Inspection Notes
N. Topinka

(1)

The Swan Corporation 6/14/12
200 Swan Ave 8:50
Centralia, IL

chemical & odor noted on arrival outside plant

Compression molded fiberglass
kitchen + bath
uses hydraulic presses w/ match metal dies
unsat polyester resin + additives polystyrene
low-profile (liquid)
minerals calcium additive
compounds

"giant cake mix" - liquids + powders to paste +
fiberglass reinforcement

aluminum trihidrate filler } stored in silos
$CaCO_3$ filler
colorants - in 5 gal buckets liquid dispersion
other additives in 50 lb bags

mix rm - recipe for each color
49 diff colors
3 colors through TMC process
4 BMC process

Storage tanks on load system
automated ~~mix~~ weighers

3000 lbs made @ a time

3 mixers - high speed dispersers
temp ~90°F for 30 min to appropriate viscosity → to lab for analysis to check color, visc., curing properties, will it stick to mold?
once OK'd, moved to storage (~1 day) stored

2 TMC (sheet form) machines : add fiberglass
4 BMC mixing : add glass
("cotton candy")
diff is size of glass (fibers) + how it is added

TMC compound must be stored 1-2 days
BMC can be used w/in 20 min
stored in metal containers
compound storage rm - 70-74°F

Schedule equipment, compound, die according to customer orders

matrial to press operation area
- instructions on how to press + finish item

Secondary operations
- some tub wall systems painted

- downdraft watrwash booth - 95% PM capture
painted parts thru IR oven - 200-210°F

2ndary op fabrication shop
30 x 145" panels can be for
62 x 96" shower walls

scuff-sand back of panels - dust collectors
baghouse-type - Torrit 99.3% capture
downdraft filtered

grinding operation
speckles - cured colored polyester
pulverizer - controlled by dust collector

storage, shipping

make own crating system
beam panel saws w/ dust collector

no exhaust in storage rm

2ndary carbon filtration - mixing area

IEPA not issued revised Title V permit

Change of EHS w/in last few years

Since 1964 11,250 sq. ft

1st took orders + shipped

early 70s - hydraulic presses to paint parts

Kevin Kuhnke -

now 300,000 sq. ft.

5 presses to 22-23 presses

1981 - 9 presses

1981 - 2004 increased to 19 presses

2004 - present - 22 presses

1 to 10-12 min to press a product

molds 280-300°F

op. removes part from press

thermoset resins - one shot

thermoplastic can re-melt

3-3.5% of products scrapped

test every 6 months

green-guard approved - no emissions after curing

limitation/bottleneck: detailwork/secondary processes

painted products - e.g. 5 panel system...
painted in sets - sanded in fine sandpaper
dust left on product

paint shop has continuous conveyor loop
- blowoff booth - filtered booth
- heads to paintshop - do
- waterfall catches paint spray
- paint floated using chemical
- pumped to skimmer - paint dried in burlap bag, landfill

acrylic
urethane

bags hung by ovens to dry - 2-7 days
paint checked for VOC - looking @ MSDS
↳ part of air report

booth

TMC + BMC areas carbon filtered

resins arrive in liquid form - delivered in tank car, pumped into tanks

~175 employees - 2 10/hr shifts 4 days wk w part time fri

20% less operations than ~2006-2007 (peak)
maybe 60%

flush paint lines w/ MEK
haz. waste storage area for spent MEK
↳ 20' x 25' area - drums

MEK on-site recycling
Superior Solvents - dispose of sludge
Rine Co
Safety-Kleen

55 gal drums - truck still

90-95% recovered MEK

TMC + BMC mixer cleaned w/ MEK

@ cleaned least every night 16 mixers

** ask consultant for Q about why emission units requested to be regroped

Tour

Spray paint resin smelling

resin tank rm

mix rm

BMC mixers

mixing vessel awaiting to be cleaned

lab press

continuous mat molding / wet molding

2 80 hp boilers } nat. gas — 6/8/84, 10/22/84 — MMBtu rating

1 150 hp boiler — install 2004

paint ~ every other day

chemical to float the paint?

floater — Nalco chemicals

de-tacky — Ultimer 7751 coagulant

de foamer — 71 D+ antifoamer

Paint kills PK952 flocculan

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* 2 5-ton units to cool cure room

Environ - consulting

RMJ out of Salem does A/C maintenance

Chemicals for cooling tower?

☐ send CD of photos to Deb
dholle@swanstone.com

(h) on Calumet (Gen Fed Credit union)