

JOHN DEERE
MICHELIN® TIRE FITMENTS



THE MICHELIN BENEFITS

+4% Yield Increase and -10% Fuel Consumption*

Thanks the Michelin UltraFlex technology, John Deere machines help farmers increase their yield and save fuel!

- Based on a study by Harper Adams University, **Michelin UltraFlex technology averages +4% more yield and 10% fuel savings.***



Increased Benefits: A Theoretical Yield Example*

Surface: 1,000 acres		
Standard Tires Current Yield: 160 bushels/acre Average Price (US): \$3/bushel Total Production: 160,000 bushels Total Turnover: \$480,000	MICHELIN UltraFlex Tires Yield (+4%): 166.4 bushels/acre Average Price (US): \$3/bushel Total Production: 160,400 bushels Total Turnover: \$499,200	Real Bottom Line Benefits! <h1 style="font-size: 2em; margin: 0;">+\$19,000</h1>

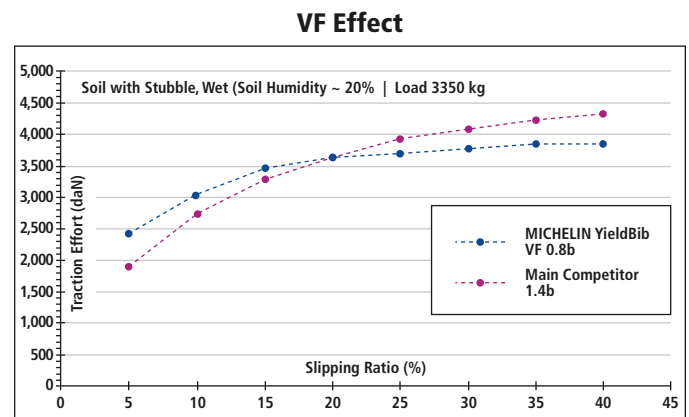
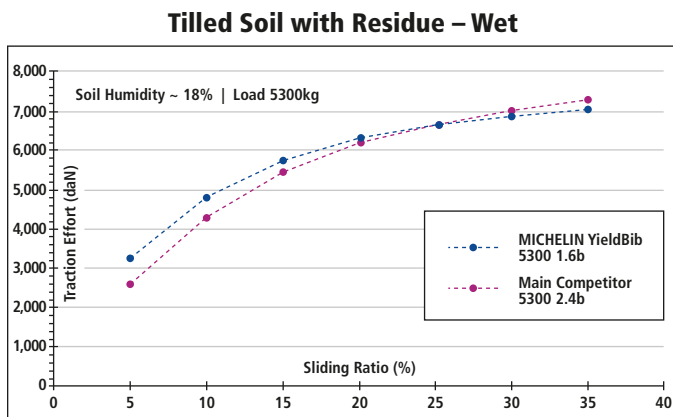


* YIELD: Increased yield = cultivated area, average yield, average sales price. | 4% increased yield observed with low pressure tires. Estimate made by Harper Adams University during an independent study. "Effect of tire pressure, traffic and tillage on crop yield"* presented by Professor Peter Mills. | Reference study: Smith et al., (2014) ASABE Paper N°1912652 Montreal Canada. Study carried out in the UK on winter wheat.

+10% on Average More Traction Capacity

- LESS TIME
- LESS FUEL CONSUMPTION
- LESS TREAD WEAR
- LESS COMPACTION

Example: MICHELIN UltraFlex YieldBIB Range vs. Competition**



** Field tests conducted at Michelin's AG test center in Clermont Ferrand France.



THE MICHELIN ADVANTAGE

No matter the season or soil condition, Michelin® ag tires are uniquely designed to excel throughout the entire year.

- The **expanded footprint** gives **more contact** on the ground and **less soil compaction**.
- The unique vertical lug design maintains traction with wear.

The 45° lug angle provides self-cleaning for superior traction.



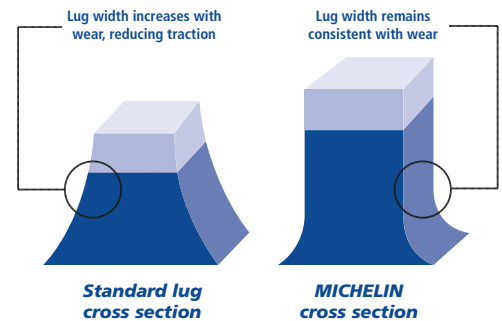
Longer Tire Life

Michelin's exclusive rubber compounds and industry-exclusive deep, vertical lug design not only last longer, but also wear more evenly, resulting in superior traction throughout the life of the tire.

Results

- Lower cost per hour than the competition.
- More stubble resistant.
- Michelin R-1W gives you 33 percent more usable tread than competitor R-1 tire.

Deep, sharp, vertical lug profile gives Michelin more-uniform tread wear for superior traction over the tire's life.



Less Soil Compaction

MICHELIN® ag tires are made with more-flexible sidewalls and a flat crown that delivers a longer footprint that more evenly distributes machine weight, putting less pressure on the ground. Less pressure on the ground means less soil compaction, which means increased yield.

THE MICHELIN ADVANTAGE

Fuel Savings

Michelin's unique tire design (45-degree lug angle, vertical lug and flexible sidewalls) allows for superior traction in almost all weather conditions, which minimizes slippage and can result in greater fuel savings.

Results

- Less slippage maximizes equipment productivity.
- More-efficient use of horsepower increases fuel economy.

Stubble Resistant



Michelin R&D teams invest significant time and resources designing tires for superior stubble resistance. The results are the innovative solutions for stubble resistance found in MICHELIN® Stubble shield™, including specialized rubber compounds and the anti-stubble reinforcement in the tread area of the new MICHELIN® YieldBib™ radial. To further guarantee your confidence in the superior stubble resistance of the MICHELIN® Stubble shield™, we offer a two-year free replacement Stubble Damage Warranty on the MICHELIN® YieldBib™ line.

Results

- Specially designed rubber compounds and tread design for increased durability in severe stubble conditions.

Side-by-side comparison of Michelin and competitor tire showcasing the stubble resistance on the MICHELIN® YieldBib™ tire.*



Michelin



Competitor

* MICHELIN® YieldBib™ and Competitor Brand Tire research conducted in North Platte, NE. Each tire had 274.5 hours.

Innovative Solutions

Michelin Ultraflex Technologies deliver greater casing flexibility, resulting in increased durability, a longer footprint and reduced soil compaction. Michelin Ultraflex Technology tires can carry the same loads at up to 20 percent less air pressure (IF rated tires) or the same loads at up to 40 percent less air pressure (VF rated tires). Michelin was the pioneer in IF and VF technology in the North American tire market. Our innovations deliver results for your operation, resulting in better care for your soil, less downtime and improved yields.

Note: Reduction in air pressure recommendation or increase in load size compared with standard radial tire technology.





Tractors

7R Series Tractor

REAR OPTIONS

480/80R46 AgriBib / (NEW) Agribib 2 (S)(D)
 480/80R50 AgriBib / (NEW) Agribib 2 (S)(D)
 520/85R42 AgriBib / (NEW) Agribib 2 (S)(D)
 520/85R46 AgriBib / (NEW) Agribib 2 (S)(D)
 620/70R42 OmniBib (S)(D)
 650/65R42 MultiBib (S)
 650/85R38 MachXBib (S)(D)

IF650/85R38 AxioBib / (NEW) AxioBib 2 (S)

710/70R38 MachXBib (S)
 710/70R42 MachXBib (S)(D)

IF710/70R42 AxioBib / (NEW) AxioBib 2 (S)(D)

IF710/75R42 AxioBib / (NEW) AxioBib 2 (S)

800/70R38 MachXBib (S)

IF800/70R38 AxioBib / (NEW) AxioBib 2 (S)

FRONT OPTIONS

380/80R38 AgriBib / (NEW) Agribib 2 (S)
 380/85R34 AgriBib / (NEW) Agribib 2 (S)
 420/85R34 AgriBib / (NEW) Agribib 2 (S)
 420/90R30 AgriBib / (NEW) Agribib 2 (S)
 480/70R34 OmniBib (S)
 540/65R34 MultiBib (S)
 600/65R28 MachXBib (S)
 600/70R30 MachXBib (S)

IF600/70R30 AxioBib / (NEW) AxioBib 2 (S)

IF620/75R30 AxioBib / (NEW) AxioBib 2 (S)

8R Series Tractor

REAR OPTIONS

480/80R46 AgriBib / (NEW) Agribib 2 (S)(D)
 480/80R50 AgriBib / (NEW) Agribib 2 (S)(D)(T)

VF480/80R50 Yieldbib (D)

480/95R50 AgriBib / (NEW) Agribib 2 (D)
 520/85R42 AgriBib / (NEW) Agribib 2 (S)(D)
 520/85R46 AgriBib / (NEW) Agribib 2 (S)(D)
 620/70R42 Omnibib (S)(D)
 650/85R38 MachXBib (S)(D)

IF650/85R38 AxioBib / (NEW) AxioBib 2 (S)(D)

710/70R38 MachXBib (S)(D)
 710/70R42 MachXBib (S)(D)

IF710/70R42 AxioBib / (NEW) AxioBib 2 (S)(D)

IF710/75R42 AxioBib / (NEW) AxioBib 2 (S)

800/70R38 MachXBib (S)(D)

IF800/70R38 AxioBib / (NEW) AxioBib 2 (S)(D)

IF900/60R42 AxioBib / (NEW) AxioBib 2 (S)

FRONT OPTIONS

380/80R38 AgriBib / (NEW) Agribib 2 (S)(D)
 380/85R34 AgriBib / (NEW) Agribib 2 (D)
 420/85R34 AgriBib / (NEW) Agribib 2 (S)(D)

VF420/85R34 Yieldbib (S)(D)

420/90R30 AgriBib / (NEW) Agribib 2 (S)
 480/70R34 Omnibib (S)(D)
 540/65R34 Multibib (S)
 600/65R28 MachXBib (S)
 600/70R30 MachXBib (S)

IF600/70R30 AxioBib / (NEW) AxioBib 2 (S)

IF620/75R30 AxioBib / (NEW) AxioBib 2 (S)

IF650/60R34 AxioBib / (NEW) AxioBib 2 (S)

9R Series Tractor

FRONT & REAR OPTIONS

480/80R46 AgriBib / (NEW) Agribib 2 (D)(T)
 480/80R50 AgriBib / (NEW) Agribib 2 (D)(T)
 520/85R42 AgriBib / (NEW) Agribib 2 (D)(T)
 520/85R46 AgriBib / (NEW) Agribib 2 (D)(T)
 620/70R42 OmniBib (D)
 650/85R38 MachXBib (D)

IF650/85R38 AxioBib / (NEW) AxioBib 2 (D)

710/70R38 MachXBib (D)
 710/70R42 MachXBib (D)

IF710/70R42 AxioBib / (NEW) AxioBib 2 (D)

800/70R38 MachXBib (S)(D)

IF800/70R38 AxioBib / (NEW) AxioBib 2 (S)(D)

Harvesters S Series Combine

FRONT OPTIONS

VF520/85R42 CFO+ CerexBib / (NEW) CerexBib 2 (D)
VF580/85R42 CFO+ CerexBib / (NEW) CerexBib 2 (D)
 650/85R38 MachXBib (D)

IF800/70R38 CFO+ CerexBib / (NEW) CerexBib 2 (S)

REAR OPTIONS

VF620/70R26 CFO+ CerexBib / (NEW) CerexBib 2
VF750/65R26 CFO+ CerexBib / (NEW) CerexBib 2

Sprayers R Series

FRONT & REAR OPTIONS

320/90R54 AgriBib / (NEW) Agribib 2 Row Crop
VF380/90R46 SprayBib
VF380/90R50 Spraybib
VF380/90R54 Spraybib
VF420/95R50 Spraybib

Note: Tires in bold are fitment options with Michelin Ultraflex Technologies.



TRACTORS

MICHELIN® AgriBib® 2

Long Tire Life

Deep lugs, low slip and optimized rubber compounds help reduce wear to give exceptionally long tire life. A sharp verticle lug design allows the MICHELIN® AgriBib® tire to retain traction even when 70 percent worn.

Exceptional Traction: Year Round

Strong but super-flexible sidewalls allow a long footprint, putting more lugs in contact with soil. Michelin's exclusive "self-cleaning hinge" between the lugs helps ensure maximized pulling power in wet conditions. Michelin's 45-degree tread bar provides maximum traction in all field and road situations.



MICHELIN® AxioBib™ 2

Greater Sidewall Flexibility

The MICHELIN® AxioBib™ is the first tire in the industry rated by the U.S. Tire and Rim Association as IF, or Improved Flexion.



High Load-Carrying Capacity

Up to 20 percent more load capacity compared with standard tires of the same size, at the same pressure.

"D" Speed Rating

Approved for road speeds of up to 40 mph.

Superb Comfort

Greater sidewall flexibility offers outstanding operator comfort without compromising endurance or service life.



MICHELIN® MachXBib™ MICHELIN® XM28™ Large Volume

The MICHELIN® MachXBib™ tire is an excellent choice for soil protection and flotation for heavy or minimal tillage and soil preparation.

High Load Capacity

With a large air chamber and a strong, reinforced radial casing, MICHELIN® MachXBib™ tires are designed to carry heavy loads at lower pressures.

Soil Protection is #1

The MICHELIN® MachXBib™ tire carries heavy loads at ultra-low pressures thanks to a huge, yet soft, stable footprint.

Extraordinary Traction and Efficiency

Incorporating Advanced Radial Technology™, the MICHELIN® MachXBib™ tire features a broad, flat crown with long, deep lugs and low rolling resistance, providing more traction and saving time and fuel. Many MICHELIN® MachXBib™ tires are rated for use at up to 40 mph.





MICHELIN® MultiBib™

30 Percent Larger Footprint

Compared to standard radials, a wider tread and longer sidewall flexing zone give the MICHELIN® MultiBib™ a much larger footprint.

35 Percent Longer Tire Service Life

The MICHELIN® MultiBib™ offers 35 percent longer tire service life when compared with the MICHELIN® XM™ 108 radial.

Speed-Rating-Approved for Road Speeds up to 40 mph

The MICHELIN® MultiBib™ radial includes a “D” speed rating, approved for road speeds of up to 40 mph.

Note: Maximum Load and Maximum Inflation Pressure are at 20 mph for A8 and 40 mph for D.



MICHELIN® OmniBib™

High Load-Carrying Capacity and Low Soil Compaction

The MICHELIN® OmniBib™ radial offers up to a 14 percent higher load capacity* than a standard radial when used on front-end loaders.

“D” Speed Rating

MICHELIN® OmniBib™ radial includes a “D” (40 mph) speed rating.

Excellent Handling and Comfort

Ultra-flexible sidewalls help maintain outstanding operator comfort.

**Compared with the MICHELIN® AgriBib® radial.*



MICHELIN® YieldBib™

Less Soil Compaction

MICHELIN® YieldBib™ tires with Michelin Ultraflex Technologies allow you to carry the same load as a standard-technology tire with up to 40 percent less air pressure. Reduced air pressure, along with our longer footprint, means less soil compaction and higher yields.

Better Grip, Better Traction

MICHELIN® YieldBib™ tires offer superior traction and less slip, meaning reduced fuel consumption and increased productivity. The MICHELIN® YieldBib™ radial allows you to get your work done, regardless of field conditions.

Greater Stubble Resistance

MICHELIN® YieldBib™ is designed with Michelin Stubble Shield™, specific lug placement and a specially designed rubber compound for longer wear and improved stubble resistance.





COMBINES

MICHELIN® CerexBib™ 2

Greater Care for the Soil

Soil preservation and traction are important factors in choosing tires for your combine. MICHELIN® CerexBib™ is the first increased-flexion radial designed specifically for combines. As a set, the MICHELIN® CerexBib™ meets classification standards both for Improved Flexion (IF) and the all-new Cyclic Field Operation (CFO) category on the front axle and Very High Flexion (VF) on the rear axle to hold up to repeated loading and unloading cycles without pressure changes. Thanks to Michelin Ultraflex Technologies, MICHELIN® CerexBib™ operates at low air pressure, which reduces ruts and soil compaction due to its larger footprint.



Greater Load-Carrying Capacity

The MICHELIN® CerexBib™ radial is extremely tough and offers up to 40 percent more load-carrying capacity than conventional tires.

Improved Service Life

With its reinforced sidewalls, the casing featuring Michelin Ultraflex Technologies will give you excellent service life, even at low pressures.

Compatible with Central Tire Inflation Systems



MICHELIN® MegaXBib™

Ultra-Low Soil Compaction

Excellent choice for situations where flotation and reduced compaction are critical.

Impressive Load-Carrying Capacity

A huge footprint combined with two steel crown belt plies in most sizes allows the MICHELIN® MegaXBib™ tire to carry extremely heavy loads.

Long-Lasting Durability

Wide, deep, straight lugs and flat, stable tread help provide more-even wear. That means less downtime and fewer tires needed over time.



MICHELIN® MegaXBib™ 2

See specifications for MegaXBib™ for Combines.





SPRAYERS

MICHELIN® SprayBib™

Improved Productivity

Stubble-resistant design offers improved tire life in the toughest conditions. Michelin Ultraflex Technologies provide a longer footprint for excellent traction, reduced soil compaction and improved stability regardless of weather or soil conditions.



Cost Savings

The MICHELIN® SprayBib™ radial can be mounted on a standard rim, saving you money on costly reinforced rims.

Outstanding Tire Life

MICHELIN® SprayBib™ radials have an estimated lifespan of three to five years* as compared with one to one-and-a-half years for our main competitors.

**Source: Michelin Test and Research Center, Almeria, Spain.*



What is the difference between standard, Increased Flexion (IF) and Very High Flexion (VF) radials?

A radial tire allows for a 30 percent increase in footprint compared with bias construction. Increased Flexion (IF) tires are designed to operate at up to 20 percent higher-rated load than standard tires at the same air pressure. Very High Flexion (VF) tires are designed to operate at up to 40 percent higher-rated load than standard tires at the same air pressure.

What is footprint, and how does it relate to the performance of the tire and the equipment?

The footprint is the surface area of the tire that is in constant contact with the soil. MICHELIN® Advanced Radial Technology® creates a longer footprint. This longer footprint results in many benefits, including improved traction, more-efficient transfer of power to the ground, greater flotation and reduced soil compaction.

Why is proper inflation pressure so important in optimizing the performance of radial ag tires?

Most people don't realize that the tire casing in a MICHELIN® agricultural radial actually supports only about 4 to 5 percent of the overall load placed on that tire. The air inside the tire carries the remaining 95 to 96 percent of the load. So accurately determining and maintaining the proper inflation pressure is critical, because over-inflation can have a serious effect on how well the tires perform and wear, while under-inflation can lead to tire damage.

The tire inflation pressure should always be based on the most-demanding condition for the tire:

- For tractors, this is generally when the tractor is driven at its maximum speed on the road.
- For combine harvesters, sprayers, etc., the most-demanding condition for the tire is usually when the machine is fully loaded in the field.

What are the differences between R-1 and R-1W tires, and how do these affect performance?

An R-1W tire features a deeper lug design, which is at least 20 percent deeper than an R-1 tire. This allows the operator to run in wetter, muddier conditions than a machine equipped with R-1 tires.

The straight, deep lugs on the MICHELIN® radial set it apart from the competition. The tapered lugs of a conventional radial experience accelerated wear early in the tire's life. As these lugs wear and widen, they lose pulling power, which reduces the tire's performance. But the sharp vertical lugs of a MICHELIN® radial will continue to deliver exceptional traction and performance even when they're 70 percent worn.



TIRE SIDEWALL MARKINGS

What do the markings on a tire mean?



XeoBib	Tread design
VF = Very High Flexion	Prefix designating a category of tires
650	Nominal section width of the tire in mm
60	Nominal aspect ratio of the tire (%)
R	Indicates radial construction
38	Nominal rim diameter in inches
155	Indicates a load capacity of 8,543 lbs. (load index)
D	Maximum speed 40 mph (speed symbol)
Radial	Type of tire construction (casing)
Tubeless	A tire can be mounted without a tube
Michelin® X®	Registered trademark

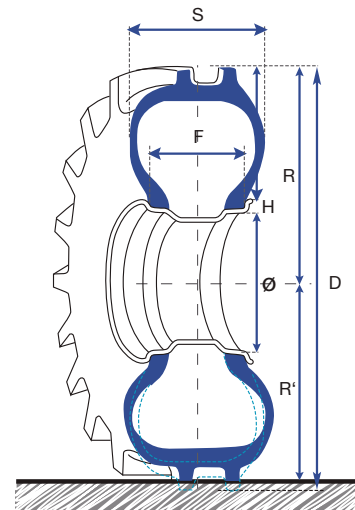
Tire and rim dimensions

TIRE

- S** Nominal section width
- R'** Radius with static load*
- R** Free radius
- D** Overall diameter = 2 x free radius
- R.C.** Rolling circumference of the tire with dynamic load* (*dynamic measurement*)
- *at reference load and pressure

RIM

- F** Rim width
- H** Flange height
- Ø** Seat diameter (*tire bead seat diameter*)



Equivalent load in duals or triples

When used as duals, tire load carrying capacity must be reduced by 12 percent; when used as triples, tire load carrying capacity must be reduced by 18 percent. The equivalent load value in this data book that corresponds to the required inflation pressure can be found as follows:

DUALS:

$$\text{Equivalent Load} = \frac{\text{Actual Load Per Tire}}{.88}$$

TRIPLES:

$$\text{Equivalent Load} = \frac{\text{Actual Load Per Tire}}{.82}$$



LOAD INDICES AND SPEED SYMBOLS

Most tires carry a service description made up of the load index (a number) and the speed symbol (letter or letter with figure). The tables below show the tire load indices and speed symbols with their corresponding capacities, in kgs and km/h and in lbs. and mph.

Load indices

Index	LOAD		Index	LOAD		Index	LOAD		Index	LOAD	
	lbs.	kg		lbs.	kg		lbs.	kg		lbs.	kg
100	1764	800	126	3748	1700	152	7826	3550	178	16535	7500
101	1819	825	127	3858	1750	153	8047	3650	179	17086	7750
102	1874	850	128	3968	1800	154	8267	3750	180	17637	8000
103	1929	875	129	4079	1850	155	8543	3875	181	18188	8250
104	1984	900	130	4189	1900	156	8818	4000	182	18739	8500
105	2039	925	131	4299	1950	157	9094	4125	183	19290	8750
106	2094	950	132	4409	2000	158	9370	4250	184	19842	9000
107	2150	975	133	4542	2060	159	9645	4375	185	20393	9250
108	2205	1000	134	4674	2120	160	9921	4500	186	20944	9500
109	2271	1030	135	4806	2180	161	10196	4625	187	21495	9750
110	2337	1060	136	4938	2240	162	10472	4750	188	22046	10000
111	2403	1090	137	5071	2300	163	10748	4875	189	22708	10300
112	2469	1120	138	5203	2360	164	11023	5000	190	23369	10600
113	2535	1150	139	5357	2430	165	11354	5150	191	24030	10900
114	2601	1180	140	5512	2500	166	11685	5300	192	24692	11200
115	2679	1215	141	5677	2575	167	12015	5450	193	25353	11500
116	2756	1250	142	5842	2650	168	12346	5600	194	26015	11800
117	2833	1285	143	6008	2725	169	12787	5800	195	26786	12150
118	2910	1320	144	6173	2800	170	13228	6000	196	27558	12500
119	2998	1360	145	6393	2900	171	13558	6150	197	28329	12850
120	3086	1400	146	6614	3000	172	13889	6300	198	29101	13200
121	3197	1450	147	6779	3075	173	14330	6500	199	29983	13600
122	3307	1500	148	6945	3150	174	14771	6700	200	30865	14000
123	3417	1550	149	7165	3250	175	15212	6900	201	31967	14500
124	3527	1600	150	7385	3350	176	15653	7100	202	33069	15000
125	3638	1650	151	7606	3450	177	16094	7300	203	35274	16000

Speed symbol

Speed Symbol	mph	km/h
A2	6	10
A4	12	20
A5	15	25
A6	20	30
A8	25	40
B	30	50
D	40	65
G	55	90

Units of measurement

1 centimeter	cm	= 0.39 inch	1 inch	in.	= 2.54 cm
1 meter	m	= 3.28 feet	1 foot	ft.	= 0.30 m
1 kilometer	km	= .62 mile	1 mile	mi	= 1.60 km
1 liter	l	= 0.21 imp. gallon	1 imp. gallon	imp. gal.	= 4.54 liters
1 kilogram	kg	= 2.20 pounds	1 pound	lb.	= 0.45 kg
1 horse power	cv	= 735.49 W	1 kilowatt	kw	= 1.35 cv
1 bar	bar	= 14.50 psi	1 bar	bar	= 100 kPa (kilo Pascal)
1 pound per sq. in.	psi	= 6.89 kPa	1 acre imp.		= 0.40 ha
1 hectare	ha	= 2.47 acre (imp.)	1 square inch (imp.)	sq. in.	= 6.45 cm ²
1 square cm	cm²	= 0.15 sq. in. (imp.)	1 ton	t	= 0.98 tn (imp.)
1 ton (imp)	tn	= 1.01	1 km/hour	km/h	= 0.62 mph
1 mile per hour	mph	= 1.60 km/h			