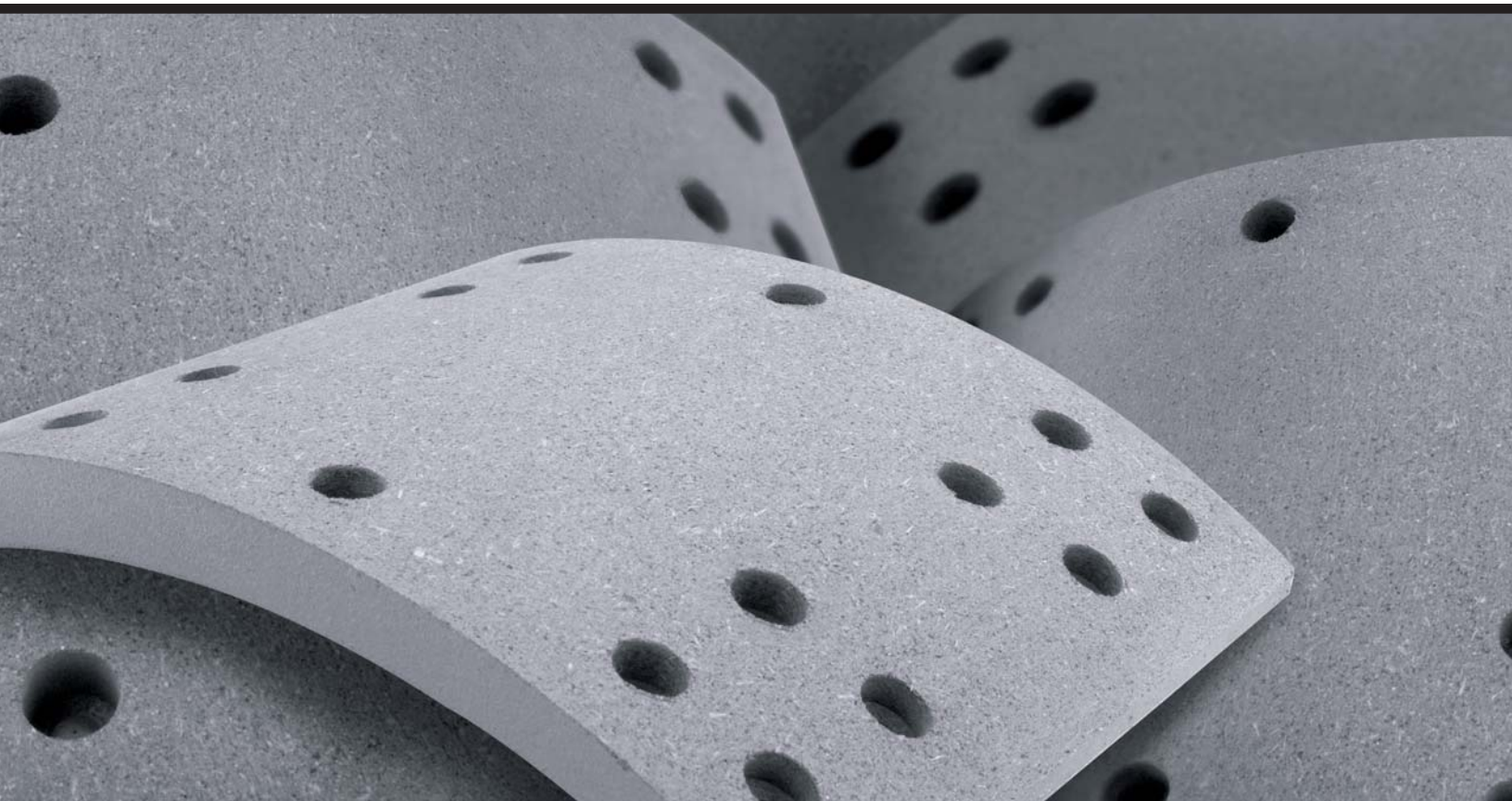




**Bendix®**  
Brake Linings

OEM Certified

Stopping Power

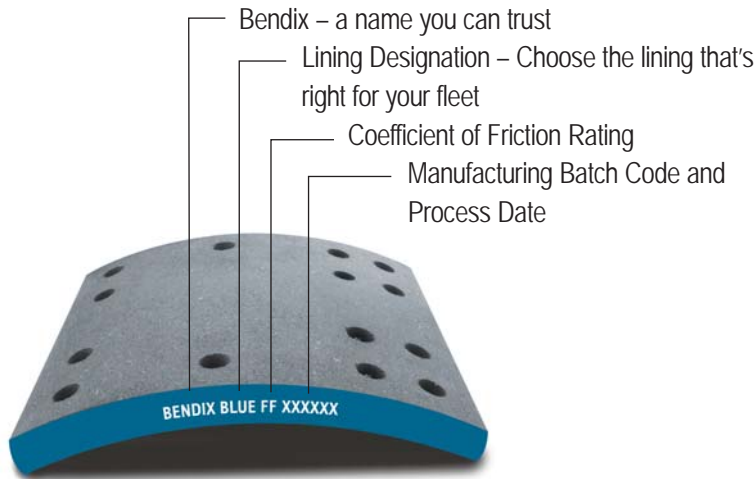


a product of

**Bendix Spicer  
Foundation Brake LLC**  
*A Bendix CVS and Dana Joint Venture*

# Bendix® Lining Identification

## Bendix Aftermarket Friction (Bendix Colored Lining)



## Bendix OEM “ES” Extended Service Friction



## OEM Certified Stopping Power

Whether you're performing light on-highway hauling, severe duty stop and go, or tough off-highway service, Bendix® brake linings are specifically tailored to meet your requirements. Bendix offers a wide selection of linings including Extended and Standard platforms, Fiberglass to metallic fibers and GAWR's of 13,200 to 29,000 lbs.

Be assured that Bendix brake linings are engineered to provide safe, consistent, and reliable performance and are precision made for specific applications.

Manufactured and assembled in the United States and Canada, all Bendix linings are made exclusively with premium compounds. When it comes to durability, reliability, and long-term wear, select Bendix, the brake lining with OEM certified stopping power.

## Bendix Friction Application Chart

GAWR	Bendix Aftermarket Friction	Bendix OEM Friction	General Application
20,000	Black	–	High torque output long life friction for line haul and city pick-up and delivery applications
	Silver	–	Medium grade friction for line haul and city pick-up and delivery applications
	Blue	ES420	Premium grade friction giving long lining life and long drum life for line haul, city pick-up and delivery and school bus applications
23,000	Red	ES600	Premium long life friction for typical over the road applications
	Yellow	–	Premium grade friction for line haul and vocational applications
	Gold	ES710	Quiet, long life friction for high duty cycle applications such as school bus and beverage trucks
	Orange	ES1160	Severe service combination friction
	Bronze	ES1100	Severe service full metallic friction
25,000	–	ES1180	Severe service friction for vocational applications

Bendix Friction Formulations are available on both Standard and Extended Service Platforms. Extended Service Platforms provide a 22% thicker and higher density material than the industry standard platform lining. The combination of increased density and increased thickness allows for a 30% to 35% wearable life expectancy increase when compared to the standard platform lining.

# Bendix® Linings Typical Applications Chart

(Drive and Trailer Axle)



	GOOD	BETTER	BEST
Bendix Aftermarket Friction	YELLOW	GOLD	ORANGE
Bendix OEM Friction	ES600	ES710	ES1160



	GOOD	BETTER	BEST
Bendix Aftermarket Friction	YELLOW	GOLD	ORANGE
Bendix OEM Friction	ES600	ES710	ES1160



	GOOD	BETTER	BEST
Bendix Aftermarket Friction	YELLOW	GOLD	ORANGE
Bendix OEM Friction	ES600	ES710	ES1160



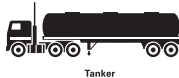
	GOOD	BETTER	BEST
Bendix Aftermarket Friction	BLUE	RED	GOLD
Bendix OEM Friction	ES420	ES600	ES710



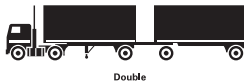
	GOOD	BETTER	BEST
Bendix Aftermarket Friction	BLUE	RED	GOLD
Bendix OEM Friction	ES420	ES600	ES710



	GOOD	BETTER	BEST
Bendix Aftermarket Friction	RED	GOLD	ORANGE
Bendix OEM Friction	ES600	ES710	ES1160



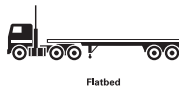
	GOOD	BETTER	BEST
Bendix Aftermarket Friction	BLUE	RED	GOLD
Bendix OEM Friction	ES420	ES600	ES710



	GOOD	BETTER	BEST
Bendix Aftermarket Friction	BLACK	BLUE	RED
Bendix OEM Friction	–	ES420	ES600



	GOOD	BETTER	BEST
Bendix Aftermarket Friction	BLACK	BLUE	RED
Bendix OEM Friction	–	ES420	ES600



	GOOD	BETTER	BEST
Bendix Aftermarket Friction	BLACK	BLUE	RED
Bendix OEM Friction	–	ES420	ES600




	GOOD	BETTER	BEST
Bendix Aftermarket Friction	RED	YELLOW	GOLD
Bendix OEM Friction	ES600	–	–

\*Lining is application specific and determined by the specific application. These are standard recommendations.

# For Your Next Brake Job ... Specify Bendix®

## COMPETITIVE CROSS REFERENCE

	<div> <div>20K Economy</div> <div>→</div> <div>20K High Performance Premium</div> </div>					<div> <div>23K Economy</div> <div>→</div> <div></div> </div>		
	Upgrade to Bendix Black	Black	Silver	Blue	ES420	Upgrade to Bendix Red	Red	ES600
<b>FORMULABLUE</b>								
<b>ABEX®</b>	XL20 XL6014	XC6085 AN 6166	EN 6008-1	EL 6011		AX6149	EX 685	
<b>BRAKEPRO™</b>	CM14 CM15	CM16					CM18	
<b>CARLISLE®</b>	NA100-2 EC 20	MB 20	MB 21			EC 23	MB 44	
<b>EUCLID™</b>	E55	E77	E78				E88	
<b>FRAS-LE®</b>	AF520	AF540	AF555	AF556		AF523	AF555	AF557
<b>HALDEX®</b>	V-77	GN 2017		GF 2008	GF 3008	V 88	GD 2016	
<b>MARATHON®</b>	MH UB	DB				FLOE	HS	
<b>MERITOR®</b>	EG	MG1	MG2L	MA 212	MA210	MG 2	MA 310	MA 312
<b>SUNDARAM®</b>	AF180	AF200					AF230	
<b>TMD® Cobreq®</b>		NABK090	NABK102				NABK 110	
<b>PERFORMANCE FRICTION®</b>								
<b>RAYBESTOS®</b>								

All Bendix frictions are tested and rated using a 165 AL Factor.

\*Note: Information compiled from various industry sources. The GAWR for each friction material may vary depending on the AL factor. Bendix does not make any inference to FMSI testing results for the above non-Bendix linings.

Maximum GAWR based on 16½" x 7" Drive and Trailer applications.

Performance of friction will vary dependent on vehicle type, load, terrain and driver. Consult your account manager to determine the correct friction for the specific application.

Cross reference information is provided as a reference only and not indicative of equal performance characteristics.

 <b>23K High Performance Premium</b>			<b>23K Combination Block</b>		<b>23K Metallic</b>		<b>25,000</b>	<b>Hydraulic Disc Pads</b>
			<b>23K Premium</b>	<b>23K Heavy Duty Premium</b>	<b>23K Premium</b>	<b>23K Heavy Duty Premium</b>	<b>25K Heavy Duty Premium</b>	
<b>Yellow</b>	<b>ES710</b>	<b>Gold</b>	<b>Orange</b>	<b>ES1160</b>	<b>Bronze</b>	<b>ES1100</b>	<b>ES1180</b>	<b>Prem FM HD</b>
								<b>E107 E109 E111</b>
SDA 6098	EH 6040 (1083-9)	MC 685/695	EC 685/6069	EM 6069	ED/EW 6028	SM/6098		
CM20	CM22A-1	CMB42		CMM46		CM29		
MB 23	SD1 WT 56	MB 62		MB 60		MB 60		
E94		E98		E100		E94		ED-V ED-S ED-M
	AF587	AF560 AF/555/FF		AF560		AF587		
GG 3020	GH 3023	GC 3020/20		GZ 2035		GM 2040 GP 2030		
	TS	MBC		MBS		TS		
	R401	CG		MET		R403		MVD MD MMD
AF250								
NABK 142		NABK 171		NABK 170		NABK 132		
								Carbon Metallic®
								SGD PGD ATD



Bendix-leading the way in engineering and development of application specific friction products.

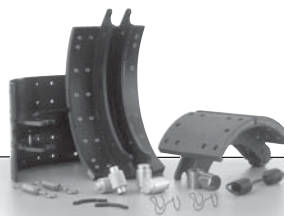
All Bendix® linings meet or exceed FMVSS 121 for their specified application.

Bendix® Black FF lining certifies for a 20,000 GAWR at a 19.6" rolling radius and an A/L factor of 165.

The Bendix® Black lining was developed as a value based - high torque 20,000 lb. material that provides long life and lower cost per mile with an optimized friction couple.

Our Black lining excels in line haul, P&D and vocational truck applications where safety and economy rank above vehicle tare weight.

The special formulation of ceramics and organic compounds found in our Bendix® Black lining enables it to outperform other value materials in a wide range of brake temperatures while providing resistance to external contamination that can effect performance and wear.



## Black FF Lining

Bendix — a name you can trust

Lining Designation — Choose the lining that's right for your fleet

Coefficient of Friction Rating

Manufacturing Batch Code and Process Date



### Applications:

Line Haul  
Pick-up & Delivery  
Vocational Straight Trucks

### Notes:

Available in the common FMSI numbers  
High Torque Output  
Excellent Stopping Power

### Market Competition:

Meritor® MG1  
GreyRock® 2016, 2017  
Carlisle® MB21, MB20  
Abex® 6166  
BrakePro™ CM16  
Fras-le® 540, 550  
Marathon® DB20



Bendix-leading the way in engineering and development of application specific products.

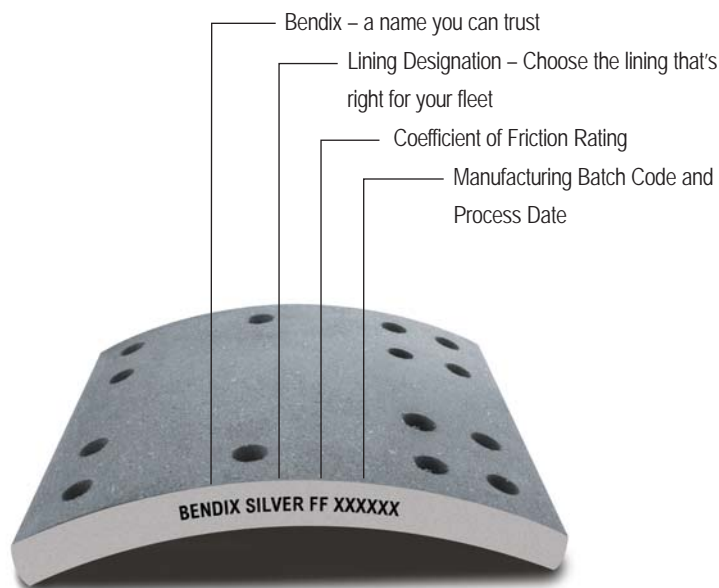
All Bendix® linings meet or exceed FMVSS121.

Our Silver FF is engineered to provide an economical lining for single axles up to a maximum of 20,000 lbs., and tandem axles up to a maximum of 40,000 lbs. G.A.W.R., using either standard 16.5" x 7" or 16.5" x 8.63" brakes with 165 or 180 AL factors as specified in the chart below.

Silver FF linings are extremely well suited for tractor, trailer, and straight truck applications. Uniquely formulated with a moderate to high friction organic compound, they are designed to handle on-highway applications and city pick-up and delivery as well.



## Silver FF Lining



### Applications:

Line haul  
Pick-Up and Delivery

### Notes:

Available on standard brake shoes  
Large torque capacity  
Good stopping power

### Market Competition:

Meritor R201, R202  
GreyRock 2015  
Carlisle MB21, MB19  
Abex 6008-1, 6011  
BrakePro CM16  
Fras-le 550, 555  
Marathon DB20

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
12.25" X 7.5"	4692	165 / 180	16.1"	17k / 34k	DAP	SILVER FF
16.5" X 7"	4311	165 / 180	21.1"	20k / 40k	SAP	SILVER FF
16.5" X 7"	4515	165 / 180	21.1"	20k / 40k	DAP	SILVER FF
16.5" X 8.63"	4551	165 / 180	21.1"	20k / 40k	DAP	SILVER FF





Bendix-leading the way in engineering and development of application specific products.

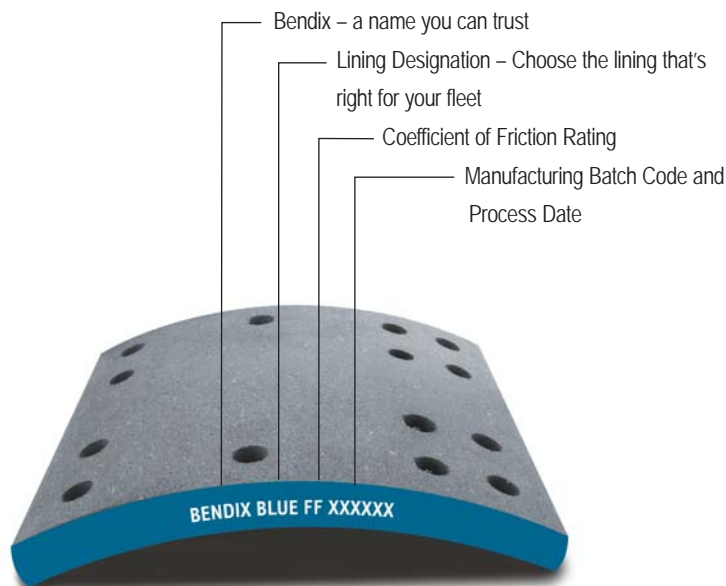
All Bendix® linings meet or exceed FMVSS121.

Our Blue FF is engineered to provide a premium, multi-application, all-makes lining for single axles up to a maximum of 20,000 lbs., and tandem axles up to a maximum of 40,000 lbs. G.A.W.R., using either standard 16.5" x 7" or 16.5" x 8.63" brakes with 165 or 180 AL factors as specified in the chart below.

Blue FF linings are designed with uniquely formulated high-friction Aramid polymer fibers, engineered to handle the high heat of long mountain grades and high duty cycles of city pick-up & delivery.



## Blue FF Lining



### Applications:

Conventional line haul

### Notes:

Aramid polymer fibers  
Available on standard shoes  
Good torque capacity  
Good stopping power  
Long drum life

### Market Competition:

Meritor R201  
GreyRock 2015  
Carlisle MB21  
Abex 6011, 6008-1  
BrakePro CM16  
Fras-le 555  
Marathon DB20

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
16.5" X 7"	4311	165 / 180	21.1"	20k / 40k	SAP	BLUE FF
16.5" X 7"	4515	165 / 180	21.1"	20k / 40k	DAP	BLUE FF
16.5" X 8.63"	4551	165 / 180	21.1"	20k / 40k	DAP	BLUE FF





Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

Our Red GG is engineered to provide a premium, multi-application lining for single axles up to a maximum of 23,000 lbs., and tandem axles up to a maximum of 46,000 lbs. G.A.W.R., using either standard 16.5" x 7" or 16.5" x 8.63" brakes with 165 or 180 AL factors as specified in the chart below.

For steer axles, Red linings are engineered to provide a premium, multi-application lining up to a maximum of 16,000 lbs. G.A.W.R., using standard 16.5" x 6" brakes with 132 AL factor as specified in the chart below.

Capable of handling maximum loads with consistent brake performance and maximum drum life, when used with conventional brake shoe designs.

Designed with uniquely formulated high-friction Aramid polymer fibers, engineered to endure the intense heat of long mountain grades and high duty cycles of city pick up & delivery.



## Red GG Lining



### Applications:

Heavy line haul

### Notes:

Aramid polymer fibers  
Available on standard brake shoes  
Good torque capacity  
Good stopping power  
Long drum life

### Market Competition:

Meritor R301  
GreyRock 2020  
BrakePro CM18  
Fras-le 557  
Marathon FLOE  
Carlisle MB23  
Abex 685, 697

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
12.25" X 5"	4661	165 / 180	16.1"	17k / 34k	DAP	RED GG
12.25" X 5.5"	4536	165 / 180	16.1"	17k / 34k	DAP	RED GG
12.25" X 7.5"	4591	165 / 180	16.1"	17k / 34k	DAP	RED GG
12.25" X 7.5"	4692	165 / 180	16.1"	17k / 34k	DAP	RED GG
15" X 4"	4693	132	21.1"	14.4k	SAP	RED GG
15" X 4"	1308	132	21.1"	14.4k	SAP	RED GG
16.5" X 5"	4524	132	21.1"	14.6k	DAP	RED GG
16.5" X 6"	4514	132	21.1"	16k	DAP	RED GG
16.5" X 7"	4311	165 / 180	21.1"	23k / 46k	SAP	RED GG
16.5" X 7"	4515	165 / 180	21.1"	23k / 46k	DAP	RED GG
16.5" X 8.63"	4551	165 / 180	21.1"	20k / 40k	DAP	RED GG



Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

Our Yellow GG is engineered to provide an economical lining for single axles up to a maximum of 23,000 lbs., and tandem axles up to a maximum of 46,000 lbs. G.A.W.R., using either standard 16.5" x 7" or 16.5" x 8.63" brakes with 165 or 180 AL factors as specified in the chart below.

Yellow is a uniquely formulated high-friction organic compound that will handle heavy duty and on/off road applications where high brake torque is required.



## Yellow GG Lining



### Applications:

Heavy line haul  
Heavy vocational

### Notes:

Available on standard brake shoes  
Extremely high torque  
Great stopping power  
Good drum life

### Market Competition:

Market competition:  
Meritor R301, R302  
GreyRock 2020  
Carlisle MB23  
Abex 685, 697  
BrakePro CM20  
Fras-le 557  
Marathon FLOE

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
16.5" X 5"	4524	132	21.1"	14.6k	DAP	YELLOW GG
16.5" X 6"	4514	132	21.1"	16k	DAP	YELLOW GG
16.5" X 7"	4311	165 / 180	21.1"	23k / 46k	SAP	YELLOW GG
16.5" X 7"	4515	165 / 180	21.1"	23k / 46k	DAP	YELLOW GG
16.5" X 8.63"	4551	165 / 180	21.1"	23k / 46k	DAP	YELLOW GG



Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

Our Gold FF is specifically engineered to provide a maximum life, premium all-makes lining for single axles up to a maximum of 23,000 lbs., and tandem axles up to a maximum of 46,000 lbs. G.A.W.R., using standard 16.5" x 7" brakes with 165 or 180 AL factors as specified in the chart below.

For steer axles, Gold is engineered to provide a maximum life, premium all-makes lining for up to a maximum of 25,000 lbs. G.A.W.R., using standard 16.5" x 10" brakes with 180 AL factor as specified in the chart below.

Gold high-friction Aramid polymer fibers are designed to handle the high heat of bus service or the long grades of mountain terrain.



## Gold FF Lining



### Applications:

Heavy line haul  
Heavy vocational  
Bus

### Notes:

Aramid polymer fibers  
Available on standard shoes  
High torque capacity  
Superior friction and drum life  
Superior stopping power

### Market Competition:

Meritor R302  
Carlisle MB23  
BrakePro CM22A-1  
Marathon FLOE  
GreyRock 2020  
Abex 685, 697  
Fras-le 557

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
16.5" X 10"	4552	180	21.1"	25k	DAP	GOLD FF
16.5" X 5"	4524	132	21.1"	14.6k	DAP	GOLD FF
16.5" X 6"	4514	132	21.1"	16k	DAP	GOLD FF
16.5" X 7"	4515	165 / 180	21.1"	23k / 46k	DAP	GOLD FF
16.5" X 7"	4311	165 / 180	21.1"	23k / 46k	SAP	GOLD FF



Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

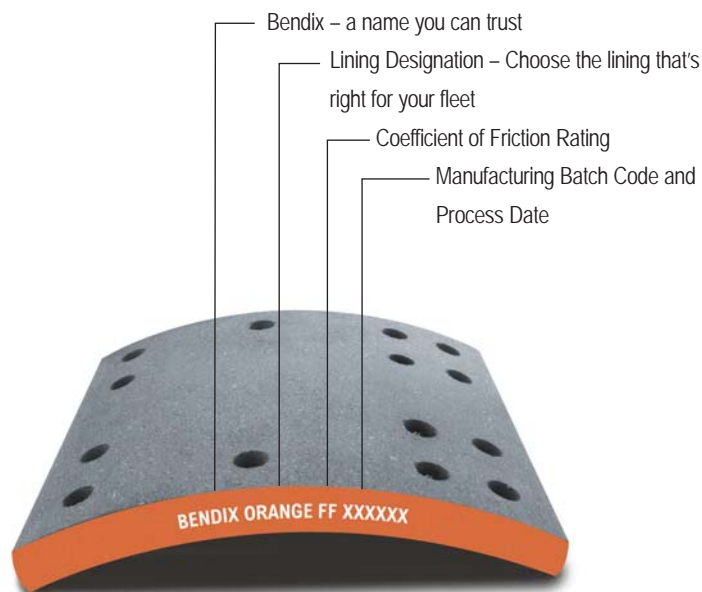
Our Orange FF Combination is engineered to provide a competitively priced lining for single axles up to a maximum of 23,000 lbs., and tandem axles up to a maximum of 46,000 lbs. G.A.W.R., using standard 16.5" x 7" brakes with 165 or 180 AL factors as specified in the chart below.

For steer axles, Orange linings are engineered to provide a competitively priced lining for up to a maximum of 16,000 lbs. G.A.W.R., using standard 16.5" x 6" brakes with 132 AL factor as specified in the chart below.

Designed to handle a complete weight range, from empty to maximum loads with consistent brake performance.

Designed with a uniquely formulated high friction Aramid compound on the anchor and high friction metallic compound on the cam end of the shoe, Orange linings can handle high temperature and severe duty environments both on and off the road.

## Orange FF Lining



### Applications:

Mining  
Logging  
Construction  
Heavy vocational vehicles

### Notes:

Available on standard shoes  
Use on drive and heavy steer axles

### Market Competition:

Carlisle MB62  
BrakePro CM42  
GreyRock 2040  
Abex 6069/695  
Fras-le 560/555

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
16.5" X 5"	4524	132	21.1"	14.6k	DAP	ORANGE FF
16.5" X 6"	4514	132	21.1"	16k	DAP	ORANGE FF
16.5" X 7"	4311	165 / 180	21.1"	23k / 46k	SAP	ORANGE FF
16.5" X 7"	4515	165 / 180	21.1"	23k / 46k	DAP	ORANGE FF



Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

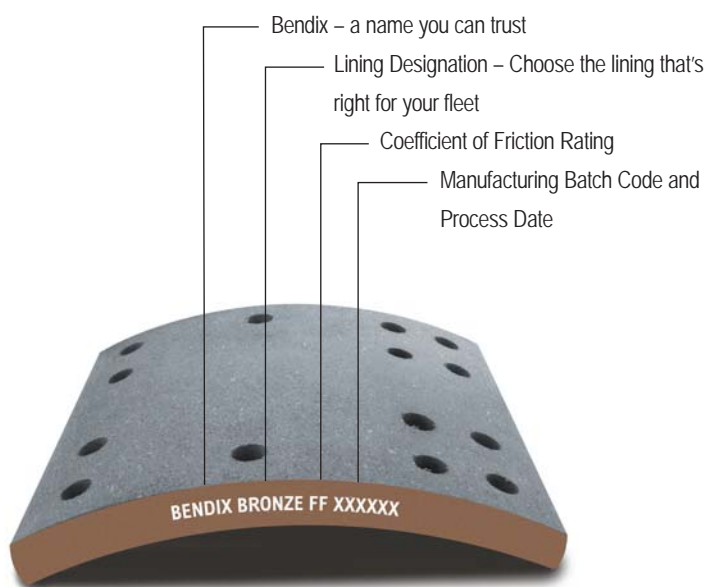
Our Bronze FF is engineered to provide a competitively priced lining for single axles up to a maximum of 23,000 lbs., and tandem axles up to a maximum of 46,000 lbs. G.A.W.R., using standard 16.5" x 7" brakes with 165 or 180 AL factors as specified in the chart below.

From empty to maximum loads, Bronze can handle a complete weight range with consistent brake performance.

Designed with a uniquely formulated high friction metallic compound, Bronze will easily handle high temperature and severe duty environments both on and off the road.



## Bronze FF Lining



### Applications:

Mining  
Logging  
Construction  
Heavy vocational vehicles

### Notes:

Available on standard shoes  
100% full metallic lining

### Market Competition:

Carlisle MB60  
BrakePro CM46  
GreyRock GM2040FF  
Abex 6069 GG

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
16.5" X 7"	4311	165 / 180	21.1"	23k / 46k	SAP	BRONZE FF
16.5" X 7"	4515	165 / 180	21.1"	23k / 46k	DAP	BRONZE FF



Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

Our ES 420 FF lining is quickly becoming one of the industry's standards, and by far is the benchmark of quality for general line haul applications.

ES 420 is engineered to provide the lowest cost per mile for single axles up to a maximum of 23,000 lbs., and tandem axles up to a maximum of 46,000 lbs. G.A.W.R., using 16.5" x 8.63" extended service brakes with 165 or 180 AL factors as specified in the chart below.

For steer axles, ES 420 is engineered to provide the lowest cost per mile up to a maximum of 16,000 lbs. G.A.W.R., using 16.5" x 6" extended service brakes with 132 AL factor as specified in the chart below.

ES 420 handles a complete weight range, from empty to maximum load with consistent brake performance and maximum drum life.



## ES 420 FF Lining



### Applications:

Line haul trucks and trailers  
Refuse trucks  
Limited vocational trucks

### Notes:

Available on ES or XLII shoes

### Market Competition:

Meritor R201, R202  
Carlisle MB21  
Abex 6011

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
15" X 4"	1443	110	19.6"	13.2k	SAP	ES 420 FF
15" X 4"	4702	110	19.6"	13.2k	DAP	ES 420 FF
16.5" X 5"	4719	132	19.6"	14.6k	SAP	ES 420 FF
16.5" X 5"	4720	132	19.6"	14.6k	DAP	ES 420 FF
16.5" X 6"	4725	132	19.6"	16k	SAP	ES 420 FF
16.5" X 6"	4715	132	19.6"	16k	DAP	ES 420 FF
16.5" X 7"	4707	165 / 180	19.6"	20k / 40k	DAP	ES 420 FF
16.5" X 7"	4708	165 / 180	19.6"	20k / 40k	DAP	ES 420 FF
16.5" X 7"	4709	165 / 180	19.6"	20k / 40k	SAP	ES 420 FF
16.5" X 8.63"	4726	165 / 180	19.6"	23k / 46k	SAP	ES 420 FF
16.5" X 8.63"	4711	165 / 180	19.6"	23k / 46k	DAP	ES 420 FF



Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

Our ES 600 FF lining is engineered to meet the economy of lowest cost per mile for single axles up to a maximum of 22,000 lbs., and tandem axles up to a maximum of 44,000 lbs.

G.A.W.R., using either 16.5" x 7" or 16.5" x 8.63" extended service brakes with 165 or 180 AL factors as specified in the chart below.

For steer axles, ES 600 is engineered to provide the lowest cost per mile up to a maximum of 16,000 lbs. G.A.W.R., using 16.5" x 6" extended service brakes with 132 AL factor as specified in the chart below.

ES 600 can handle a complete weight range, from empty to maximum load with consistent brake performance and maximum drum life. It is extremely driver friendly, providing smooth, even stops regardless of the application-from line haul to local pick-up & delivery.

## ES 600 FF Lining



### Applications:

Medium to Heavy line haul  
all wheel position friction

### Notes:

Available on ES or XLII shoes  
Extremely versatile lining,  
may be downgraded for light loads  
Drive, Trailer and Steer axle

### Market Competition:

Meritor R301, R302  
Carlisle MB23  
Abex 685, 697

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
15" X 4"	1443	110	21.5"	13.2k	SAP	ES 600 FF
15" X 4"	4702	110	21.5"	13.2k	DAP	ES 600 FF
16.5" X 5"	4719	132	21.5"	14.6k	SAP	ES 600 FF
16.5" X 5"	4720	132	21.5"	14.6k	DAP	ES 600 FF
16.5" X 6"	4725	132	21.5"	16k	SAP	ES 600 FF
16.5" X 6"	4715	132	21.5"	16k	DAP	ES 600 FF
16.5" X 7"	4707	165 / 180	21.5"	22k / 44k	DAP	ES 600 FF
16.5" X 7"	4708	165 / 180	21.5"	22k / 44k	DAP	ES 600 FF
16.5" X 7"	4709	165 / 180	21.5"	22k / 44k	SAP	ES 600 FF
16.5" X 8.63"	4711	165 / 180	21.5"	22k / 44k	DAP	ES 600 FF
16.5" X 8.63"	4726	165 / 180	21.5"	22k / 44k	SAP	ES 600 FF





Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

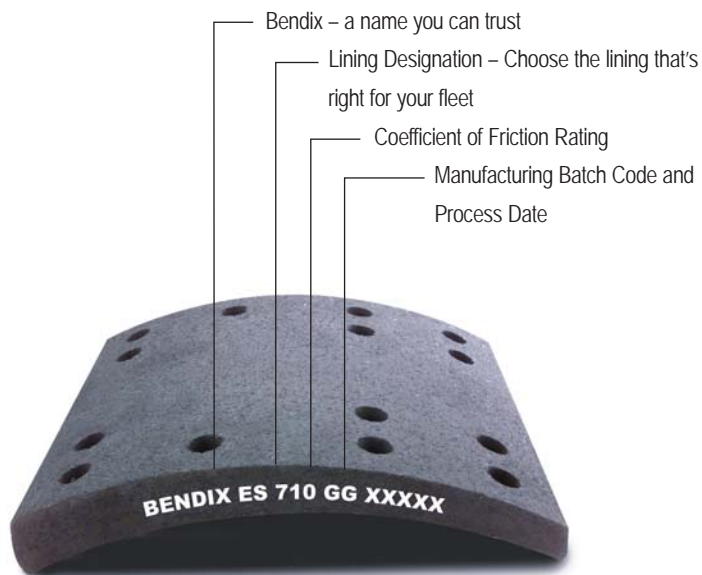
Our ES 710 GG lining is engineered to provide the lowest cost per mile for single axles up to a maximum of 23,000 lbs., and tandem axles up to a maximum of 46,000 lbs. G.A.W.R.

Bendix ES 710 is capable of handling empty to maximum load capacities with consistent brake performance and maximum drum life.

Primarily, Bendix's ES 710 uniquely formulated high-friction organic compound is designed to handle heavy-duty line haul and vocational applications.



## ES 710 GG Lining



### Applications:

Heavy line haul  
Heavy vocational

### Notes:

Available on ES or XLII shoes  
Large torque capacity  
Great stopping power

### Market Competition:

Meritor R401  
Carlisle NAB10/MB23  
GreyRock 3020  
Marathon TS  
Abex 6040

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
16.5" X 7"	4707	165 / 180	19.6"	23k / 46k	DAP	ES 710 GG
16.5" X 7"	4709	165 / 180	19.6"	23k / 46k	SAP	ES 710 GG



Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

Our ES 1100 GG lining provides a powerhouse of security. Designed with a full metallic lining, ES 1100 provides a premium lining for single axles up to a maximum of 26,000 lbs., and tandem axles up to a maximum of 52,000 lbs. G.A.W.R., using 16.5" x 8.63" brakes with 180 AL factor as specified in the chart below.

ES 1100 handles a complete weight range, from empty to maximum load with consistent brake performance. Its uniquely formulated high-friction metallic compound is designed to handle high temperature and severe duty environments on and off the road.



## ES 1100 GG Lining



### Applications:

Mining  
Logging  
Construction  
Fire Trucks  
Heavy vocational vehicles

### Notes:

Available on ES or XLII shoes  
Large torque capacity  
Great stopping power

### Market Competition:

Carlisle MB60  
BrakePro CM46  
GreyRock GM2040FF  
Abex 6069GG

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
16.5" X 7"	4707	165 / 180	19.6"	23k / 46k	DAP	ES 1100 GG
16.5" X 7"	4708	165 / 180	19.6"	23k / 46k	DAP	ES 1100 GG
16.5" X 7"	4709	165 / 180	19.6"	23k / 46k	SAP	ES 1100 GG
16.5" X 8.63"	4726	180	19.6"	26k / 52k	SAP	ES 1100 GG
16.5" X 8.63"	4711	180	19.6"	26k / 52k	SAP	ES 1100 GG



Bendix-leading the way in engineering and development of application specific products.

All Bendix® linings meet or exceed FMVSS121.

Our ES 1100/600 FF Combination lining provides the lowest cost per mile for single axles up to a maximum of 26,000 lbs., and tandem axles up to a maximum of 52,000 lbs. G.A.W.R., using 16.5" x 7" extended service brakes with 165 or 180 AL factors as specified in the chart below.

For steer axles, ES 1100/600 provides the lowest cost per mile up to a maximum of 20,000 lbs. G.A.W.R., using either 16.5" x 5" or 16.5" x 6" extended service brakes with 132 AL factor as specified in the chart below.

ES 1100/600 handles a complete range of performance applications from empty to maximum load capacity. It features a uniquely formulated high-friction organic compound on the anchor and a high friction metallic compound on the cam end of the shoe. Spicer ES 1100/600 is designed to handle high-temperature, severe-duty environments both on and off the road.



## ES 1100/600 FF Lining



### Applications:

Mining  
Logging  
Construction  
Heavy vocational vehicles

### Notes:

Available on ES or XLII shoes  
Excellent to balance a brake system  
Use on heavy steer axles  
Specified to reduce noise sensitive applications

### Market Competition:

Carlisle MB62  
BrakePro CMB42  
Grey Rock 2020/2040  
Abex 6069/685  
Marathon MBC

Size	FMSI	AL Factor	Rolling Radius	Max. G.A.W.R. Single/Tandem	Shoe Type	Bendix Friction
16.5" X 5"	4719	132	21.5"	20k	SAP	ES 1100/600 FF
16.5" X 5"	4720	132	21.5"	20k	DAP	ES 1100/600 FF
16.5" X 6"	4725	132	21.5"	20k	SAP	ES 1100/600 FF
16.5" X 6"	4715	132	21.5"	20k	DAP	ES 1100/600 FF
16.5" X 7"	4707	165/180	21.5"	26k / 52k	DAP	ES 1100/600 FF
16.5" X 7"	4708	165/180	21.5"	26k / 52k	DAP	ES 1100/600 FF
16.5" X 7"	4709	165/180	21.5"	26k / 52k	SAP	ES 1100/600 FF



*For more information, talk to your Bendix or Roadranger  
representative, call 1-866-610-9709 or visit  
[www.foundationbrakes.com](http://www.foundationbrakes.com).*



Bendix Spicer  
Foundation Brake LLC  
A Bendix CVS and Dana Joint Venture

**Roadranger**  
The Roadranger® System features  
Bendix® brand foundation brakes.