

motors, including the distributor motor, the sweep motor and the table motor. The distributor subassembly, which resembles a conveyor belt assembly line, takes the pins from the pin elevator subassembly and places them in the setting table subassembly. The setting table subassembly picks up the standing pins from the lane and takes them again from the distributor subassembly before setting them down on the lane. Between the time when the setting table picks up the standing pins and sets them down again, the sweep wagon subassembly sweeps away felled pins. The drive frame subassembly houses three of the motors that are needed to run the central block and six-pack.

The six-pack assembly contains the pin elevator subassembly with two pin elevators and the ball pit subassembly with two ball cushions and two rollers. The pin elevator subassembly receives the pins from the ball pit subassembly and raises them into the distributor subassembly. The ball pit subassembly handles the initial impact of the pins and ball and cycles them through the pinsetter to get ready for the next ball.

The ball accelerator includes the ball accelerator motor. The ball accelerator subassembly returns the ball to the bowler.

In addition to the above-described mechanical subassemblies, the complete pinsetter, as installed, contains the U.S.-origin electrical controller assembly as well as other U.S. parts.

In foreign country X, Brunswick constructs the large steel frame that houses the central block. Numerous other parts from various countries are also shipped to foreign country X for assembly of the seven principal subassemblies of the mechanical assembly. Brunswick then attaches the distributor subassembly to the steel casing of the central block. The six remaining subassemblies and the central block casing are then shipped to a manufacturing facility in Muskegon, Michigan.

#### I. Processing Performed at Michigan Plant

In the United States (Muskegon, Michigan), Brunswick integrates the sweep wagon and setting table subassemblies, as well as the three motors of the drive frame subassembly, into the central block.

The integration of the sweep wagon mechanical subassembly involves installing it into the central block in a front orientation at a 45 degree diagonal position, with the right end being placed into the right sweep track first. Brunswick then adjusts the rollers to a minimum clearance of five millimeters on each side between the roller screw, taking care to ensure that adequate clearance is maintained during the entire length of travel by manually running the wagon forward and aft. Brunswick then attaches the sweep wagon to the sweep crank arms with nylon bushings, large flat shim washers and retaining rings. This procedure is then repeated on the opposite side. Finally, Brunswick adjusts the clearance to an average of ten millimeters between the gutter adapter and the flat gutter, with slots and screws provided in both adapters. This final adjustment must be made at the midpoint of wagon travel to allow the necessary clearance at extreme front and rear positions.

Brunswick integrates the setting table mechanical subassembly into the central block. This process involves the initial placement of spacers onto the corners of the test stand deck. The assembly team then delivers the setting table to the test stand deck and sets it onto the spacers, ensuring that the spacers are clear of the spotting tong attachment screws that protrude from the underside of the setting table. Brunswick then manually turns the setting table drive pulley on the left side of the drive frame to drop the left and right deck racks to the lowest point. The deck rack teeth are aligned to the drive gear teeth and plumb. Brunswick removes the hex nuts and lock washers from the setting table studs and installs the feet of the deck rack onto studs. Brunswick then rotates the bottom hex nuts until the first interference is detected against the deck rack feet. The top hardware is reinstalled and tightened. Brunswick manually turns the setting table drive pulley in the opposite direction to raise the setting table slightly so that the spacers can be removed. The setting table is re-lowered to the lowest position. Brunswick verifies that a 5 to 15 millimeter gap exists on all points between the setting table frame and the deck of the test stand. If proper clearance is not correct, or if the table frame is not level, appropriate adjustments are made. The top sections are then assembled for the telescoping square drive shafts for each of the setting table pivot shafts, and the spotting tongs with hardware are provided. Finally, Brunswick assembles and routes the setting table function switch and solenoid cable into the panduit channel at the front of the machine.

Brunswick integrates the distributor motor of the drive frame subassembly into the central block. This involves the assembly and placement of the motor pulley to the motor shaft. A 60 Hz sheave must be facing away from the motor assembly. The motor and mount assembly must first be placed into the forward motor location in the left drive frame and then be assembled into the frame with bushing, spacer and hitch pins. Brunswick then assembles the tension spring from the mount to the frame. Brunswick assembles the V-belt to the motor pulley and drive pulley.

The sweep motor of the drive frame subassembly is integrated into the central block. This involves a process identical to the assembly of the distributor motor described above except that the assembly is located in the middle motor location of the drive frame.

The setting table step motor of the drive frame subassembly is integrated into the central block. This involves a process identical to the assembly of the distributor and sweep motors described above except that the assembly is located in the rear motor location of the drive frame.

After assembly of the three subassemblies into the central block, the fully assembled central block is quality tested at the Michigan facility. Each central block undergoes 400 cycles of testing, which can take several hours.

Counsel states that the processing performed at the Michigan facility requires complex and detail-oriented labor and precise calibrations performed by highly skilled employees.

#### II. Processing Performed at Bowling Facility

At the bowling facility, the ball pit and pin elevator subassemblies are joined to create the six-pack component of the mechanical assembly. The central block, six-pack, and ball accelerator are then assembled to form the mechanical assemblies, after which the U.S.-made electrical controller assembly and other miscellaneous parts are integrated into the mechanical assemblies to form the GS-X pinsetter.

The GS-X pinsetter is installed into the bowling facility. This process takes approximately 20 hours of skilled labor per pinsetter, using tools and large moving equipment specially constructed for that particular installation. The project manager and field foreman manage the quality-assurance procedures and certify that each pinsetter is installed and functioning according to Brunswick specifications, which counsel states surpass those of the American Bowling Congress.

#### Issue

Whether the bowling pinsetters are substantially transformed in the United States so that they become products of the United States for U.S. Government procurement purposes.

#### Law and Analysis

Under subpart B of part 177, 19 CFR 177.21 *et seq.*, which implements Title III of the Trade Agreements Act of 1979, as amended (19 U.S.C. 2511 *et seq.*), the Customs Service issues country of origin advisory rulings and final determinations on whether an article is or would be a product of a designated country or instrumentality for the purposes of granting waivers of certain "Buy American" restrictions in U.S. law or practice for products offered for sale to the U.S. Government.

Under the rule of origin set forth under 19 U.S.C. 2518(4)(B): "An article is a product of a country or instrumentality only if (i) it is wholly the growth, product, or manufacture of that country or instrumentality, or (ii) in the case of an article which consists in whole or in part of materials from another country or instrumentality, it has been substantially transformed into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was so transformed."

See also 19 CFR 177.22(a).

If the manufacturing or combining process is a minor one which leaves the identity of the imported article intact, a substantial transformation has not occurred. See *Uniroyal Inc. v. United States*, 3 CIT 220, 542 F. Supp. 1026 (CIT 1982). Assembly operations which are minimal or simple, as opposed to complex or meaningful, will generally not result in a substantial transformation. See C.S.D. 80-111, C.S.D. 85-25, and C.S.D. 90-97.

Customs ruled in Headquarters Ruling Letter ("HRL") 561734, dated March 22, 2001, 66 FR 17222, that Sharp multifunctional machines (printer, copier and fax machine) assembled in Japan were a product of Japan for procurement purposes. The machines were comprised of 227 parts (108 parts sourced from Japan, 92 parts from