

Date

"We Do It Right"

Your Company Name
Street Address
City, State Zip Code

Attn: Contact name

Re: Optical and Laser alignment services on (Machine identification)

The Right Alignment Company was asked to check the alignment of the new W&H Vistaflex press. We completed the layout work on a previous visit utilizing the Faro Laser Tracker. After the installation was completed, we were asked to check the roll alignment of the press. The alignment work was completed using Brunson optical alignment tooling. The roll alignment was verified using the FARO Laser Tracker. The monuments in the aisle (offset centerline) were used as our zero datum for checking square on the press.

We started the alignment by checking the CI Drum framework. The alignment bars in the base were used to check both level and square. The drum was covered prohibiting us from checking the alignment on the drum. The top nip roll could not be checked without power to nip the roll to the CI drum. The lead-in roll up at the top of the CI drum was out of square .050". The mounting bracket was adjusted to get it aligned.

The chill roll back stand was then checked. The stand was .020" out of square when we began. This area was difficult to adjust with all of the other framework attached to it. All of the rolls in this tube framework were aligned as well. We used the clearance in the frames and the rolls to get the proper alignment on each roll. Many of the rolls needed to be adjusted again when checked with the Faro Laser Tracker due to the framework twisting as rolls were adjusted.

Next, the alignment of the bridge which connects the CI frame and the chill roll back stand was checked. The bridge frame was square to the machine centerline but we did find a sag in the frame of .140" where there was a long distance between supports. We did need to adjust most of the rolls for level. The treater and web guide attached to the bridge were then aligned. Both of these units were shimmed for level.

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Pound, WI 54161
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Specializing In Industrial Alignment

Once the main framework was aligned, we then moved on to the independent units. The unwind and rewind units were set level and square by checking the core rolls. The center shafts in the outer cabinets were also set level. On the rewind, the bump roll rails were also checked for level. The web guide was also set level, square and on centerline. The actual web guide was out .100" to the main frame. Shim was added to the frame to get it square.

After the alignment was complete, we used the FARO Laser Tracker to recheck and verify most of the roll alignment. The readings between the two alignment processes were very similar. We tried to keep all of our alignment readings within .005". The main units were set within the .004" tolerance. There were some areas that were not checked due to not being able to get a line of site to the roll and the nip rolls were not nipped. We only checked level on the lead-in and lead-out rolls of the oven.

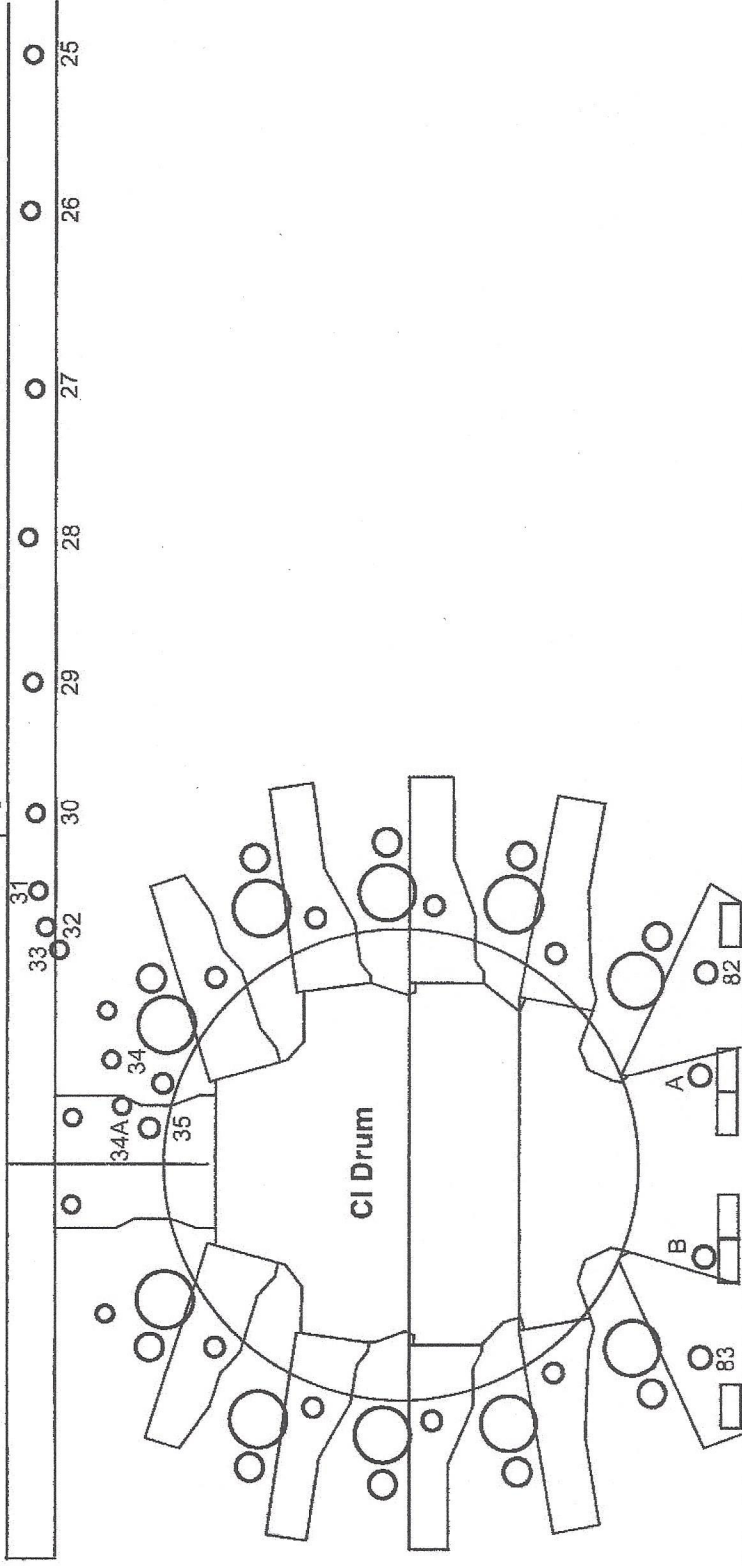
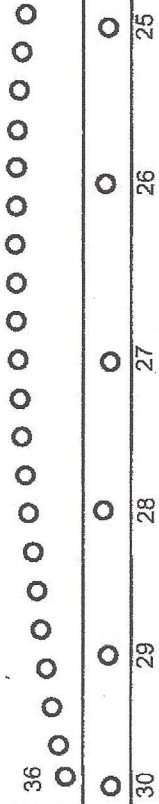
Our alignment readings are on the following pages. If you have any questions, feel free to contact us. Thank you for using our services.

Sincerely,

Jon Labs/Barry Wendricks
Optical Alignment Specialist

Your Company Name
 Machine identification
 Date

Dryer Oven

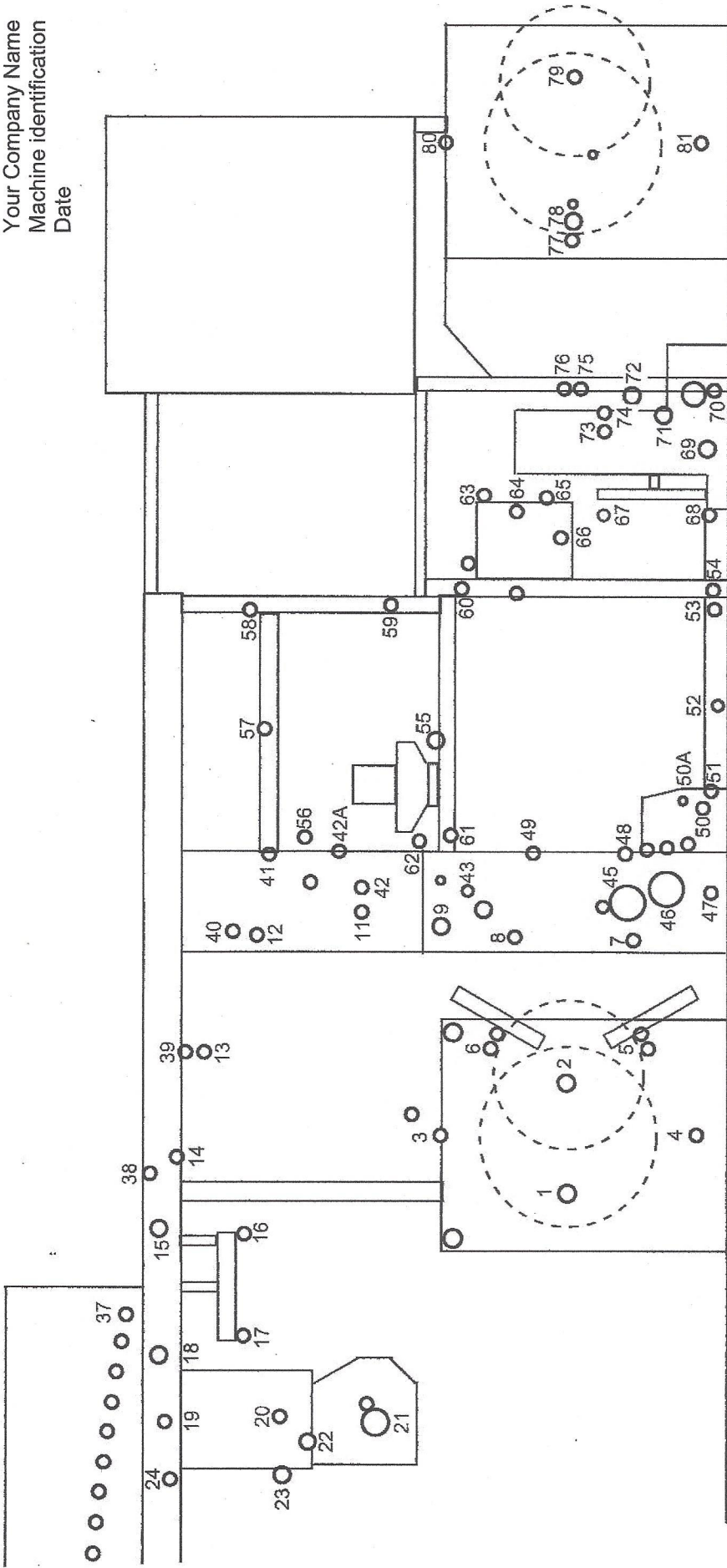


VistaFlex CL10 - 165

Roll #	Level	Square	Roll #	Level	Square
25	.002" L	.003" U	34A	.000"	.004" R
26	.003" H	.002" R	35	.003" H	.003" R
27	.005" L	.004" R	36	.008" H	(---)
28	.001" H	.005" U	82	.000"	.001" U
29	.005" H	.000"	83	.000"	(---)
30	.005" H	.005" R	A	.000"	(---)
31	.000"	(---)	B	.000"	(---)
32	.003" H	(---)			
33	.004" H	(---)			
34	.003" H	.000"			

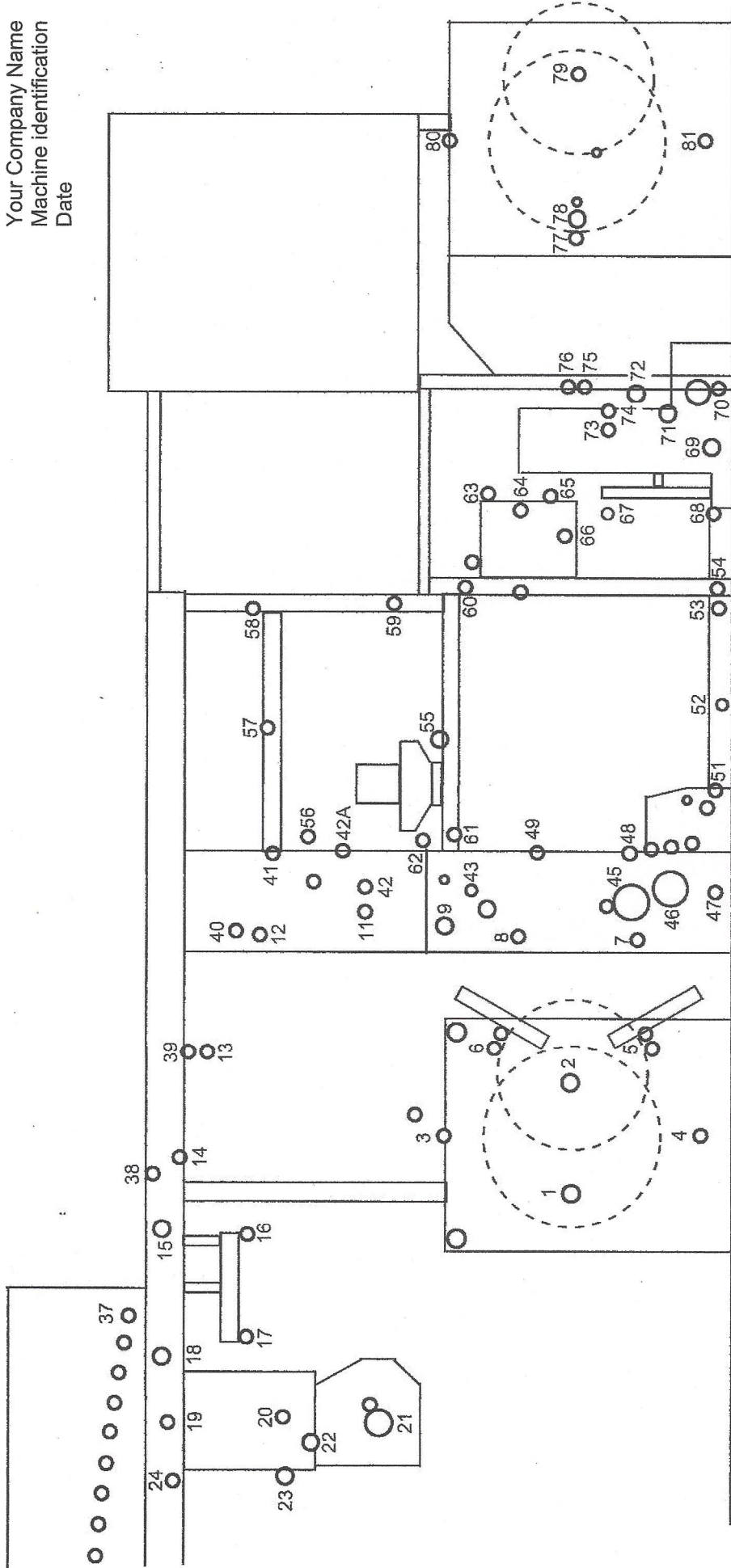
Key:
 L - Low to Tending Side
 H - High to Tending Side
 U - Tending Side Toward Unwind
 R - Tending Side Toward Rewind

Your Company Name
 Machine Identification
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VistaFlex CL10 - 165

<u>Roll #</u>	<u>Level</u>	<u>Square</u>	<u>Roll #</u>	<u>Level</u>	<u>Square</u>	<u>Roll #</u>	<u>Level</u>	<u>Square</u>
1	.000"	.002" U	13	.004" L	.002" R	37	.008" H	(---)
2	.000"	(---)	14	.000"	.000"	38	.000"	.000"
3	.000"	.005" U	15	.000"	.002" U	39	.000"	.005" R
4	.000"	.005" U	16	.003" H	WEB	40	.000"	.004" U
5	(---)	(---)	17	.005" L	GUIDE	41	.000"	.000"
6	(---)	(---)	18	.000"	.003" U	42	.003" H	.004" U
7	.000"	.003" U	19	.000"	.000"	42A	.005" L	.003" U
8	.000"	.003" U	20	.003" L	.000"	43	.000"	.003" U
9	.003" H	.003" U	21	.000"	.003" R	45	.001" H	.000"
10	.002" H	.004" U	22	.000"	.000"	46	.002" H	.000"
11	.002" H	.004" U	23	.000"	.003" R	47	.000"	(---)
12	.000"	.003" U	24	.003" L	.003" U			



VistaFlex CL10 - 165

Roll #	Level	Square	Roll #	Level	Square	Roll #	Level	Square
48	.000"	.000"	62	.002" H	.004" U	75	(---)	.000"
49	.000"	.000"	63	.000"	.000"	76	.005" H	.000"
51	.000"	.002" U	64	.003" H	.000"	77	.000"	NIP
52	.000"	.002" U	65	.000"	.000"	78	.000"	(---)
53	.000"	.003" U	66	(---)	(---)	79	.000"	.004" U
54	.000"	.002" U	67	WEB	.000"	80	.005" L	.006" U
55	.000"	.000"	68	GUIDE	.000"	81	.004" H	.001" U
56	.000"	.000"	69	.000"	(---)			
57	.000"	.000"	70	.000"	.000"			
58	.000"	.003" U	71	.000"	(---)			
59	.000"	.003" U	72	.002" H	.000"			
60	.002" H	.002" R	73	.000"	.003" R			
61	.000"	.000"	74	.002" H	.000"			

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