

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

HAER
ALA
37-BES,
5D-

SOUTHERN DUCTILE CASTING COMPANY,
CASTING
2217 Carolina Avenue
Bessemer
Jefferson County
Alabama

HAER No. AL-125-D

NOTE: Photographer Jet Lowe, August, 1995. All photographs shot
at 2500 ASA with a yellow filter 5000 ASA

- AL-125-D-1 POURING IRON FROM ELECTRIC FURNACE INTO BULL LADLE
AFTER MAGNESIUM HAD BEEN ADDED TO GENERATE DUCTILE
IRON WHEN IT COOLS IN THE MOLD.
- AL-125-D-2 POURING IRON FROM ELECTRIC FURNACE INTO BULL
LADLE.
- AL-125-D-3 POURING IRON FROM BULL LADLE INTO MOBILE LADLES
USED TO FILL MOLDS ON CONVEYOR LINES AFTER FERRO-
SILICON IS ADDED TO ENHANCE DUCTILITY AND
FLUIDITY.
- AL-125-D-4 FILLING MOLDS MADE ON THE BRITISH MOLDING MACHINE,
AUTOMATIC COPE AND DRAG (BMM) FROM MOBILE LADLE.
EMPTY BULL LADLE IN FOREGROUND.
- AL-125-D-5 TRUFLO GONDOLA, USED WITH THE HUNTER 10 MOLDING
MACHINE, OPERATES THE SAME AS THE TWO LARGER
TRUFLOS USED IN CONJUNCTION WITH THE TWO HUNTER
20S. EACH GONDOLA IS CONNECTED TO THE NEXT AND
RIDES ON A SINGLE TRACK RAIL FROM MOLDING MACHINES
THROUGH POURING AREAS CARRYING A MOLD AROUND TWICE
BEFORE THE MOLD IS PUSHED OFF ONTO A VIBRATING
SHAKEOUT CONVEYOR.
- AL-125-D-6 HUNTER 10, TRUFLO GONDOLA CONVEYOR, TOP VIEW,
SHOWING MOTIVE DEVICE THAT PUSHES A SINGLE GONDOLA
AT TIME, BUT, BECAUSE OF THEIR LINKAGE, ACTUATES
MOVEMENT OF THE ENTIRE CONVEYOR.
- AL-125-D-7 HUNTER 10, TRUFLO GONDOLA WEIGHTS AND JACKET.
PIVOTING ARMS RAISE THE JACKET AND WEIGHTS. A
PNEUMATIC SHOVEL PUSHES THE MORE RECENTLY POURED
MOLD INTO THE COOLED MOLD, FORCING THE LATTER
ONTO THE VIBRATING SHAKEOUT CONVEYOR AND LEAVING A
SPACE UNDER THE RAISED JACKET AND WEIGHTS FOR A
FRESHLY MADE UNPOURED MOLD.

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- AL-125-D-8 BRITISH MOLDING MACHINE, PBQ AUTOMATIC COPE AND DRAG MOLDING MACHINE MAKES BOTH MOLD HALVES INDIVIDUALLY WHICH ARE LATER ROTATED, ASSEMBLED, AND LOWERED TO POURING CONVEYORS BY ASSISTING MACHINES.
- AL-125-D-9 BRITISH MOLDING MACHINE, PBQ AUTOMATIC COPE AND DRAG MOLDING MACHINE MAKES BOTH MOLD HALVES INDIVIDUALLY WHICH ARE LATER ROTATED, ASSEMBLED, AND LOWERED TO POURING CONVEYORS BY ASSISTING MACHINES.
- AL-125-D-10 FLASK LIFTER AND BMM ENTRY CONVEYOR WITH PATTERN CAR AND DRAG PATTERN
- AL-125-D-11 HUNTER 20 MATCHPLATE MOLDING MACHINE, OPERATING THE SAME AS THE HUNTER 10 AND OTHER HUNTER 20 COMPRESSES BOTH MOLD HALVES OVER A DOUBLE-SIDED MATCH PLATE PATTERN. DENNIS GRAY TESTS A MOLD'S HARDNESS TO ENSURE SAND MIXTURE AND MACHINE COMPRESSIBILITY ARE CORRECT.
- AL-125-D-12 HUNTER 20 MATCHPLATE MOLDING MACHINE, OPERATING THE SAME AS THE HUNTER 10 AND OTHER HUNTER 20 COMPRESSES BOTH MOLD HALVES OVER A DOUBLE-SIDED MATCH PLATE PATTERN. DENNIS GRAY TESTS A MOLD'S HARDNESS TO ENSURE SAND MIXTURE AND MACHINE COMPRESSIBILITY ARE CORRECT.
- AL-125-D-13 HUNTER 20 MATCHPLATE MOLDING MACHINE, WITH COMPLETED MOLD EXITING, DENNIS GRAY OPERATOR.
- AL-125-D-14 HUNTER 20 MATCHPLATE MOLDING MACHINE "SQUEEZING" BOTH HALVES OF A MOLD SURROUNDING A MATCHPLATE PATTERN, DENNIS GRAY OPERATOR.
- AL-125-D-15 HUNTER 20 MATCHPLATE MOLDING MACHINE "SQUEEZING" BOTH HALVES OF A MOLD SURROUNDING A MATCHPLATE PATTERN, DENNIS GRAY OPERATOR.