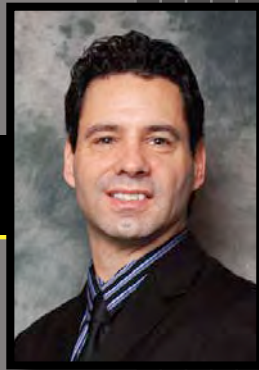


When Precision Matters

As Owner



of GLASS, I understand the need to provide excellent service at a fair price. This combination makes for a **satisfied customer** and is why all of our customers prefer to use us for any of their future alignment needs.

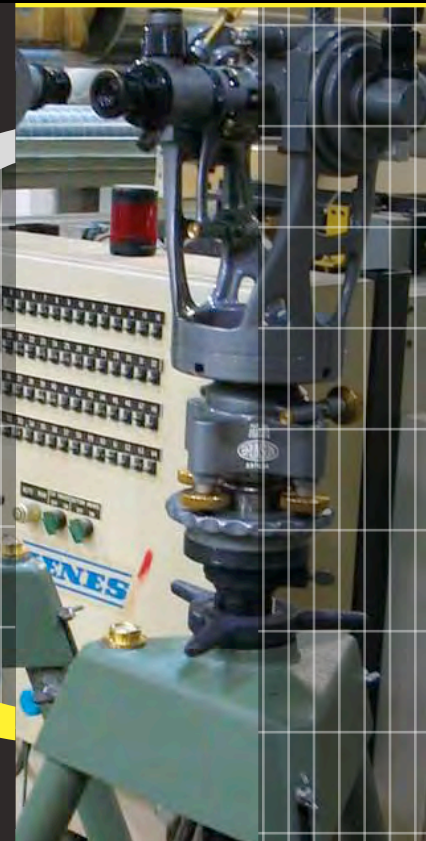
We are proud that we've had ZERO cases where the customer requested warranty work. And, our rates are typically **25% less** than other premium alignment service companies.

Mike

Owner, Mike Peeples



Great Lakes Alignment Survey Services LLC



Paper Machine Services

- Paper Machines
- Pulp Machines
- Winders
- Calenders
- Finish Stack



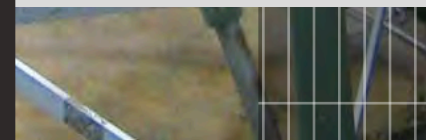
GREAT LAKES ALIGNMENT SURVEY SERVICES LLC

W7036 Rimrock Ln.
Greenville, WI 54942
tel. 262-339-7631



Visit our website for sample reports
www.glassalignment.com

FOLD HERE



PAPER MACHINE SERVICES

Great Lakes Alignment Survey Services^{LLC} provides the required manpower and tooling to perform alignment projects up to and including the realignment of an entire paper machine. We have the flexibility of providing turnkey alignment services or we can work with your millwrights to assist them in the alignment of your machine components.

Because of the **reliability**

of their work, we prefer to use GLASS for turnkey installations and recommend them to our own customers.

– David Cuppan
Faustel, Inc.



Our mill has relied on [GLASS] for the past **13 years**

and they have always met or **exceeded** our expectations. Mike and his team are always willing to adjust to our conditions...

– Keith Weizenicker

Packaging Corporation
of America

PRECISION IS KEY

CENTERLINE SURVEY AND BASELINE INSTALLATION

A machine centerline survey and baseline installation accomplishes the following:

- Best representation of the paper
- Provides an overview alignment profile of the paper machine
- Provides a basis for maintenance planning and operational troubleshooting
- Establishes a permanent alignment reference for
 - ✓ Roll changeouts
 - ✓ All future machine alignment
 - ✓ Machine rebuilds and installations
 - ✓ Recording machine movement caused by building or machine settlement or movement by normal thermal cycles

BENEFITS

- Improved sheet formation
- Reduced felt wear
- Improved dewatering
- Reduction of baggy edges, sheet flutter and wrinkles
- Improved web tracking and sheet transfer between sections
- Longer bearing and coupling life
- Increased machine speed
- Reduced vibration
- Less energy consumption

OPTICAL INSPECTIONS

GLASS diagnostic inspections identify misalignment issues such as

- ✓ **HEADBOX:** Improper jet impingement, streaking and sheet profile issues
- ✓ **TABLE ELEMENTS:** Poor flocculation, premature foil wear, wire tracking issues or uneven dewatering
- ✓ **PRESS NIPS:** Poor dewatering and caliper, streaking, scissoring and barring
- ✓ **VARIOUS ROLLS:** Premature roll cover and felt wear, excessive vibration and increased energy usage
- ✓ **WEB CARRYING ROLLS:** Sheet breaks, baggy edges and wrinkles
- ✓ **DRYER CANS:** Drying inefficiencies as well as premature gear wear and felt skew
- ✓ **DRIVES:** Premature wear, noise, vibration, broken shafts and shortened coupling life
- ✓ **WINDER DRUMS:** Dishing, thrusting and poor starts
- ✓ **SLITTER SECTIONS:** Interweaving and ragged edges
- ✓ **RIDER ROLL AND CORE CHUCKS:** Poor starts, breaks, vibration, uneven rolls, starring or tensioning issues