

QUADRANT

Heat Testing

Equipment:

- LakeShore F41 Teslameter
- Transverse probe (0.040" sheathing)
- Probe locating fixture
- LakeShore Model 480 Fluxmeter
- 4" Helmholtz Coil
- Infinity M30 Oven

Procedure:

1. Preliminary readings taken of both surface gauss (0.040" offset) and magnetic flux.



Probe locating fixture



F41 Teslameter and transverse probe



Model 480 Fluxmeter and 4" Helmholtz coil

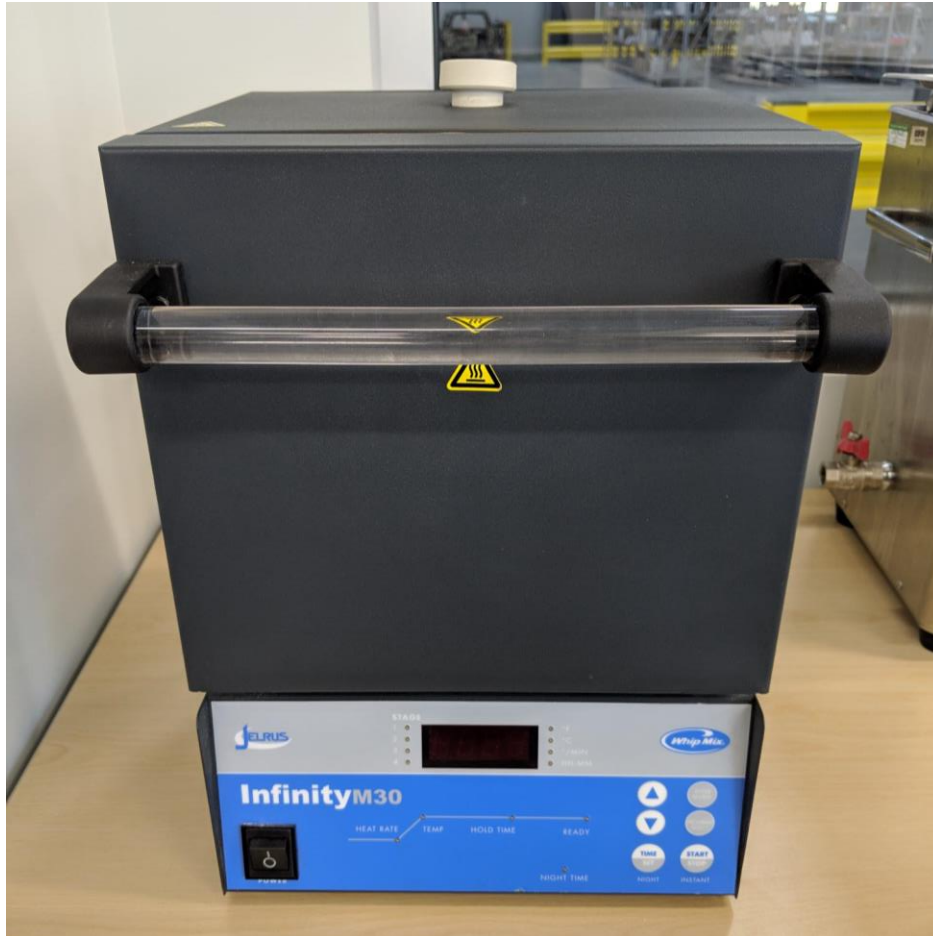
At the Forefront of Magnetic Solutions

2606 River Green Circle Louisville, KY 40206 | Phone: (502) 589-9650 | Fax: (502) 589-9660

www.quadrantmagnetics.com

QUADRANT

2. Magnets baked individually in a 212°F oven for 30 minutes to saturate.



Infinity M30 Oven

3. Magnets removed from oven and allowed to return to room temperature before retesting.
4. Surface gauss and magnetic flux readings retaken.

Testing Results:

1. Magnetic Flux Results:

Sample	Helmholtz Reading		Difference
	Pre	Post	
1	30.91	30.90	0.03%
2	31.04	30.88	0.53%
3	31.04	30.96	0.26%
4	31.03	30.88	0.48%
5	31.06	31.08	0.06%

Magnetic Flux readings(mVs)

At the Forefront of Magnetic Solutions

2606 River Green Circle Louisville, KY 40206 | Phone: (502) 589-9650 | Fax: (502) 589-9660

www.quadrantmagnetics.com

QUADRANT

2. Surface Gauss results:

Sample	Pole	Gauss Reading		Difference
		Pre	Post	
1	N	5.86	5.82	0.60%
	S	5.92	5.94	0.19%
2	N	5.86	5.86	0.08%
	S	5.83	5.83	0.09%
3	N	5.86	5.85	0.10%
	S	5.92	5.91	0.17%
4	N	5.90	5.89	0.07%
	S	5.96	5.97	0.12%
5	N	5.88	5.87	0.17%
	S	5.93	5.94	0.17%

Surface gauss readings (kG)

Conclusion

Heating to 212°F had no effect on the test magnets.

At the Forefront of Magnetic Solutions

2606 River Green Circle Louisville, KY 40206 | Phone: (502) 589-9650 | Fax: (502) 589-9660

www.quadrantmagnetics.com