

MANUFACTURER	SAGEM	SAGEM	SAMSUNG ELECTRONICS	SAMSUNG ELECTRONICS	SEAGATE TECHNOLOGY
DRIVE	MSA 252-100	MSA 252-200	SHD2040N	SHD2041B	ST683J (9710-80) RSD
DISK/TREND GROUP	6	6	4	4	2
MARKET	OEM	OEM	OEM, Captive	OEM, Captive	OEM
MEDIA: Generic type	Special	Special	Fixed	Fixed	Removable Storage Drive
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID	230 mm OD 100 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Oxide Coated
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	SCSI	SCSI	ST412	PC AT	SMD
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	--	--	U: 51.2*	F: 47.0	--
REMOVABLE	F: 100	F: 200	--	--	U: 82.9
Capacity per track (Bytes)	F: 23,040	F: 23,040	U: 15,624*	F: 14,336	U: 20,160
Data surfaces per spindle	8	16	4	4	5
Heads per data surface	1	1	1	1	1
Tracks per surface	720	720	820	820	823
Track density (TPI)	950	950	1065	1065	550
Maximum linear density (BPI)	19680 BPI 14760 FCI	19680 BPI 14760 FCI	20196 BPI 13464 FCI	22386 BPI 14924 FCI	10000 BPI 6666 FCI
Recording code	1,7 RLL	1,7 RLL	2,7 RLL*	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3600	3568	3525	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rack & Pinion, Stepping Motor	Rack & Pinion, Stepping Motor	Linear, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Embedded	Embedded	Dedicated Surf.
Average positioning time (msec)	17	17	35 (including settling)	29 (including settling)	27
Average rotational delay (msec)	8.3	8.3	8.4	8.51	8.3
Average access time (msec)	25.3	25.3	43.4	37.51	35.3
Data transfer rate (KBytes/sec)	1500	1500	937.5*	937.5	1209
FIRST CUSTOMER SHIPMENT	10/90	10/90	4Q88	1Q90	1Q83
COMMENTS	Militarized Subsystem Removable Head/Disk Module	Militarized Subsystem Removable Head/Disk Module	41.3 mm high *With RLL controller	41.3 mm high	

1990 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE					
	ST124	ST125	ST125A	ST125N	ST225
DISK/TREND GROUP	3	3	3	3	3
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	95 mm OD	95 mm OD	130 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	40 mm ID Oxide Coated
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	ST412	ST412	PC AT	SCSI	ST412
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 25.6	U: 25.6	F: 21.5	F: 21.5	U: 25.6
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 10,416	U: 10,416	F: 13,312	F: 13,312	U: 10,416
Data surfaces per spindle	4	4	4	4	4
Heads per data surface	1	1	1	1	1
Tracks per surface	615	615	404	407	615
Track density (TPI)	824	824	824	824	588
Maximum linear density (BPI)	14953	14953	16546 BPI 11030 FCI	16546 BPI 11030 FCI	9827
Recording code	MFM	MFM	2,7 RLL	2,7 RLL	MFM
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor
Servo type	Open Loop	Open Loop	Open Loop	Open Loop	Open Loop
Average positioning time (msec)	40 (including settling)	28 (including settling)	28 (including settling)	28 (including settling)	65 (including settling)
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	48.3	36.3	36.3	36.3	73.3
Data transfer rate (KBytes/sec)	625	625	937.5	937.5	625
FIRST CUSTOMER SHIPMENT	3Q89	3Q87	2Q89	1Q88	10/84
COMMENTS	41.3 mm high	41.3 mm high	41.3 mm high	41.3 mm high	41.3 mm high

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE					
	ST225N	ST225R	ST3025A	ST3025N	ST325A
DISK/TREND GROUP	3	3	3	3	3
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID
Recording medium	Oxide Coated	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	SCSI	ST412	PC AT	SCSI-2	PC AT
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 21.3	U: 25.0*	F: 21.5	F: 21.5	F: 21.4
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 8,704	U: 18,750*	*	*	*
Data surfaces per spindle	4	2	1	1	2
Heads per data surface	1	1	1	1	1
Tracks per surface	615	667			
Track density (TPI)	588	588	1760	1760	1290
Maximum linear density (BPI)	9827	18897 BPI 12598 FCI	27000 BPI 18000 FCI	27000 BPI 18000 FCI	28922 BPI 19281 FCI
Recording code	MFM	2,7 RLL*	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3000	3600	3600	3048
PERFORMANCE					
Actuator type	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Rack, Stepping Motor
Servo type	Open Loop	Open Loop	Dedicated Surf.	Dedicated Surf.	Open Loop
Average positioning time (msec)	65 (including settling)	70 (including settling)	19	19	28 (including settling)
Average rotational delay (msec)	8.3	10	8.3	8.3	9.8
Average access time (msec)	73.3	80	27.3	27.3	37.8
Data transfer rate (KBytes/sec)	625	937.5*	1250-1750	1250-1750	1250-1750
FIRST CUSTOMER SHIPMENT	4Q85		2Q91	1Q91	3Q90
COMMENTS	41.3 mm high	41.3 mm high *With RLL controller	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone

MANUFACTURER

DRIVE

DISK/TREND GROUP

MARKET

MEDIA: Generic type

Nominal disk diameter

Recording medium

DRIVE: Heads

Interface

CAPACITY/RECORDING DENSITY

Total capacity (Mbytes) FIXED

REMOVABLE

Capacity per track (Bytes)

Data surfaces per spindle

Heads per data surface

Tracks per surface

Track density (TPI)

Maximum linear density (BPI)

Recording code

Rotational speed (RPM)

PERFORMANCE

Actuator type

Servo type

Average positioning time (msec)

Average rotational delay (msec)

Average access time (msec)

Data transfer rate (KBytes/sec)

FIRST CUSTOMER SHIPMENT

COMMENTS

	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
	ST325N	ST325X	ST1057A	ST1057N	ST138
	3	3	4	4	4
	OEM	OEM	OEM	OEM	OEM
	Fixed	Fixed	Fixed	Fixed	Fixed
	95 mm OD 25 mm ID Thin Film	95 mm OD 25 mm ID Thin Film	95 mm OD 25 mm ID Thin Film	95 mm OD 25 mm ID Thin Film	95 mm OD 25 mm ID Thin Film
	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
	SCSI	PC XT	PC AT	SCSI-2	ST412
	F: 21.4	F: 21.4	F: 53.4	F: 49.1	U: 38.4
	--	--	--	--	--
	F:	F:	*	*	U: 10,416
	2	2	3	3	6
	1	1	1	1	1
		1230			615
	1015	1015	1300	1300	824
	22762 BPI 15175 FCI 2,7 RLL	22762 BPI 15175 FCI 2,7 RLL	20400 BPI 13600 FCI 2,7 RLL	20400 BPI 13600 FCI 2,7 RLL	14953 MFM
	3600	3600	3528	3528	3600
	Rotary, Rack, Stepping Motor	Rotary, Rack, Stepping Motor	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Band, Stepping Motor
	Open Loop	Open Loop	Dedicated Surf.	Dedicated Surf.	Open Loop
	28 (including settling)	45 (including settling)	19	19	28 (including settling)
	8.3	8.3	8.5	8.5	8.3
	36.3	53.3	27.5	27.5	36.3
	1150	1150	1025-1500	1025-1500	625
	3Q90	2Q89	2Q91	1Q91	3Q87
	31.5 mm high	30 mm high	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST138A	ST138N	ST138R	ST151	ST157A
DISK/TREND GROUP	4	4	4	4	4
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	95 mm OD	95 mm OD	95 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	PC AT	SCSI	ST412	ST412	PC AT
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 32.1	F: 32.2	U: 38.4*	U: 50.8	F: 44.7
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 13,312	F: 13,312	U: 15,624*	U: 10,416	F: 13,312
Data surfaces per spindle	4	4	4	5	6
Heads per data surface	1	1	1	1	1
Tracks per surface	604	615	615	977	560
Track density (TPI)	824	824	824	1300	824
Maximum linear density (BPI)	22430 BPI 14953 FCI	22430 BPI 14953 FCI	22430 BPI 14953 FCI	14108	20280 BPI 13520 FCI
Recording code	2,7 RLL	2,7 RLL	2,7 RLL*	MFM	2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Voice Coil	Rotary, Band, Stepping Motor
Servo type	Open Loop	Open Loop	Open Loop	Dedicated Surf.	Open Loop
Average positioning time (msec)	28 (including settling)	28 (including settling)	28 (including settling)	24	28 (including settling)
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	36.3	36.3	36.3	32.3	36.3
Data transfer rate (KBytes/sec)	937.5	937.5	937.5*	625	937.5
FIRST CUSTOMER SHIPMENT	2Q89	3Q87	3Q87	2Q88	1Q89
COMMENTS	41.3 mm high	41.3 mm high	41.3 mm high *With RLL controller	41.3 mm high	41.3 mm high

1990 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE					
	ST157N	ST157R	ST238R	ST250R	ST251
DISK/TREND GROUP	4	4	4	4	4
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD 25 mm ID	95 mm OD 25 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID
Recording medium	Thin Film	Thin Film	Oxide Coated	Thin Film	Thin Film
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	SCSI	ST412	ST412	ST412	ST412
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 48.6	U: 57.7*	U: 38.4*	U: 50.0*	U: 51.2
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 13,312	U: 15,624*	U: 15,624*	U: 18,750*	U: 10,416
Data surfaces per spindle	6	6	4	4	6
Heads per data surface	1	1	1	1	1
Tracks per surface	615	615	615	667	820
Track density (TPI)	824	824	588	588	777
Maximum linear density (BPI)	22430 BPI	22430 BPI	14740 BPI	18897 BPI	9935
Recording code	14953 FCI 2,7 RLL	14953 FCI 2,7 RLL*	9827 FCI 2,7 RLL*	12598 FCI 2,7 RLL*	MFM
Rotational speed (RPM)	3600	3600	3600	3000	3600
PERFORMANCE					
Actuator type	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor
Servo type	Open Loop	Open Loop	Open Loop	Open Loop	Open Loop
Average positioning time (msec)	28 (including settling)	28 (including settling)	65 (including settling)	70 (including settling)	28 (including settling)
Average rotational delay (msec)	8.3	8.3	8.3	10	8.3
Average access time (msec)	36.3	36.3	73.3	80	36.3
Data transfer rate (KBytes/sec)	937.5	937.5*	937.5*	937.5*	625
FIRST CUSTOMER SHIPMENT	3Q87	3Q87	1Q86	3Q88	3Q87
COMMENTS	41.3 mm high	41.3 mm high *With RLL controller	41.3 mm high *With RLL controller	41.3 mm high *With RLL controller	41.3 mm high

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST252	ST253 (94205-51) Wren 2 HH	ST3057A	ST3057N	ST351A/X
DISK/TREND GROUP	4	4	4	4	4
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID
Recording medium	Thin Film	Oxide Coated	Thin Film	Thin Film	Thin Film
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	
Interface	ST412	ST412	PC AT	SCSI-2	PC AT/XT
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 51.2	U: 51.5	F: 53.4	F: 49.1	F: 42.8
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 10,416	U: 10,416	*	*	*
Data surfaces per spindle	6	5	3	3	2
Heads per data surface	1	1	1	1	1
Tracks per surface	820	989			
Track density (TPI)	777	960	1760	1760	1290
Maximum linear density (BPI)	9935	9535	27000 BPI 18000 FCI	27000 BPI 18000 FCI	28922 BPI 19281 FCI
Recording code	MFM	MFM	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	3048
PERFORMANCE					
Actuator type	Rotary, Band, Stepping Motor	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary
Servo type	Open Loop	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Embedded
Average positioning time (msec)	40 (including settling)	28	19	19	28
Average rotational delay (msec)	8.3	8.3	8.3	8.3	9.8
Average access time (msec)	48.3	36.3	27.3	27.3	37.8
Data transfer rate (KBytes/sec)	625	625	1250-1750	1250-1750	1250-1750
FIRST CUSTOMER SHIPMENT	4Q89	1Q86	1Q90	1Q90	4Q90
COMMENTS	41.3 mm high	41.3 mm high	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone

	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
MANUFACTURER					
DRIVE					
	ST4053	ST1096N	ST1102A	ST1102N	ST177N
DISK/TREND GROUP	4	5	5	5	5
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	ST412	SCSI	PC AT	SCSI-2	SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 53.3	F: 83.9	F: 89.1	F: 84.0	F: 60.8
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 10,416	F: 13,312	*	*	F: 13,312
Data surfaces per spindle	5	7	5	5	5
Heads per data surface	1	1	1	1	1
Tracks per surface	1024	906			921
Track density (TPI)	1031	1300	1300	1300	1300
Maximum linear density (BPI)	9792	19893 BPI 13262 FCI	20400 BPI 13600 FCI	20400 BPI 13600 FCI	19893 BPI 13262 FCI
Recording code	MFM	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3600	3528	3528	3600
PERFORMANCE					
Actuator type	Linear, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	28	20	19	19	20
Average rotational delay (msec)	8.3	8.3	8.5	8.5	8.3
Average access time (msec)	36.3	28.3	27.5	27.5	28.3
Data transfer rate (KBytes/sec)	625	937.5	1025-1500	1025-1500	937.5
FIRST CUSTOMER SHIPMENT	1/87	1Q89	4Q89	4Q89	1Q89
COMMENTS		41.3 mm high	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST274A (94204-74) Wren 2 HH	ST277N	ST277R	ST278R	ST279R (94205-77) Wren 2 HH
DISK/TREND GROUP	5	5	5	5	5
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID
Recording medium	Oxide Coated	Thin Film	Thin Film	Thin Film	Oxide Coated
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	PC AT	SCSI	ST412	ST412	ST412
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 65	F: 64.9	U: 76.9*	U: 76.8*	U: 77*
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 13,824	F: 17,408	U: 15,624*	U: 15,624*	U: 15,624*
Data surfaces per spindle	5	6	6	6	5
Heads per data surface	1	1	1	1	1
Tracks per surface	948	628	820	820	989
Track density (TPI)	960	777	777	777	960
Maximum linear density (BPI)	13489 BPI 8992 FCI	19869 BPI 13246 FCI	14902 BPI 9935 FCI	14902 BPI 9935 FCI	14302 BPI 9534 FCI
Recording code	2,7 RLL	2,7 RLL	2,7 RLL*	2,7 RLL*	2,7 RLL*
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor	Rotary, Voice Coil
Servo type	Dedicated Surf.	Open Loop	Open Loop	Open Loop	Dedicated Surf.
Average positioning time (msec)	28	28 (including settling)	28 (including settling)	40 (including settling)	28
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	36.3	36.3	36.3	48.3	36.3
Data transfer rate (KBytes/sec)	937.5	1250	937.5*	937.5*	937.5*
FIRST CUSTOMER SHIPMENT	7/88	1/87	3Q86	4Q89	3Q87
COMMENTS	41.3 mm high	41.3 mm high	41.3 mm high *With RLL controller	41.3 mm high *With RLL controller	41.3 mm high *With RLL controller

1990 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST280A (94204-71) Wren 2 HH	ST296N	ST3096A	ST3096N	ST4085 (94155-85) Wren 2
DISK/TREND GROUP	5	5	5	5	5
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID	130 mm OD 40 mm ID
Recording medium	Oxide Coated	Thin Film	Thin Film	Thin Film	Oxide Coated
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	PC AT	SCSI	PC AT	SCSI-2	ST412
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 71	F: 84.9	F: 89.1	F: 84.0	U: 85
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 13,824	F: 17,408	*	*	U: 10,416
Data surfaces per spindle	5	6	3	3	8
Heads per data surface	1	1	1	1	1
Tracks per surface	1032	820			1024
Track density (TPI)	960	777	1760	1760	980
Maximum linear density (BPI)	14357 BPI 9571 FCI	19869 BPI 13246 FCI	27000 BPI 18000 FCI	27000 BPI 18000 FCI	9400
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL	MFM
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Band, Stepping Motor	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Open Loop	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	29	28 (including settling)	19	19	28
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	37.3	36.3	27.3	27.3	36.3
Data transfer rate (KBytes/sec)	937.5	1250	1250-1750	1250-1750	625
FIRST CUSTOMER SHIPMENT	7/88	4Q87	1Q90	1Q90	1986
COMMENTS	41.3 mm high	41.3 mm high	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone	

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST4086 (94155-86) Wren II	ST4086E (94156-86) Wren 2	ST4096	ST4097 (94155-96) Wren 2	ST1100 Swift
DISK/TREND GROUP	5	5	5	5	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	95 mm OD 25 mm ID
Recording medium	Oxide Coated	Oxide Coated	Thin Film	Oxide Coated	Thin Film
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	ST412	ESDI	ST412	ST412	ST412
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 86	U: 86.7	U: 96	U: 96	U: 100.5
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 10,416	U: 10,416	U: 10,416	U: 10,416	U: 10,416
Data surfaces per spindle	9	9	9	9	9
Heads per data surface	1	1	1	1	1
Tracks per surface	925	925	1024	1024	1072
Track density (TPI)	960	960	1031	980	1350
Maximum linear density (BPI)	9274	9540	9792	9400	14019
Recording code	MFM	MFM	MFM	MFM	MFM
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Linear, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	28	28	28	28	15
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	36.3	36.3	36.3	36.3	23.3
Data transfer rate (KBytes/sec)	625	625	625	625	625
FIRST CUSTOMER SHIPMENT	2Q84	2Q84	1Q86	1986	2Q88
COMMENTS					41.3 mm high

1990 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST1111E Swift	ST1126A Swift	ST1126N Swift	ST1133A Swift	ST1133NS Swift
DISK/TREND GROUP	6	6	6	6	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD 25 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads	MIG	Ferrite	Ferrite	MIG	MIG
Interface	ESDI	PC AT	SCSI	PC AT	SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 111.9	F: 111.4	F: 107.0	F: 117	F: 117
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 20,880	F: 14,848	F: 14,848	F: 18,432	F: 18,432
Data surfaces per spindle	5	7	7	5	5
Heads per data surface	1	1	1	1	1
Tracks per surface	1072	1072	1068	1272	1272
Track density (TPI)	1350	1350	1350	1543	1543
Maximum linear density (BPI)	28103 BPI 18735 FCI	22638 BPI 15092 FCI	22638 BPI 15092 FCI	28103 BPI 18735 FCI	28103 BPI 18735 FCI
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	15	15	15	15	15
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	23.3	23.3	23.3	23.3	23.3
Data transfer rate (KBytes/sec)	1250	1000	1000	1250	1250
FIRST CUSTOMER SHIPMENT	1Q89	1Q89	1Q89	4Q89	4Q89
COMMENTS	41.3 mm high	41.3 mm high	41.3 mm high	41.3 mm high	41.3 mm high

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST1144A	ST1144N	ST1150R Swift	ST1162A Swift	ST1162N Swift
DISK/TREND GROUP	6	6	6	6	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	95 mm OD	95 mm OD	95 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Interface	PC AT	SCSI-2	ST412	PC AT	SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 124.7	F: 125.8	U: 150.7	F: 143	F: 137.5
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	U: 15,624	F: 18,432	F: 18,432
Data surfaces per spindle	7	7	9	9	9
Heads per data surface	1	1	1	1	1
Tracks per surface			1072	1072	1272
Track density (TPI)	1300	1300	1350	1350	1350
Maximum linear density (BPI)	20400 BPI	20400 BPI	21030 BPI	22638 BPI	22638 BPI
Recording code	13600 FCI 2,7 RLL	13600 FCI 2,7 RLL	14020 FCI 2,7 RLL	15092 FCI 2,7 RLL	15092 FCI 2,7 RLL
Rotational speed (RPM)	3528	3528	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	19	19	15	15	15
Average rotational delay (msec)	8.5	8.5	8.3	8.3	8.3
Average access time (msec)	27.5	27.5	23.3	23.3	23.3
Data transfer rate (KBytes/sec)	1025-1500	1025-1500	938	1000	1000
FIRST CUSTOMER SHIPMENT	2Q90	4Q90	2Q88	1Q89	1Q89
COMMENTS	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high	41.3 mm high	41.3 mm high

1990 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST1186A Swift	ST1186N Swift	ST1201A Swift	ST1201E Swift	ST1201N Swift
DISK/TREND GROUP	6	6	6	6	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	95 mm OD	95 mm OD	95 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film
DRIVE: Heads	MIG	MIG	MIG	MIG	MIG
Interface	PC AT	SCSI	PC AT	ESDI	SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 164	F: 164	F: 177.5	U: 201.4	F: 171.9
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 18,432	F: 18,432	F: 18,432	U: 20,880	F: 18,432
Data surfaces per spindle	7	7	9	9	9
Heads per data surface	1	1	1	1	1
Tracks per surface	1272	1272	1072	1072	1072
Track density (TPI)	1543	1543	1543	1543	1543
Maximum linear density (BPI)	29000 BPI	29000 BPI	28103 BPI	28103 BPI	28103 BPI
Recording code	19333 FCI 2,7 RLL	19333 FCI 2,7 RLL	18735 FCI 2,7 RLL	18735 FCI 2,7 RLL	18735 FCI 2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	15	15	15	15	15
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	23.3	23.3	23.3	23.3	23.3
Data transfer rate (KBytes/sec)	1250	1250	1250	1250	1250
FIRST CUSTOMER SHIPMENT	4Q89	4Q89	1Q89	1Q89	1Q89
COMMENTS	41.3 mm high	41.3 mm high	41.3 mm high	41.3 mm high	41.3 mm high

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST1239A Swift	ST1239N Swift	ST2106E (94216-106) Wren 3 HH	ST2106N (94211-106) Wren 3 HH	ST2125N (94221-125) Wren 5 HH
DISK/TREND GROUP	6	6	6	6	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	130 mm OD	130 mm OD	130 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film
DRIVE: Heads	MIG	MIG	Ferrite	Ferrite	Ferrite
Interface	PC AT	SCSI	ESDI	SCSI	SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 210.7	F: 204.2	U: 106	F: 89	F: 110
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 18,432	F: 18,432	U: 20,880	F: 18,432	*
Data surfaces per spindle	9	9	5	5	3
Heads per data surface	1	1	1	1	1
Tracks per surface	1272	1272	1024	1024	1544
Track density (TPI)	1543	1543	960	960	1280
Maximum linear density (BPI)	28103 BPI	28103 BPI	19058 BPI	19058 BPI	19213 BPI
Recording code	18735 FCI 2,7 RLL	18735 FCI 2,7 RLL	12705 FCI 2,7 RLL	12705 FCI 2,7 RLL	12808 FCI 2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	15	15	18	18	18
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	23.3	23.3	26.3	26.3	26.3
Data transfer rate (KBytes/sec)	1250	1250	1250	1250	1125-1875
FIRST CUSTOMER SHIPMENT	3Q89	3Q89	2/87	2/87	
COMMENTS	41.3 mm high	41.3 mm high	41.3 mm high	41.3 mm high	41.3 mm high *Varies by zone

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST2182E (94246-182) Wren 6 HH	ST2209N (94221-209) Wren 5 HH	ST2274A (94244-274) Wren 6 HH	ST4135R (94155-135) Wren 2	ST4141E/N 94166-141 Wren 3
DISK/TREND GROUP	6	6	6	6	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Oxide Coated	Thin Film
DRIVE: Heads	Thin Film	Ferrite	Thin Film	Ferrite	Ferrite
Interface	ESDI	SCSI	PC AT	ST412	ESDI, SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 182	F: 179	F: 193	U: 135*	U: 141
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 31,320	*	F: 27,648	U: 15,624*	U: 20,880
Data surfaces per spindle	5	5	5	9	7
Heads per data surface	1	1	1	1	1
Tracks per surface	1453	1544	1453	960	969
Track density (TPI)	1459	1280	1459	980	960
Maximum linear density (BPI)	31699 BPI 21132 FCI	19213 BPI 12808 FCI	31699 BPI 21132 FCI	13670 BPI 9113 FCI	19058 BPI 12705 FCI
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL*	2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	15	18	16	28	16.4
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	23.3	26.3	24.3	36.3	24.7
Data transfer rate (KBytes/sec)	1875	1875	1875	937.5*	1250
FIRST CUSTOMER SHIPMENT	1/89		4/89	3Q87	2Q86
COMMENTS	41.3 mm high	41.3 mm high *Varies by zone	41.3 mm high	*With RLL controller	

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST4144R	ST4182E (94166-182) Wren 3	ST4182N (94161-182) Wren 3	ST6344J (9715-340) FSD	ST1400N
DISK/TREND GROUP	6	6	6	7	7
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	230 mm OD 100 mm ID	95 mm OD 25 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Oxide Coated	Thin Film
DRIVE: Heads	Ferrite	Ferrite	Ferrite	Thin Film	
Interface	ST412	ESDI	SCSI	SMD	PC AT
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 144*	U: 182	F: 155	U: 344	F: 331
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 15,624*	U: 20,880	F: 19,456	U: 20,160	*
Data surfaces per spindle	9	9	9	12	7
Heads per data surface	1	1	1	2	1
Tracks per surface	1024	969	969	1422	
Track density (TPI)	1031	960	960	960	
Maximum linear density (BPI)	14688 BPI 9792 FCI	19058 BPI 12705 FCI	19058 BPI 12705 FCI	10000	
Recording code	2,7 RLL*	2,7 RLL	2,7 RLL	MFM	
Rotational speed (RPM)	3600	3600	3600	3600	4400
PERFORMANCE					
Actuator type	Linear, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Linear, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	28	16.5	16.5	18	14
Average rotational delay (msec)	8.3	8.3	8.3	8.3	6.8
Average access time (msec)	36.3	24.8	24.8	26.3	20.8
Data transfer rate (KBytes/sec)	937.5*	1250	1250	1209	1875-3125
FIRST CUSTOMER SHIPMENT	3Q87	2Q86		4Q83	4Q90
COMMENTS	*With RLL controller				41.3 mm high *Varies by zone

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MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST1401N	ST1480A	ST1480N	ST2383A (94244-383) Wren 6 HH	ST2383E (94246-383) Wren 6 HH
DISK/TREND GROUP	7	7	7	7	7
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	95 mm OD	130 mm OD	130 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film
DRIVE: Heads				Thin Film	Thin Film
Interface	SCSI, SCSI-2	PC AT	SCSI, SCSI-2	PC AT	ESDI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 340	F: 426	F: 426	F: 338	U: 383
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	*	F: 27,648	U: 31,320
Data surfaces per spindle	9	9	9	7	7
Heads per data surface	1	1	1	1	1
Tracks per surface				1747	1747
Track density (TPI)				1459	1459
Maximum linear density (BPI)				31699 BPI	31699 BPI
Recording code				21132 FCI	21132 FCI
				2,7 RLL	2,7 RLL
Rotational speed (RPM)	4400	4400	4400	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	14	14	14	16	16
Average rotational delay (msec)	6.8	6.8	6.8	8.3	8.3
Average access time (msec)	20.8	20.8	20.8	24.3	24.3
Data transfer rate (KBytes/sec)	2500-3125	1875-3125	1875-3125	1875	1875
FIRST CUSTOMER SHIPMENT	5/90	4Q90	3Q90	4/89	1/89
COMMENTS	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high	41.3 mm high

1990 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST2383N (94241-383) Wren 6 HH	ST4350N (94171-350) Wren 4	ST4376N (94171-344) (94171-376) Wren 4	ST4383E (94186-383) Wren 5	ST4384E (94186-383H) Wren 5
DISK/TREND GROUP	7	7	7	7	7
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film		
Interface	SCSI	SCSI	SCSI	ESDI	ESDI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 338	F: 307	F: 330	U: 383	U: 383
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	*	U: 20,880	U: 20,880
Data surfaces per spindle	7	9	9	13	15
Heads per data surface	1	1	1	1	1
Tracks per surface	1261	1412	1549	1412	1224
Track density (TPI)	1459	1280	1280	1280	1280
Maximum linear density (BPI)	31674 BPI 21116 FCI	19058 BPI 12705 FCI	19058 BPI 12705 FCI	19600 BPI 13066 FCI	19600 BPI 13066 FCI
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	14	16.5	17.5	18	14.5
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	22.3	24.8	25.8	26.3	22.8
Data transfer rate (KBytes/sec)	2250-2265	1250-1875	1125-1875	1250	1250
FIRST CUSTOMER SHIPMENT	7/89	3/87	10/87	2/88	2/88
COMMENTS	41.3 mm high *Varies by zone	*Varies by zone	*Varies by zone		

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST4385N (94181-385H) Wren Runner	ST4442E (94186-442) Wren 5	ST6315J (9715-300) FSD	ST8368 (9720-368) Sabre 1	ST2502N (94241-502) Wren 6 HH
DISK/TREND GROUP	7	7	7	7	8
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	230 mm OD 100 mm ID	210 mm OD 100 mm ID	130 mm OD 40 mm ID
Recording medium	Thin Film	Thin Film	Oxide Coated	Oxide Coated	Thin Film
DRIVE: Heads	Thin Film		Thin Film	Thin Film	Thin Film
Interface	SCSI	ESDI	SMD	SMD,SMD-E,SCSI	SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 337	U: 442	U: 315	U: 368	F: 440
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	U: 20,880	U: 20,160	U: 30,240	*
Data surfaces per spindle	15	15	9.5	10	7
Heads per data surface	1	1	2/1	1	1
Tracks per surface		1412	1646	1217	1755
Track density (TPI)	1280	1280	1040	960	1459
Maximum linear density (BPI)	22000 BPI 14666 FCI	19600 BPI 13066 FCI	10000	15185 BPI 10123 FCI	31674 BPI 21116 FCI
Recording code	2,7 RLL	2,7 RLL	MFM	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Linear, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	10.7	16	20	18	16
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	19	24.3	28.3	26.3	24.3
Data transfer rate (KBytes/sec)	1875-2000	1250	1209	1815	1875-2750
FIRST CUSTOMER SHIPMENT	1Q89	2/88	4Q85	11/85	9/89
COMMENTS	*Varies by zone				41.3 mm high *Varies by zone

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST4702N (94181-702) Wren 5	ST4766E (94196-766) Wren 6	ST4766N (94191-766) Wren 6	ST4767N (94601-767H) Wren Runner-2	ST6515 (9715-500) FSD
DISK/TREND GROUP	8	8	8	8	8
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	230 mm OD 100 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Oxide Coated
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	SCSI	ESDI	SCSI	SCSI, SCSI-2	Mod.SMD,IPI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 613	U: 766	F: 676	F: 676	U: 516
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	U: 31,320	F: 28,672	*	U: 30,240
Data surfaces per spindle	15	15	15	15	12
Heads per data surface	1	1	1	1	2
Tracks per surface	1546	1632	1632	1356	1422
Track density (TPI)	1280	1459	1459	1600	960
Maximum linear density (BPI)	26000 BPI 17333 FCI	30500 BPI 20333 FCI	30500 BPI 20333 FCI	30600 BPI 20400 FCI	15159 BPI 10106 FCI
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3600	3600	4800	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Linear, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	16.5	15.5	16.5	11.9	18
Average rotational delay (msec)	8.3	8.3	8.3	6.25	8.3
Average access time (msec)	24.8	23.8	24.8	18.15	26.3
Data transfer rate (KBytes/sec)	1500-2000	1875	1875	3000	1825
FIRST CUSTOMER SHIPMENT	5/88	8/88	9/88	3/90	4Q83
COMMENTS	*Varies by zone			*Varies by zone	

1990 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST8500 (9720-500) Sabre 2	ST8741 (9720-736) Sabre 3	ST8851 (9720-850) Sabre 4	ST41200N (94601-12G) Wren 7	ST41201 (97500-12G) (97509-12G) Elite 1
DISK/TREND GROUP	8	8	8	9	9
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	210 mm OD	210 mm OD	210 mm OD	130 mm OD	130 mm OD
Recording medium	100 mm ID Oxide Coated	100 mm ID Oxide Coated	100 mm ID Oxide Coated	40 mm ID Thin Film	40 mm ID Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	Mod.SMD, SCSI	Mod.SMD, SCSI	SMD,SCSI,IPI-2	SCSI, SCSI-2	Mod. SMD, IPI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 500	U: 741	U: 851	F: 1,050	U: 1,200
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 41,088	U: 30,240	U: 41,088	*	U: 33,600
Data surfaces per spindle	10	15	15	15	17
Heads per data surface	1	1	1	1	1
Tracks per surface	1217	1635	1381	1931	2101
Track density (TPI)	960	1289	1089	1600	1801
Maximum linear density (BPI)	19816 BPI	14981 BPI	19816 BPI	32750 BPI	33344 BPI
Recording code	13210 FCI 2,7 RLL	9987 FCI 2,7 RLL	13210 FCI 2,7 RLL	24562 FCI 1,7 RLL	22229 FCI 2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	5400
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	18	15	15	15	11.5
Average rotational delay (msec)	8.3	8.3	8.3	8.3	5.56
Average access time (msec)	26.3	23.3	23.3	23.3	17.06
Data transfer rate (KBytes/sec)	2465	1815	2465	1875-2625	3000
FIRST CUSTOMER SHIPMENT	2Q87	2Q87	3Q87	5/89	1Q90
COMMENTS				*Varies by zone	

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST41520 (97501-15G) Elite 1	ST41600N Elite 1	ST81123J (97200-1123) Sabre 5	ST81154K (97229-1154) Sabre 2	ST81236 (9720-1230) Sabre 5
DISK/TREND GROUP	9	9	9	9	9
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	210 mm OD 100 mm ID	210 mm OD 100 mm ID	210 mm OD 100 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	SCSI-2	SCSI-2	Mod. SMD	IPI-2	SMD,SCSI,IPI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 1,600 F: 1,352	U: 1,600 F: 1,352	U: 1,123	U: 1,154	U: 1,236
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	U: 45,792	U: 50,400	U: 50,400
Data surfaces per spindle	17	17	15	14	15
Heads per data surface	1	1	1	1	1
Tracks per surface	2101	2101	1635	1635	1635
Track density (TPI)	1801	1801	1289	1289	1289
Maximum linear density (BPI)	*	*	22955 BPI 15303 FCI	25264 BPI 16842 FCI	25264 BPI 16842 FCI
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	5400	5400	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	11.5	11.5	15	15	15
Average rotational delay (msec)	5.56	5.56	8.3	8.3	8.3
Average access time (msec)	17.06	17.06	23.3	23.3	23.3
Data transfer rate (KBytes/sec)	3000	3000-4500	2747	6000	3000
FIRST CUSTOMER SHIPMENT	2Q90	3Q90	3Q88	4Q88	2Q88
COMMENTS	*Varies by zone	*Varies by zone	22 Mhz version of Sabre 5	2 head parallel version of Sabre 5	

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST82272J Sabre 6	ST82368K (97299-2368) Sabre PTD	ST82500 (9720-2500) Sabre 6	ST83050K Sabre 7 2HP	ST83220K Sabre 7
DISK/TREND GROUP	9	9	9	9	9
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	210 mm OD	210 mm OD	210 mm OD	210 mm OD	210 mm OD
Recording medium	100 mm ID Thin Film	100 mm ID Thin Film	100 mm ID Thin Film	100 mm ID Thin Film	100 mm ID Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	Modified SMD	IPI-2	SMD,SCSI,IPI-2	IPI-2	IPI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 2,272	U: 2,368	U: 2,500	U: 3,050	U: 3,220
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 45,792	U: 53,599	U: 50,400	U: 127,680	U: 63,840
Data surfaces per spindle	19	18	19	18	19
Heads per data surface	1	1	1	1	1
Tracks per surface	2611	2611	2611	2655	2655
Track density (TPI)	1880	1880	1880	1912	1912
Maximum linear density (BPI)	21987 BPI	24200 BPI	25409 BPI	32202 BPI	32202 BPI
Recording code	14658 FCI 2,7 RLL	16133 FCI 2,7 RLL	16939 FCI 2,7 RLL	24151 FCI 1,7 RLL	24151 FCI 1,7 RLL
Rotational speed (RPM)	3600	3600	3600	4365	4365
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	12	12	12	12	12
Average rotational delay (msec)	8.3	8.3	8.3	6.87	6.87
Average access time (msec)	20.3	20.3	20.3	18.87	18.87
Data transfer rate (KBytes/sec)	2747	27000	3000	9340	4670
FIRST CUSTOMER SHIPMENT	1Q90	3Q90	1Q90	4Q90	3Q90
COMMENTS	22 Mhz version of Sabre 6	9 head parallel version of Sabre 6		2 head parallel version of Sabre 7	