

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%
Moisture content	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%
Snapple, 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 ³ in structure
Est as-fed density**	5. _____ lb/ft ³
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/snapple. Use higher or lower numbers for well packed or poorly packed units, respectively.

CROP-N-RICH[®] BUCHNERI

Easy-to-use silage inoculant reduces spoilage & heating of a broad range of forages & high moisture corn

Contains *L. buchneri* 40788



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CROP-N-RICH® BUCHNERI

Silage inoculant with *L. buchneri* 40788 bacteria reduces yeast growth and subsequent mold, spoilage, and heating

Proven effective

Research shows:

- Less spoilage, longer bunklife and less wasted feed
- Improved palatability
- Improved milk production

Pure, effective bacterial inoculant:

- Acetic acid is a powerful fungicide that reduces yeast growth. *L. buchneri* 40788 works by producing higher levels of acetic acid in the silage.
- Supplies 400,000 CFU/g of forage (when applied at 2 g/ton) and 600,000 CFU/g of high moisture corn, earlage, or snaplage (when applied at 3 g/ton).

Unmatched ease of use

- Water-soluble product easily mixes into solution in less than 45 seconds.
- Vita Plus consultants have expertise in the right application for your conditions.

Use when:

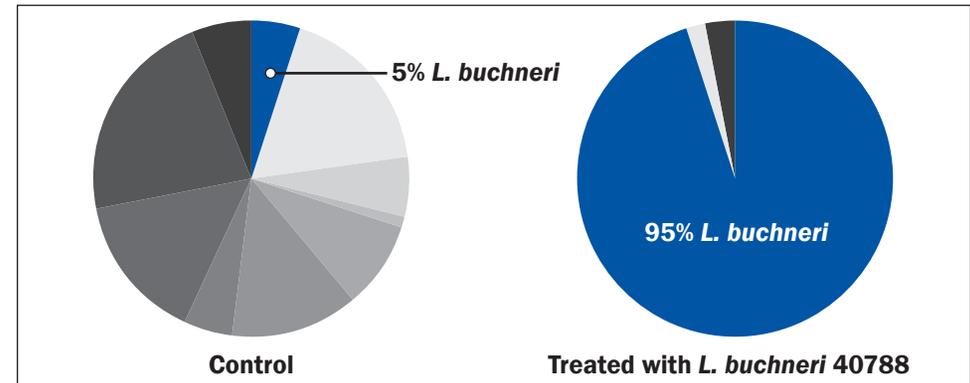
- Forages are fed during warm weather, feedout rates are a challenge, high-starch feeds are stored, feeds may be moved after storage, TMRs tend to heat in the feedbunk, or crops have been compromised by rain, hail, insects, drought, or disease.
- Crops are stored with greater than 25% moisture.
- Storing high moisture corn and small grains as spoilage and heating are concerns.
- Feedout will begin after at least 45 days in storage to maximize aerobic stability benefits.

Product Options

- **Crop-N-Rich Buchneri 500** (treats 500 tons of forage or 333 tons of high moisture corn, earlage, or snaplage)
- **Crop-N-Rich Buchneri 100** (treats 100 tons of forage or 66 tons of high moisture corn, earlage, or snaplage)



Treatment with *L. buchneri* dominates the fermentation in high moisture corn after 30 days of ensiling.



Source: da Silva and Kung, 2016., University of Delaware

The pH, fermentation profile, and microbial counts of corn silages collected from Midwest farms that were either untreated or treated with an *L. buchneri* 40788-based inoculant.

	Untreated	<i>L. buchneri</i> -based inoculants
pH	3.71	3.69
Lactic acid, % DM	4.17	4.85
Acetic acid, % DM	2.24	2.41
1,2-Propanediol, % DM	0.29	1.26*
Lactic acid bacteria, CFU/g	1,047,129	3,311,311*
<i>L. buchneri</i> , CFU/g	77,625	2,884,032*
Yeasts, CFU/g	354,813	56,234

*Statistically significant difference

Source: Mari et al., 2009, Journal of Dairy Science

Improved milk production with haylage treated with *L. buchneri* 40788.

	Control	Treated
DM intakes, lb/d	55.3	56.0
Milk, lb/d	88.0	89.7*
3.5% FCM, lb/d	85.8	88.2*

Source: Kung et al., 2007, Journal of Dairy Science