintl.com