

# Capacity Charts

## As-fed upright silo capacity

Size, ft (diameter x height)	Corn silage & haylage			HMSC	Ground HMSC	Ground HM ear corn
	70%	60%	50%	30%	30%	30%
12x30	80	65	50	89	95	70
12x40	115	90	70	120	128	94
12x50	155	120	95	151	160	120
14x40	160	120	96	165	172	128
14x50	213	160	127	208	220	163
14x60	266	200	160	251	264	198
16x30	146	110	88	150	166	123
16x40	209	156	125	220	224	167
16x50	278	208	167	274	285	213
16x60	347	260	208	330	345	259
18x40	265	198	159	270	284	211
18x50	352	264	211	350	360	269
18x60	440	330	264	422	437	328
18x70	530	398	318	496	520	389
20x40	326	245	196	340	350	260
20x50	435	326	261	428	445	332
20x60	543	407	326	525	540	404
20x70	655	491	393	617	638	480
20x80	767	575	460	708	736	557
24x50	626	470	375	600	640	478
24x60	782	587	469	763	776	582
24x70	943	707	565	897	918	692
24x80	1,104	828	662	1,032	1,060	801
24x90	1,275	955	764	1,165	1,209	920
30x80	1,725	1,293	1,035	1,628	1,656	1,252
30x90	1,990	1,493	1,195	1,840	1,888	1,434

## Wagon capacity

Depth, ft	Approximate tons (as-is basis)							
	Length, ft (65% moisture)				Length, ft (55% moisture)			
	14	16	18	20	14	16	18	20
3	3.5	4.0	4.5	5.0	2.5	3.0	3.5	4.0
4	4.5	5.5	6.0	6.5	3.5	4.0	4.5	5.0
5	6.0	6.5	7.5	8.5	4.5	5.0	5.5	6.5
6	7.0	8.0	9.0	10.0	5.5	6.0	7.0	7.5
7	8.0	9.5	10.5	12.0	6.0	7.0	8.0	9.0
8	9.5	11.0	12.0	13.5	7.0	8.0	9.0	10.0

## Bag capacity\*

Bag size, ft	Tons (fresh)
8	1
9	1.25
10	1.5
11	1.75
12	2.25
14	2.75

\*Estimates shown are for corn silage.

## Ratio for bag chart

Type of crop, moisture	Relation to 65% corn silage tonnage
Haylage, 60%	100%
HMSC, 30%	130%
Earlage, 35%	120%
Snaplage, 40%	130%

## Estimated as-fed capacity for bunkers and piles

Enter avg width*	1. _____ ft
Enter avg length	2. _____ ft
Enter avg height	3. _____ ft
Multiply 1x2x3	4. _____ lb/ft <sup>3</sup> in structure
Est as-fed density**	5. _____ lb/ft <sup>3</sup>
Multiply 4x5	6. _____ lb as-fed in structure
Divide by 2,000	7. _____ tons as-fed in structure

\*To determine dimensions for piles, look at the slopes of each side of the pile. Visualize how much of the slope would need to be "folded back" on itself to square up the sides of the pile to determine average width.

\*\*Use known as-fed density when possible. Otherwise, start with these average densities: 40 lb for haylage and corn silage; 60 lb for HMSC; and 45 lb for earlage/snaplage. Use higher or lower numbers for well packed or poorly packed units, respectively.



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**Crop-N-Rich Buchneri and Stage 2 inoculants are the most effective inoculant technologies available to battle the risk of aerobic spoilage.**

### Crop-N-Rich Buchneri 40788

*L. buchneri* 40788 is a bacterial inoculant especially suited for high moisture corn (HMC) and small grains, and produces a small amount of acetic acid during fermentation. This acid works as a preservative, preventing spoilage and improving forage quality, intake, and milk production.

### Crop-N-Rich Stage 2

This inoculant offers a unique combination of an upfront lactic acid-producing fermenter (*P. pentacaceous*) and the only inoculant bacteria (*L. buchneri* 40788) that holds an FDA claim for improved aerobic stability of silage and high moisture corn.

### Features

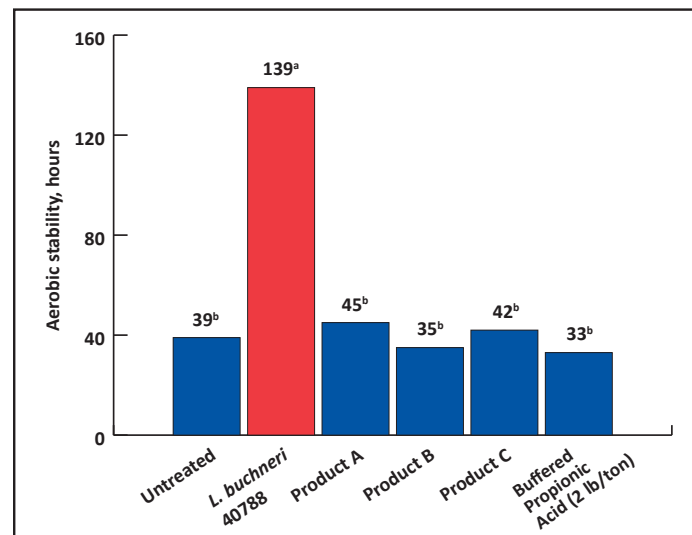
- 100- and 500-ton packaging based on silage (66 and 333 tons for HMC)
- Robust bacterial application rates (see application rate chart)
- Aerobic stability functionality claim granted by FDA
- Heat-sealed foil packages should be stored below 40 degrees F until use (24-month shelf life)
- Use on crops stored with greater than 25 percent moisture

### Effective uses

Crop-N-Rich Buchneri and Stage 2 inoculants help reduce yeast production, mold counts and spoilage as a result of heating at feedout. Use when....

- Forages are fed during warm weather
- Feedout rates present a challenge
- High-starch feeds like HMC and corn silage are stored
- Feed may be moved after storage
- TMRs tend to heat in the manger
- Crops have been compromised because of rain, hail, insect, drought or disease damage
- Feedout will be delayed for at least 45 days after filling to maximize aerobic stability benefits of *L. buchneri* 40788

### *L. buchneri* 40788 stands tall compared to competitors claiming enhanced aerobic stability



Source - Kleinschmit et al., 2005, University of Delaware

### Independent milk production trials - *L. buchneri* 40788

	DM fed, lb	FCM increase over control, lb	FCM increase per ton of as-fed silage, lb
(1) Haylage trial	8.13	2.42	94.73
(2) Corn silage trial	25.08	2.42	67.54

(1) University of Delaware (US)

(2) Wye College (UK)

### Application rates

	Corn silage and haylage	High moisture corn
Buchneri 40788	2 g/ton (1)	3 g/ton (2)
Stage 2	2 g/ton (1)	3 g/ton (2)

At the above rates, Stage 2 applies 100,000 cfu/g of *P. pentocaceous* and 400,000 cfu/g of *L. buchneri* 40788 to silage and 150,000 cfu/g of *P. pentocaceous* and 600,000 cfu/g of *L. buchneri* 40788 to high moisture corn and grains.

*Buchneri* 40788 applies 400,000 cfu/g of *L. buchneri* to silage and 600,000 cfu/g of high moisture grain.