



top – Germany GmbH

Siemensstrasse 9 Fon 0049 6227 / 6053 812
DE 69190 Walldorf Fax 0049 6227 / 6053 810
Service – Hotline 24-h 0049 172 / 6809 050
e-mail info@top-germany.com
internet www.top-germany.com

substantial energy – savings

huge increase in efficiency

Low – Energy Technology

German Low – Energy, Low – Cost Technology “ LET ”

for each German bottle washer, German pasteurizer, German sterilizer ...

top is a German equipment – and full – service specialist for German bottle washer:

top modul – system solutions: LET

„ everything from one source “

1. complete Low – Energy modules
2. professional Low – Energy assembly on – site
3. German ORIGINAL Low – Energy Manufacturer Guarantee

reducing the total operating costs per year up to 45 % + per LET – bottle washer

your total investment is completely paid off within 6,6 months !

substantial energy – savings

huge increase in total washer efficiency

up to 45 % lower total operating costs per year + per LET – washer

complete modul – system – solutions : you get a lot more than you paid...

your energy – optimization

- 1. integrated plastic bottle pockets =
- 2. LET – bottle carriers =
- 3. longlife bottle washer chains =
- 4. bottle washer jetting pumps =
- 5. fresh water control =
- 6. less caustic carryover =
- 7. less additives consumption =
- 8. several bottle sizes =
- 9. extra savings =

substantial savings

- proceed gently, no bottle mouth – damage, no scuffing
- less carryover, smooth surfaces, less weight
- longlife, ecological and economical beneficial
- synchron automatic control
- minus 50 % consumption, from 365 ml to 180 ml each bottle
- minus 25 % consumption
- minus 30 % consumption
- program – selection for fresh water
- fresh water, waste water, caustic, additives, anti foaming agents, acids, chemicals, less warm – up heat, less operating heat – consumption

your efficiency – optimization

- 10. is there over – capacity =
- 11. suitable pocket design =
- 12. open mouth pocket design =
- 13. broken glass =
- 14. fallen bottles =
- 15. low – pressure infeed table =
- 16. first + last channel =
- 17. reducing fresh water =
- 18. broken – glass rejection =
- 19. bottle discharge =
- 20. reducing noise =
- 21. quick exchange bottle pockets =

use what you paid for already = substantial gains

a lot more bottles each bottling – hour

- right configuration of your bottle LET – washer
- the right bottle pockets for your bottles
- is saving more than 50 % fresh water
- must be eliminated before bottle washer infeed
- automatic rejection device before infeed
- electrical bottle guides, ultra – sound bridges
- full – load program “ soft tool ”
- open – mouth design of plastic bottle pockets
- automatic broken – glass rejection device
- less noise, soft – controlled discharge
- pressure – less bottle discharge, automatic control
- snap – on – system of plastic bottle pockets
- there are many written LET – examples available for you.**

energy – optimization + efficiency – optimization = reducing the total operating costs per year up to 45 % !

your total investment is completely paid off within 6,6 months !

substantial energy – savings
huge increase in total washer efficiency

up to 45 % lower total operating costs per year + per LET – washer

saving with retrofitting – only Low – Energy bottle washer

your advantage: LET is reducing the total operating costs per bottle washer & per year up to 45 %, permanently

>> complete Low – Energy – Technology = LET

- LET – bottle pockets = 100 % LET
- LET – bottle washer carriers = 100 % LET
- LET – bottle washer chains = 100 % LET
- LET – fresh water automatic control = 100 % LET
- LET – automatic control jetting pumps= 100 % LET

>> professional Low – Energy – Service

experienced LET – Service Technicians retrofit your existing bottle washer and turning it to a Low – Energy bottle washer each product is only as good, as assembled

>> Low – Cost – Technology

- LET = minus 50 % water consumption
- LET = minus 60 % heat consumption
- LET = minus 30 % caustic carry – over
- LET = minus 30 % additive consumption
- LET = minus 60 % kJ each bottle
- reducing total operating costs by 45 %

>>> jet nozzles

>>> jetting water tubes

>>> label - extraction + label - press

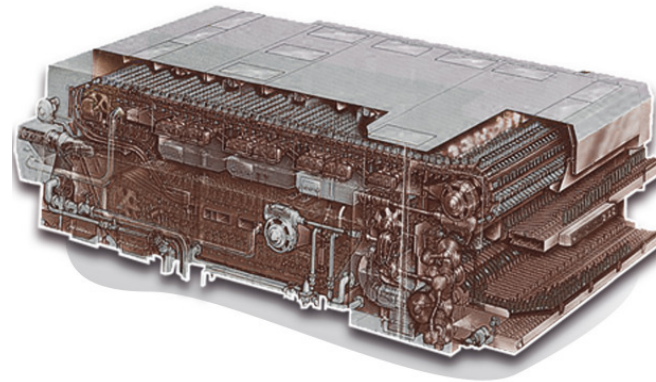
>>> regenerative section

>>> temperatur control

>>> main drive motor + flange bearings

>>> manhole - sealings

energy – efficient washing



cost – efficient washing

>>> LET - bottle - pockets

>>> LE - bottle carriers

>>> LL - bottle washer - chain

>>> bottle - discharge - fingers

>>> bottle discharge - conveyors

>>> operating - panels

>>> bottle infeed - tables

>>> bottle infeed - guides

>>> bottle infeed - fingers

>>> main - drive - shaft

everything from one – source:

German Low – Energy – Modules + professional assembly / commissioning + German ORIGINAL – Low – Energy Manufacturer Guarantee!

for your German Low – Energy, Low – Cost bottle washer

each bottle washer can be retrofitted very easily and very quickly – you always get a lot more than you pay !



substantial energy – savings

huge increase in total washer efficiency

up to 45 % lower total operating costs per year + per LET – washer

Low – Energy experience 2009: German LET – bottle washer

German bottle washer, 40.000 bph, 4.800 operating hours per year, 3 different bottle sizes

goal : energy – optimization, efficiency – optimization, actual efficiency measured before optimization: 64% degree of total efficiency

- investment:**
- 1. pressure – less bottle – infeed
 - 2. new LET – bottle carriers with plastic bottle – pockets
 - 3. new longlife bottle washer chain with extended guarantee
 - 4. automatic bottle – rejection areas infeed + discharge
 - 5. software – adjustments

LET - results: actual efficiency measured after optimization, 2 - shifts: 82 % degree of total efficiency

1. substantial savings

less fresh water, less waste water, less caustic, less additives, less anti – foaming agents
less acids, less chemicals, less warm – up heat, less operating – heat consumption

each year EURO 176.830

2. less downtime

total efficiency of bottle washer after the optimisation

each hour from 64 % up to 82 %

3. huge increase in total washer efficiency

the same bottling – hours per week increase of washed bottles

per week 448.000 bottles

4. amortisation of your total investment

savings – sharing & profit – sharing
your total investment is paid off by your total savings + gains

after 6,6 months

with German ORIGINAL Low – Energy OEM – Guarantee. with 100 % customer satisfaction!



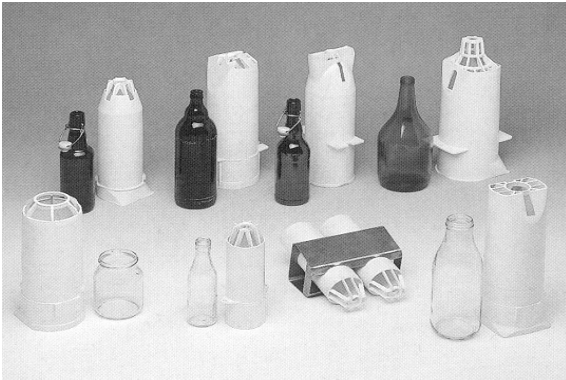
top – Germany GmbH

substantial energy – savings

huge increase in total washer efficiency

up to 45 % lower total operating costs per year + per LET – washer

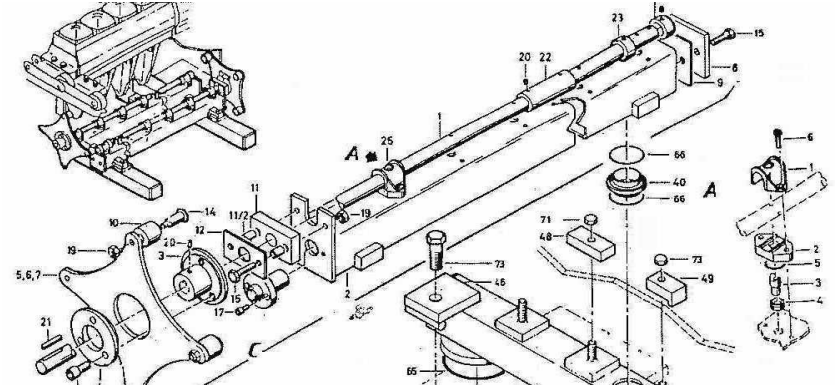
LET – bottle pockets – plastic



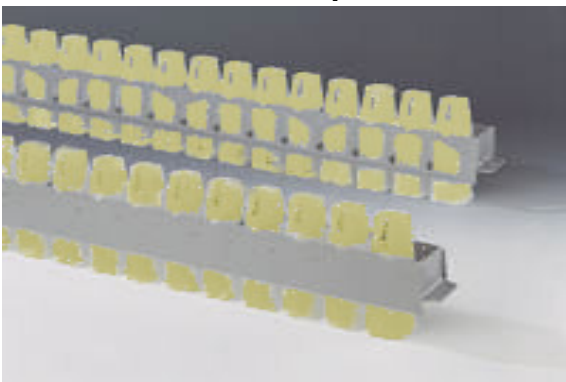
LET – bottle pockets – steel sheet



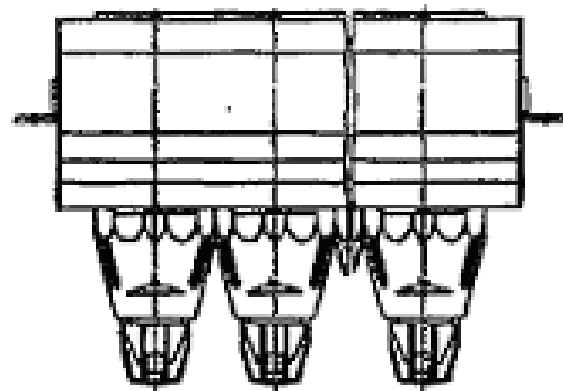
complete jetting water tubes



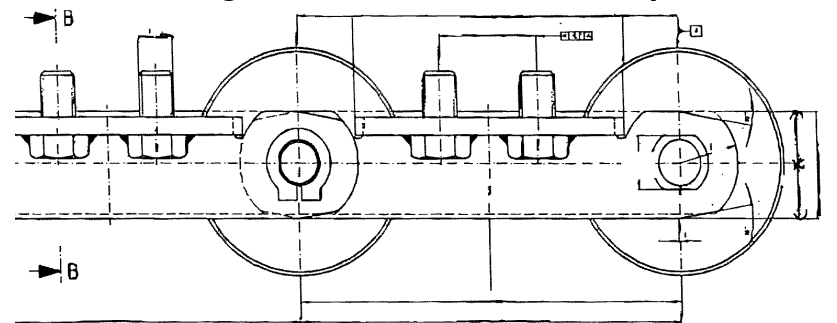
LET – bottle carrier – plastic



LET – bottle carrier – steel sheet



German longlife bottle washer chain + sprockets



everything from one – source:

German Low – Energy – modules + professional assembly / commissioning + German ORIGINAL – Low – Energy Manufacturer Guarantee!

for your German Low – Energy, Low – Cost bottle washer

your total investment is completely paid off within 6,6 months !



German Low – Energy – Guarantee for any Low–Energy, Low–Cost washer

with German ORIGINAL Manufacturer Guarantee “ made in Germany ”

German ORIGINAL – Manufacturer Quality and Guarantee !

all LET – equipment always comes with a written LET – Guarantee:

we guarantee for our top LET – specifications and LET – performance:

- for each LET – bottle pockets
- for each LET – bottle carriers
- for each LET – bottle washer chains
- for each LET – fresh water automatic control
- for each LET – automatic control jetting pumps
- for each LET – Service Technicians

we guarantee for 100 % customer satisfaction !

our top LET – Guarantee is based on:

1. top is configuring your complete LET – system – solution
2. you are using only complete top – LET solutions
3. top is doing the assembling + commissioning on – site
4. you are following our top – operating – manuals

**If our LET – Technology is not performing as promised, top
will immediately do everything to make it operate as promised in our top LET – specifications and performance !**