10.2 SOLUTIONS TO CORRECT DEFORMED AND CRACKED BLOCKS.

10.2.1 CRACKED FACE SHELLS

a. Check mold to stripper head alignment (section 5).
b. Check to see if core assembly is bent or twisted due to over tightening.
c. Check mix (moisture content). An inconsistent moisture content in your mix may result in inconsistent concrete product quality. The use of a computerized moisture control unit in your mixer is recommended to improved product quality and consistency.
d. Check pallet receiver guides on slide shaft (section 5).

g. Increase delay time (section 9).
h. Check shock absorbers.
i. Check pallet receiver rubbers.

J. Check admix.

k. Check amount of material being left in mold after feedbox goes back.
l. Check vibrator brakes (for a Vibrapac equipped with standard vibration).
m. Check roller of block moving cam. It should never leave cam, otherwise you will get a jerky moment that might crack the units.

10.2.2 HALF-MOON ON FACE SHELL

a. Check for loose division plates.
b. Check pallet receiver rubbers.
c. Check that pallet is moving on the conveyor.
d. Check vibrator bearings.
e. Check pallet receiver rubbers (hardness).
f. Check mold assembly.
g. Check amount of admix in concrete.
10.2.3 LAMINATION ON FACE SHELL AND HORIZONTAL CRACKING

- a. Check vibrator shaft speeds for R.P.M. (they should turn within 2 R.P.M. of each other - adjust with screw.

- b. Check for metal to metal contact during vibration (mold vibrating against machine mold throat).

- c. Check back apron plate alignment to mold (section 5)

- d. Check that Feedbox is not vibrating on mold.

- e. Check vibrator bearings.

- f. Check delay time (decrease or increase). (section 9)

- g. Check mix design.

- h. Check for loose division plates.

- i. Check for lack of proper admix.

- j. Check slide shaft pucks (section 5).

- k. Check vibrator brakes (for a Vibrapac equipped with standard vibration).

- l. Check roller of block moving cam. It should never leave cam, otherwise you will get a jerky moment that might crack the units.

10.2.4 FRONT OF BLOCK NOT FILLED

- a. Check hopper gate setting.

- b. Check feedbox travel forward.

- c. Check agitator.

- d. Check for chunks in feedbox.

- e. Mix may be too wet.

- f. Check feed time. Increase if necessary. (section 8 and 9)
10.2.5 AREA OF FACE SHELL TOO COARSE

a. Check machine hopper for build up.
b. Make sure vibrator sheaves are properly aligned.
c. Check vibrator weights for proper balance (equal length of clamping bolts and equal weight of nuts).
d. Check for loose mold parts.
e. Check for material segregation.
f. Check vibrator shaft speed.

10.2.6 SMOOTH TOP EDGE ON FACE SHELL

a. Check for division plate wear.
b. Make sure stripper shoes protrude through bottom of mold at completion of stripping.
c. Check stripper head alignment. (section 5)
d. Check for loose stripper shoes.
e. Check pallet receiver frame for level. (section 5)
f. Check moisture content of mix.
g. Check finish times. (sections 8 and 9)
h. Check feed time. Decrease if necessary. (sections 8 and 9)
i. Check autofeed mechanism. Lower if necessary.
10.2.7 BOTTOM EDGE CRUSHED

a. Check spring opening. (section 5)
b. Check delay time. (section 8 and 9)
c. Check stripper head alignment. (section 5)
d. Check pallet receiver rubbers.
e. Check for build up on bottom of mold.
f. Check for build up on pallets.
g. Check for spillage on pallet.
h. Check rubbers on cutoff bars.
i. Check the mix (can be too dry).
j. Check the air compaction setting (too much force).
k. Make sure pallet is against bottom of mold.

10.2.8 BLOCK CRUSHED DURING STRIPPING

a. Increase strip delay time. (section 9)
b. Check spring opening. (section 5)
c. Check moisture content of concrete.
d. Check for excess feed. Decrease feed time and lower autofeed if necessary.
e. Check vibrator brakes.
f. Check pallet delivery and timing.
g. Check air compaction setting.
10.2.9 CORE BAR CRACK

a. Check vibrator brake settings (for Vibrapac equipped with standard vibration).
b. Check vibrators shaft speeds.
c. Check for loose cores.
d. Check vibrator sheave alignment.
e. Check pallet guides. Rear guides may have a groove worn so pallets stick during stripping operation (this may not apply to V4).
f. Check feed and finish time (it may need more).
g. Check for material build-up on core bars or core assemblies.
h. Check mix (it can be too dry).

10.2.10 CRACKING AT PALLET SIDE

a. Check for loose core assembly.
b. Check for bent core assembly.
c. Check pallet receiver frame for level.
d. Check pallet receiver rubbers. Pallet may be moving during finish time (it may require pallet snubbers).
e. Check pallet guides.
f. Check core bars for material build-up.
g. Check for thick and thin pallets.
h. Check vibrator brakes (may be slipping) for Vibrapac equipped with standard vibration.
i. Check for material between pallet and pallet receiver rubbers.
j. Pallet receiver and stripper head alignments.
10.2.11 BLOCK HEIGHT NOT CORRECT FRONT TO REAR

- a. Check pallet receiver frame for level (see section 5.4)
- b. Check stripper head frame in relation to pallet receiver frame alignment.
- c. Check stripper head for level.
- d. Check mold for 5/8" dimension off mold throat.
- e. Check for loose stripper shoe or plunger.
- f. Check agitator grid (see section x.x).
- g. Check delay time.

10.2.12 COARSE TEXTURE IN MIDDLE OF BLOCK FACE

- a. Check vibrator shaft speeds.
- b. Check material for coarse aggregate.
- c. Check (generally increase) feed time setting.
- d. Check material, could be too wet.
- e. Check autofeed, make sure it's turned on.
- f. Check for material segregation.
- g. Check vibrator motor rotation.
- H. Material segregation in machine hopper.
10.2.13 BLOCK NOT FILLED PROPERLY

a. Check agitator grid for build up.
b. Check agitator grid to make sure it is turned on.
c. Material too wet and there may be moisture variations.
d. Check that autofeed is on automatic.
e. Check hopper gate setting.
f. Check if there are chunks in feedbox.
g. Check feed time.

10.2.14 FACE SHELLS SUCKED IN AT COMPLETION OF STRIPPING

a. Check core vents, may be plugged.
b. Material too wet, moisture content variation.
c. Check for worn division plates.
d. Check for loose core assembly.
e. Check stripping speed.
f. Check admix.
g. Check for frozen aggregate.
h. Check core valve springs.
10.2.15 COARSENESS ON BOTTOM OF BLOCK LEAVING A BAD EDGE

- a. Check pallet receiver rubbers.
- b. Check if pallet moves during vibration.
- c. Check vibrator weights, may have to change to larger or smaller vibrator weights.
- d. Check mold for loose parts.
- e. Check stripper head alignment.
- f. Check for material segregation.
- g. Check for build up on pallets or mold.
- h. Check for core spillage on pallet.
- i. Check moisture content of mix. It may be to dry.
- j. Check vibrator shaft rotation.
- k. Make sure pallet is against bottom of mold.

10.2.16 HAIRLINE CRACKING AND PULLING AT TOP OF BLOCK ON COMPLETION OF STRIPPING

- a. Check spring opening to assure height pins stay together during strip.
- b. Check to make sure stripper shoe protrudes through bottom of mold at completion of strip.
- c. Check adjustment for stripping.
- d. Check division plates for wear.
- e. Check for loose stripper shoes.
- f. Check moisture content of mix. It may be too wet.
- g. Check vibrator brakes (for a Vibrapac equipped with standard vibration).
- h. Check roller of block moving cam. It should never leave cam, otherwise you will get a jerky moment that might crack the units.
Note: There are no visible cracks on the blocks.

a. Check block handling during movement to curing kilns.

b. Check block delivery on machine.

c. Check stripping adjustment.

d. Check mold assembly for wear.

e. Check curing cycle (preset & steam conditions).

f. Check admix.

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10.2.18 BLOCK OUT OF SQUARE (NOT 90° ON EACH CORNER)

a. Check mold assembly for wear.

b. Check all mold parts for excessive wear.

c. Check block delivery on machine.

d. Check curing cycle (preset, steam, etc.).
10.2.19 DIAGONAL CRACK AT REAR OF BLOCK

a. Pallet setting on block moving bars may be too late.
b. Check fork lift bumping rack on Besser-Matic.
c. Check if pallet is setting down evenly on front delivery conveyor.
d. Check for loose core.
e. Check of loose plunger.
f. Check mix design.
g. Check vibrator weights.
h. Check vibrator brakes (for a Vibrapac equipped with standard vibration).
i. Check roller of block moving cam. It should never leave cam, otherwise you will get a jerky moment that might crack the units.

10.2.20 DIAGONAL CRACK AT FRONT OF BLOCK

a. Check if pallet hit stop on front delivery too hard.
b. Check fork lift bumping rack on Besser-matic.
c. Check if pallet is not setting down evenly on front delivery conveyor.
d. Check for loose core.
e. Check for loose plunger.
f. Check mix design.
g. Check for wrong vibrator weights.
h. Check vibrator brakes (for a Vibrapac equipped with standard vibration).
i. Check roller of block moving cam. It should never leave cam, otherwise you will get a jerky moment that might crack the units.
10.1.21 FEATHER-EDGE AT TOP OF UNIT

a. Check alignment of stripper shoes.
b. Check for worn plungers and mold parts.
c. Check Mix design and mixing procedure.
d. Check stripping adjustment.
e. Check for mold shifting.
f. Check for loose mold parts.
g. Check stripper head alignment.
h. Check vibration.
i. Check vibrator motor brake adjustments.
j. Check admixture in batch.

10.1.22 CRACK IN MORTAR GROOVE

a. Check vibrator brakes (for a Vibrapac equipped with standard vibration).
b. Check for loose end liner.
c. Check for worn end liner.
d. Pallet snubbers may be necessary.
e. Check vibrator shaft speeds.
f. Check for loose mold parts.
g. Check stripping adjustment.
h. Check moisture content of mix.
i. Check mix design.