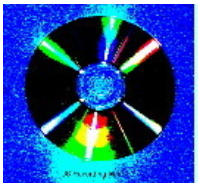
QUANTEGY

700 Series Logging Tape

High Output Tape Offers the Industry Unparalleled Performance in all Logging Applications

700 Series logging tape is processed under special conditions that ensure a high concentration of oxide particles is uniformly deposited on the surface of the polyester base material. This special processing yields a tape that exhibits uniform electrical performance from beginning to end.

The exclusive gamma ferric oxide, unique formulation and special processing all contribute to the superior electrical performance of 700 Series logging tape. These same characteristics ensure total compatibility with existing logging hardware.



US Recording Media

US Recording Systems

WWW.USRECORDINGMEDIA.COM

1-866-231-TAPE

Features:

- **Superior uniformity due to stringent process controls**
- **Uniform electrical performance end to end**
- **Complete compatibility with existing systems**
- **Designed to optimize performance and low head wear**

An exclusive gamma ferric oxide particle provides improved output at all wavelengths commonly associated with logging applications. The superior record/ reproduce characteristics of 700 Series logging tapes have no equal.

The superior thermoset binder system yields a logging tape that is durable and resists coating degradation, even after repeated use under adverse environmental conditions.

The special backcoating applied to 705 and 706 products improves handling, enhances durability and provides a clean running tape.

700 Series logging tape is formulated with a special lubricant package designed for superior performance at the extremely slow speeds of logging recorders, and to eliminate noise.

Tape not designed specifically for logging applications may exhibit sticking or handling problems when used on low speed logging transports

Technical Data

	Unit	704	705	706	Test Notes
I. Physical Properties					
Base Film Thickness (Polyester)	inch	0.80	0.80	0.50	1
Oxide Coating Thickness	mils	0.17	0.17	0.17	1
Backcoat Thickness	mils	0.03	0.03		1
Tape Width Tolerance	inches	1/2" = 0.498 + 0.001		1" = 0.998 + 0.001	
Curvature per 48"	inches	0.125	0.125	0.125	
II. Magnetic Properties					
Coercivity (Hci)	Oe	350 + 10%	350 + 10%	350 + 10%	2
Retentivity (Br)	Gs	1400 + 10%	1400 + 10%	1400 + 10%	2
Erasure Field	Oe	1000	1000	1000	3
Ease of Erasure	dB	60	60	60	3
III. Electro-Magnatic Properties					
Sensitivity:					4
300 Hz	dB	0.0 + 1.0	0.0 + 1.0	0.0 + 1.0	
500 Hz	dB	0.0 + 1.0	0.0 + 1.0	0.0 + 1.0	
1000 Hz	dB	0.0 + 1.0	0.0 + 1.0	0.0 + 1.0	
2000 Hz	dB	0.0 + 1.0	0.0 + 1.0	0.0 + 1.0	
3000 Hz	dB	0.0 + 1.0	0.0 + 1.0	0.0 + 1.0	
Maximum Harmonic Distortion	%	2	2	2	5
Layer-to-Layer Signal Transfer	dB	40	40	40	6
Oxide and Backcoat Resistivity (Ohms/Square)	$< 1 \times 10^3$	$< 1 \times 10^3$	$< 1 \times 10^3$		7
Magnetic Layer Material		Gamma Fe_2O^3	Gamma Fe_2O^3	Gamma Fe_2O^3	
Uniformity	dB	3	3	3	8

Test Notes

1. Thickness Measurements are made on Standard Gauge Company Inc, Smart Box.
2. Retentivity and coercivity characteristics are those intrinsic magnetic oxide properties which are dependent upon the nature of the oxide formulation. Retentivity is a measure of magnetic efficiency, which is the magnetic strength retained in the tape oxide just after the magnetic field is removed. Coercivity of a magnetic tape is a measure of the magnetizing field that is necessary to reduce the remanent field to zero. All coercivity and retentivity values are obtained from a 60 Hz B-H loop tracer with 1000 Oersted field calibrated to that maintained by the National Bureau of Standards.
3. Erasure values are obtained by employing a 60 Hz alternating field applied to the tape under test, which causes a reduction of at least 60 dB to the recorded signal. All test conditions performed with optimum bias and the record level adjusted to the

standard record level.

4. Sensitivity is the output level, at the stated frequency, of the tape at any point in a reel when compared to the gold reference tape tested on the reference recorder. The reference transport is equalized for zero dB output at the standard record level (one percent third harmonic distortion) using peak bias and a 500 Hz fundamental input signal recorded at 15/32 inches per second.
5. Maximum harmonic distortion is the allowed third harmonic distortion of the tape when measured by playing back a recorded 500 Hz signal which was recorded at standard record level and with standard operating bias current. See Test Note 4.
6. Layer-to-layer signal transfer is the signal resulting from layer-to-layer signal transfer when tested per the following procedure. The tape is externally erased. With the appropriate reference recorder operating at 15 inches per second and with operating bias current but no input signal, ten layers of tape are recorded and wound onto a reel. The record level is increased to 10 dB above standard record level at operating bias current with a 1,000 Hz signal for one revolution of the reel. The record level is returned to zero and ten additional layers are recorded and wound on the reel. The recorded tape is then conditioned at a temperature of 150'F for a period of 4 hours. The tape is then played back at 15 inches per second. The output of the recorded signal and the maximum level of the signal resulting from signal transfer is measured through a 1 kHz filter having a 10 Hz passband.
7. Resistivity is the surface electrical resistance of the backcoat or coating surface.
8. Uniformity is the allowable change in output of a 500 Hz recorded signal measured over the entire length of tape (the first and last 1% excluded).

Specifications are subject to change without notice.

700 Series Configurations

Catalog Number	Description	Reel Size Inches / Cms.		Tape Length Feet / Meters		Carton Weight Lbs. / Kgs.		Carton Qty.
704 SERIES-PREMIUM 1 MIL THIN COAT (NON-BACKCOATED)								
704-151411	0.8 mil Polyester-Plastic Reel, SUB	1/4 x 7	18	2000	610	31.8	14.4	40
704 SERIES TAPE FOR MAGNASYNC TR-1700 & TR-2000 (NON-BACKCOATED)								
704-273lCl	0.8 mil Polyester-NAB Reel, E&I box	1/2 x 10½	27	3600	1097	19.1	8.7	7
704-573101	0.8 mil Polyester-NAB Reel, E&I box	1 x10½	27	3600	1097	20.9	9.5	5
705 SERIES-PREMIUM 1 MIL THIN COAT (BACKCOATED)								
705-173111	0.8 mil Polyester-NAB Reel, SUB	1/4 x10½	27	3600	1097	21.8	9.9	10
705-17RG1Y	0.8 mil Polyester-NAB Reel, TCB	1/4 x10½	27	3600	1097	21.8	9.9	10
705-273111	0.8 mil Polyester-NAB Reel, E&I	1/2 x10½	27	3600	1097	19.8	9.0	7

705-27RGlY	0.8 mil Polyester-NAB Reel, TCB	1/2 x10½	27	3600	1097	22.5	10.2	7

705 SERIES TAPE FOR ELECTRODATA RECORDERS

705-57RGlY	0.8 mil Polyester-Precision Reel, TCB	1 x 10½	27	3600	1097	24.3	11.0	5
705-58R71 Y	0.8 mil Polyester-Precision Reel, TCB	1 x 10½	27	4800	1463	24.0	10.9	5

705 SERIES TAPE FOR RACAL ICR-64 RECORDERS

705-26RV16	0.8 mil Polyester-Precision Reel, SUB	1/2 x 8	20	2420	738	22.0	10.0	10
705-56RV16	0.8 mil Polyester-Precision Reel, SUB	1 x 8	20	2420	738	22.4	10.2	7

706 SERIES-PREMIUM 0.5 MIL THIN COAT (BACKCOATED)

706-151Bl 1	0.5 mil Polyester-Plastic Reel, SUB	1/4 x 7	18	3600	1097	17.3	7.8	20
706-173911	0.5 mil Polyester-NAB Reel, SUB	1/4 x10½	27	7200	2185	23.2	10.5	10
706-17RG1Y	0.5 mil Polyester-NAB Reel, TCB	1/4 x 10½	27	7200	2185	23.2	10.5	10
706-26RG11	0.5 mil Polyester-Precision Reel, SUB	1/2 x 8	20	3600	1097	21.8	9.9	10
706-273911	0.5 mil Polyester-NAB Reel, E&I	1/2 x 10½	27	7200	2185	25	11.3	7
706-56RG11	0.5 mil Polyester-Precision Reel, SUB	1 x 8	20	3600	1097	23.9	10.9	7
706-57R91Y	0.5 mil Polyester-NAB Reel, TCB	1 x 10½	27	7200	2185	18.1	8.7	5

706 SERIES TAPE FOR ASSMANN MS500 AND MS600 SERIES RECORDERS

706-lERGKS	0.5 mil Polyester-Precision Reel	1/4 x 8 1/3	21	3600	1097	32	14.5	10
706-2ERGKS	0.5 mil Polyester-Precision Reel	1/2 x 8 1/3	21	3600	1097	34	15.5	10
706-5ERGKS	0.5 mil Polyester-Precision Reel	1 x8 1/3	21	3600	1097	38	17.3	10