

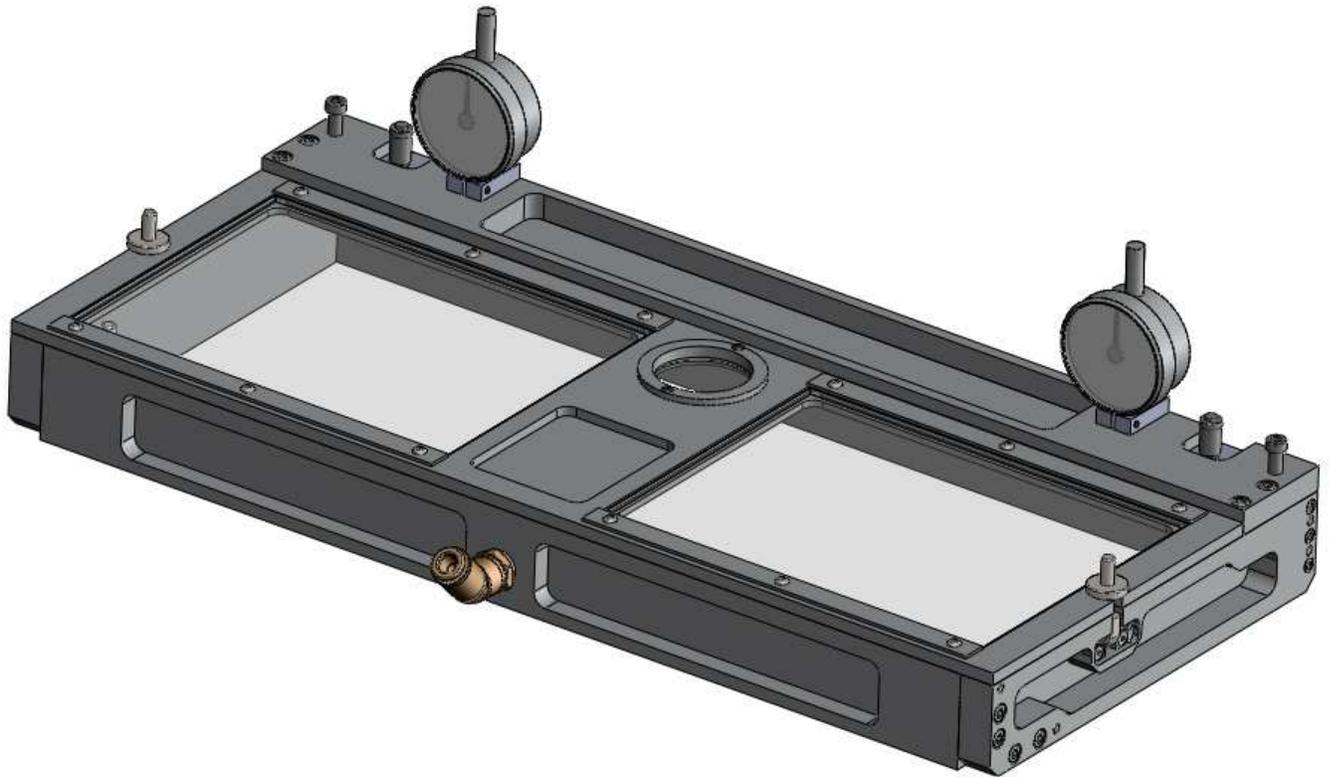


Credence Engineering Inc.

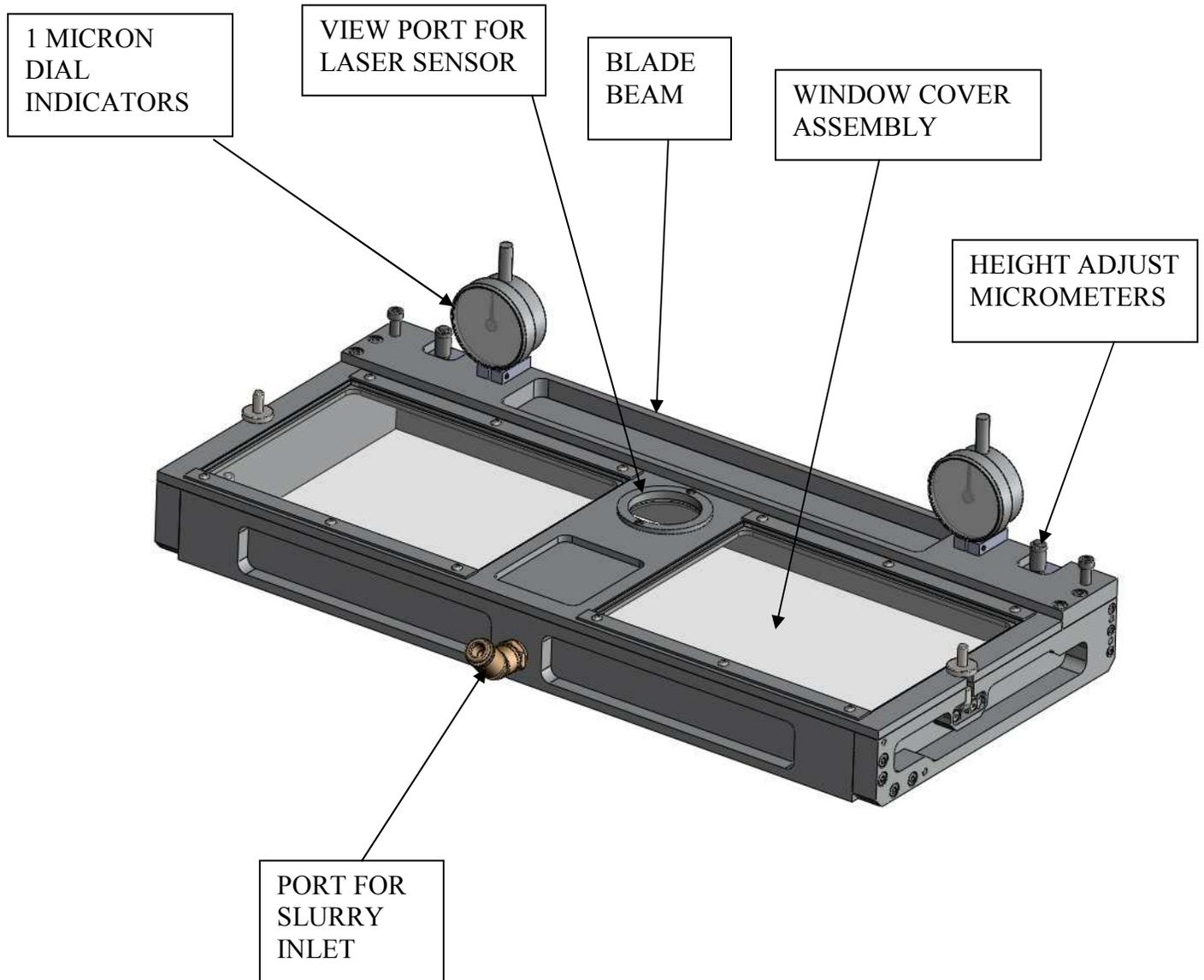
SR 150

Tape Casting Slurry Reservoir

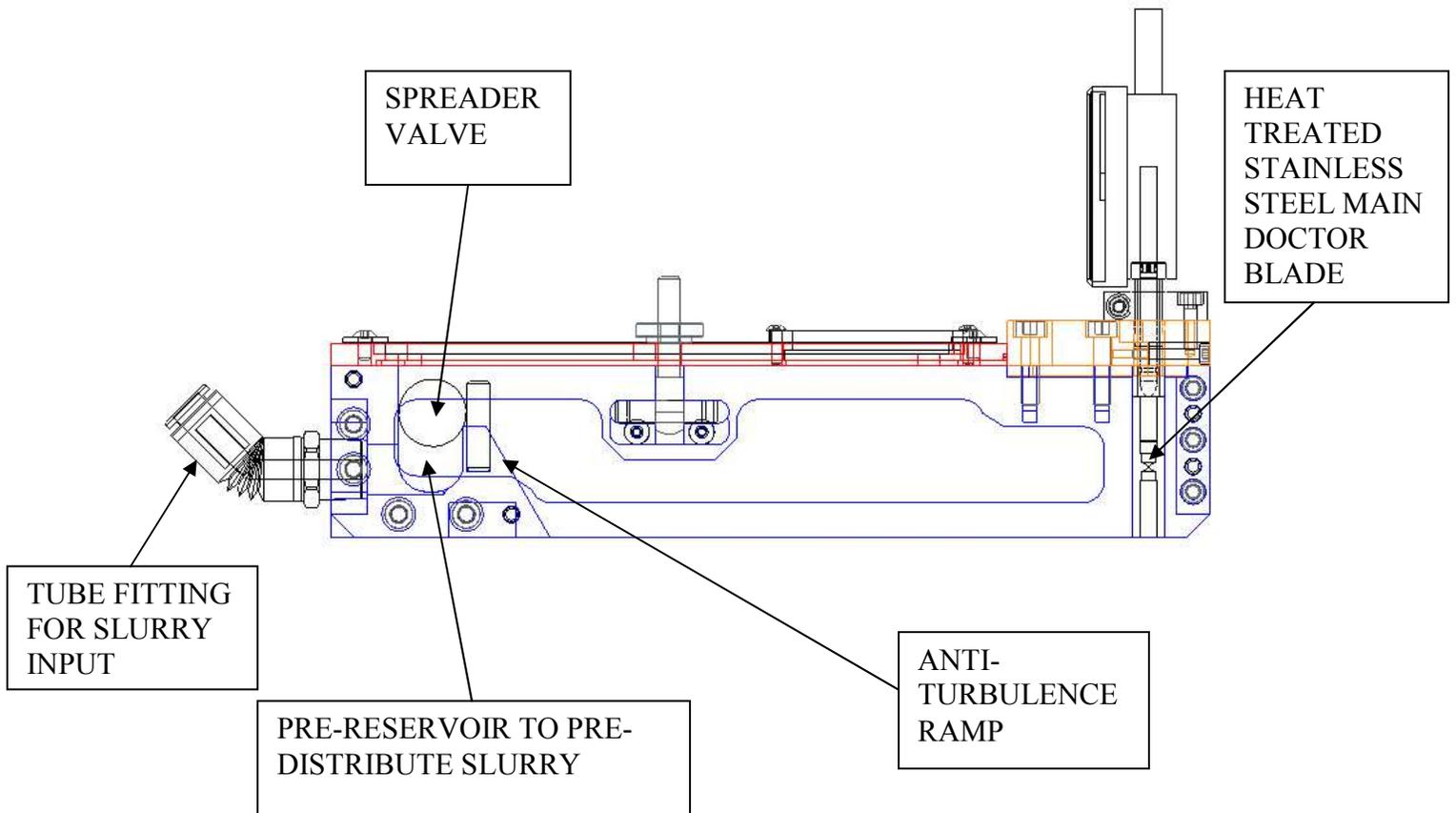
Operating Instructions



System Features



INTERNAL FEATURES

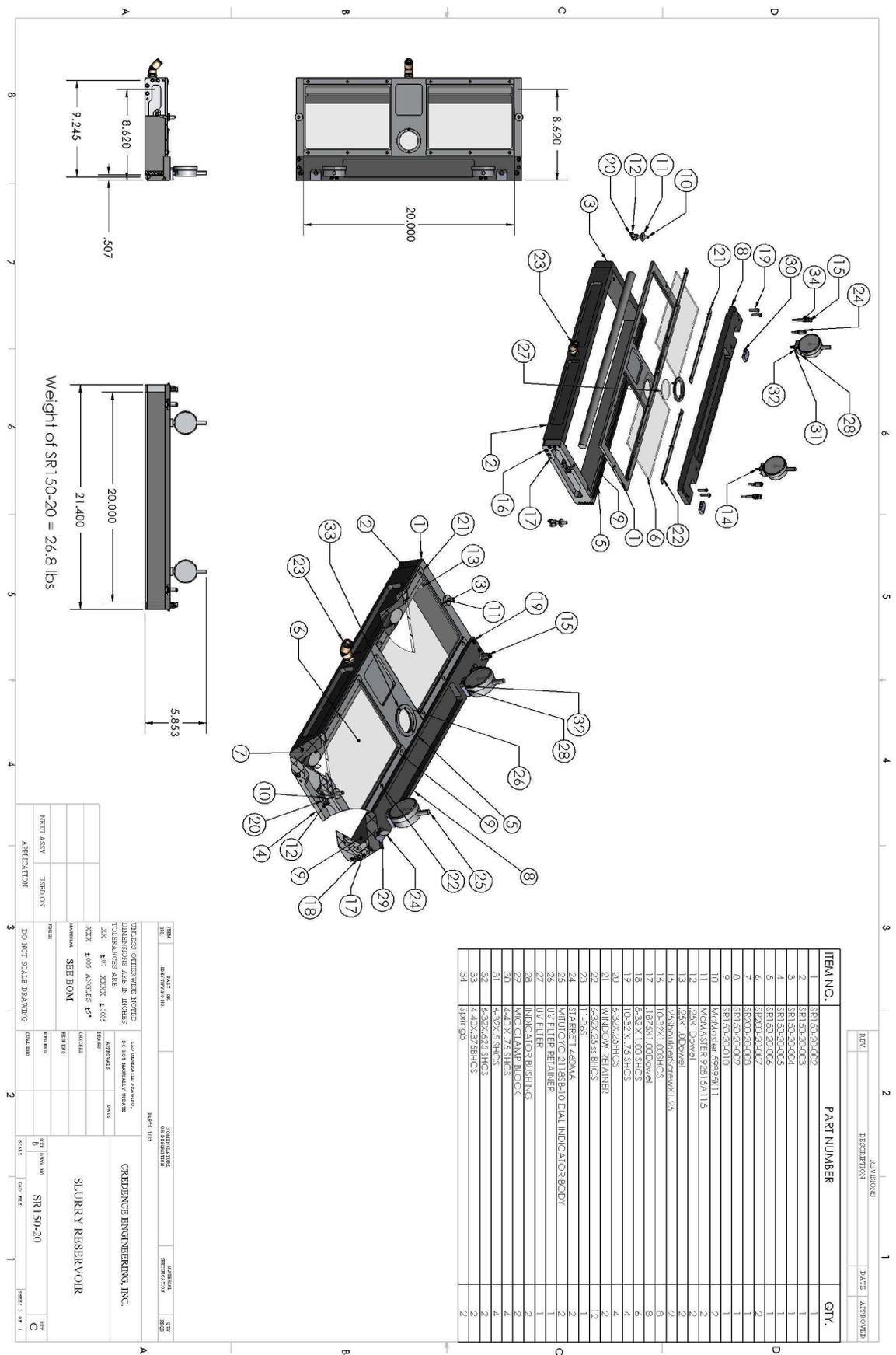


UNPACKING THE SR 150

- 1) Open the Shipping Box.
- 2) Remove the long wrapped package that contains the Stainless Steel blade.
- 3) Remove the packages from the carton. These contain the 1-micron indicators and micrometers.
- 4) Remove the SR 150 from the container and place it on a flat surface covered with cardboard.
- 5) Unpack the misc. items and place all packing materials back into the shipping container for future use.

SETTING UP THE SR 150

- 1) Place the SR 150 onto a Mylar sheet placed on top of the granite setup block for the casting machine.
- 2) Loosen both thumbnuts and swing the bolts outward releasing the window cover assembly.
- 3) Place the cover in a safe place for now.
- 4) Remove the bolts and springs for the clamps that hold the Stainless Steel blade.
- 5) Unpack the Stainless Steel blade and carefully place it on the mylar surface.
- 6) Pick up the Stainless Steel blade and carefully place it in the final cast slots of the SR 150 assembly. Be careful not to bind the blade as it enters the slots provided and also be careful so you do not drop the blade. The Stainless Steel blade is very expensive and very accurate. It is ground straight to within .0002" on both the top and bottom edges. Since this blade is symmetrical, you actually have four casting edges.
- 7) With the Stainless Steel blade in place, replace the blade beam assembly onto the SR 150 assembly.
- 8) Once in place, install the four 10-32 SHCS into the beam, but do not tighten them. Run them in all but the last ½ turn.
- 9) Install the shoulder screws and springs into the Stainless Steel blade and tighten them.
- 10) Install the two micrometers into the outward most bores of the blade beam and secure them in place using the clamps in the front of the beam. Be sure to retract the micrometers all the way so you can insert them all the way to the locating shoulder. Do not over-tighten the micrometer clamps. You can over tighten them to where the micrometers are hard to turn.
- 11) Place the steel spreader bar into the pre-reservoir and carefully set it down onto the u-trough opening.
- 12) Place the window cover assembly onto the SR 200 and fasten in place using the two swing bolts and thumbnuts.
- 13) Tighten the four 10-32 SHCS that retain the blade beam.
- 14) Run the micrometers down on each blade until you feel the micrometer touch the top surface of the blade. Run each blade down all the way using both micrometers simultaneously until the blade is at full bottom.
- 15) Install the two 1-micron dial indicators into the central-most bores in the blade beam and install the 6-32 screws into each respective clamp. The indicator height is pre-set at the factory and only needs to be zeroed once the blade is at full bottom and level.
- 16) Raise the final cast blade up the desired wet thickness.
- 17) Install the tubing into the fitting in the rear center of the reservoir assembly.
- 18) You are now ready to cast.
- 19) If you will be using an automatic level control system (such as the Levelscan 200), you will have to install the proportional cutoff valve and the sensor height adjust mechanism with respect to the SR 150. Please refer to the instructions provided with the level control system.



ITEM NO.	PART NUMBER	QTY.
1	SR150-20-002	1
2	SR150-20-003	1
3	SR150-20-004	1
4	SR150-20-005	1
5	SR150-20-006	1
6	SR200-20-007	2
7	SR200-20-008	1
8	SR150-20-009	1
9	SR150-20-010	1
10	SR150-20-011	1
11	MCMASTER 92815A11.5	2
12	.25X Dowel	2
13	.25X Dowel	2
14	2X Dowel	2
15	2X Dowel	2
16	2X Dowel	2
17	1.875X 1.00SHCS	8
18	1.875X 1.00SHCS	8
19	1.875X 1.00SHCS	8
20	1.875X 1.00SHCS	8
21	WINDOW RETAINER	2
22	6-32X.25 SHCS	12
23	11-36S	1
24	STARRET 240MA	2
25	MILUOVO 2185B-10 DIAL INDICATOR BODY	2
26	LVF FILTER	1
27	LVF FILTER BUSHING	1
28	MIND CLAMP BUSHING	2
29	MIND CLAMP BUSHING	2
30	4-40X .75 SHCS	4
31	6-32X .5 SHCS	4
32	6-32X .625 SHCS	4
33	4-40X .375 SHCS	2
34	ISDPT93	2

ITEM	DATE	DESCRIPTION	APPROVAL	REV
1	08/11/03	REVISED TO ADD PART 24	[Signature]	1
2	08/11/03	REVISED TO ADD PART 25	[Signature]	2
3	08/11/03	REVISED TO ADD PART 26	[Signature]	3
4	08/11/03	REVISED TO ADD PART 27	[Signature]	4
5	08/11/03	REVISED TO ADD PART 28	[Signature]	5
6	08/11/03	REVISED TO ADD PART 29	[Signature]	6
7	08/11/03	REVISED TO ADD PART 30	[Signature]	7
8	08/11/03	REVISED TO ADD PART 31	[Signature]	8
9	08/11/03	REVISED TO ADD PART 32	[Signature]	9
10	08/11/03	REVISED TO ADD PART 33	[Signature]	10
11	08/11/03	REVISED TO ADD PART 34	[Signature]	11

Weight of SR150-20 = 26.8 lbs

21.400

20.000

5.853

9.245

.507

Recommended Spare Parts

SR150-20

1. 1 ea UV Lens
2. 2 ea glass for window cover
3. 1 ea 1/4" Barb X 3/8 NPT Fitting for tube connection
4. 1 ea 1 micron Dial Indicator
5. 1 ea Micrometer Head
6. 4ea 4-40 socket head cap screws for micrometer clamps
7. 4 ea 6-32 socket head cap screws for indicator clamps
8. 6 ft Viton 1/16 OD o-ring cord stock
9. 2ea 1/4-20 toggle bolt
10. 2ea 1/4-20 thumb nut for toggle bolts
11. 1 ea spreader bar
12. 1 ea Spare Doctor Blade (Already have)