FUNDAMENTAL MANUFACTURING PROCESSES

PLASTIC BLOW MOLDING

SCENE 1.
CG: REVIEW
white text on black
tape 63, 12:00:15-12:03:49
review music

SCENE 2.
tape 402, 08:11:57-08:12:07
blow molded part being ejected from machine

NARRATION (VO):

BLOW MOLDING PROCESSES ARE THE MOST POPULAR METHODS USED TO PRODUCE HOLLOW PRODUCTS OUT OF THERMOPLASTIC MATERIALS.

SCENE 3.
tape 403, 01:02:09-01:02:16
2 shots, blow molded bottles & containers
tape 402, 08:26:04-08:26:08
blow molded highway barrel
tape 402, 08:24:10-08:24:15
blow molded auto part
tape 404, 09:16:23-09:16:26
blow molded circular saw case
tape 402, 08:23:21-08:23:27
blow molded toy
tape 402, 08:28:45-08:28:49
blow molded medical item
tape 401, 07:09:46-07:09:49
blow molded structural panel

NARRATION (VO):

BOTTLES AND CONTAINERS ARE THE MOST COMMON BLOW MOLDED PRODUCTS, BUT OTHER ITEMS SUCH AS HIGHWAY BARRELS, AUTOMOTIVE COMPONENTS, DOUBLE WALLED CASES, TOYS, MEDICAL ITEMS, AND STRUCTURAL PANELS ARE PRODUCED.

SCENE 4.
CG, SUPER: EXTRUSION BLOW MOLDING
tape 408, 10:11:31-10:11:50
intermittent extrusion blow molding
tape 412, 10:08:31-10:08:55
continuous extrusion blow molding

NARRATION (VO):

MOST THERMOPLASTIC BLOW MOLDED PRODUCTS ARE PRODUCED VIA EXTRUSION BLOW MOLDING, USING EITHER AN INTERMITTENT...,
OR CONTINUOUS METHOD FOR THE FORMATION OF THE MOLTEN PARISON.

SCENE 5.
CG, SUPER: INJECTION BLOW MOLDING
tape 412, 00:06:59-00:07:22

NARRATION (VO):

INJECTION BLOW MOLDING PRODUCES A PARISON IN AN

injection blow molding system
tape 412, 00:15:18-00:15:24
parison mold opening, parison on core rod indexed to blow mold

INJECTION MOLD. WHILE STILL HOT, THIS PARISON IS TRANSFERRED ON A CORE ROD TO THE BLOW MOLD WHERE IT IS BLOWN INTO SHAPE.

SCENE 6.
CG, SUPER: BIAXIAL STRETCH BLOW MOLDING
tape 412, 03:10:21-03:10:24
biaxial stretch blow molding, parison stage, dissolve to
tape 412, 03:10:29-03:10:42
biaxial stretch blow molding, mold opening, bottle stage
tape 399, 04:00:50-04:01:40
blue background
CG: INCREASES TENSILE STRENGTH
DROP IMPACT
CLARITY
BARRIER PROPERTIES
REDUCES AMOUNT OF MATERIAL USED TO PRODUCE CONTAINER

NARRATION (VO):

STRETCH BLOW MOLDING PRODUCES A CONTAINER FROM A PREFORM OR A PARISON BY STRETCHING IT IN BOTH THE AXIAL AND THE RADIAL, OR HOOP, DIRECTIONS. THIS STRETCHING INCREASES THE THERMOPLASTIC'S TENSILE STRENGTH, DROP IMPACT, CLARITY, AND BARRIER PROPERTIES, WHILE USUALLY REDUCING THE AMOUNT OF MATERIAL USED TO PRODUCE THE CONTAINER.

SCENE 7.
tape 407, 01:04:32-01:04:37
preforms fed to two stage stretch blow molding machine
tape 399, 04:00:50-04:01:40
blue background
CG: SINGLE-STAGE STRETCH BLOW MOLDING
TWO-STAGE STRETCH BLOW MOLDING

NARRATION (VO):

THERE ARE TWO PRIMARY TYPES OF STRETCH BLOW MOLDING PROCESSES. THEY INCLUDE:
SINGLE STAGE,
AND TWO-STAGE STRETCH BLOW MOLDING.

SCENE 8.
tape 403, 01:47:55-01:48:06
2 shots, co-extrusion container produced, dissolve to co-extrusion parisons extruded
CG, SUPER: CO-EXTRUSION BLOW MOLDING
tape 403, 01:57:49-01:57:52
c.u. co-extruded part being blown
tape 403, 01:26:25-01:26:32
co-extruded part being produced

NARRATION (VO):

CO-EXTRUSION BLOW MOLDING PRODUCES PARTS CONTAINING SEVERAL LAYERS OF VARIOUS MATERIALS IN THEIR WALL STRUCTURES. THESE LAYERS CAN BE A COMBINATION OF COLORED, CLEAR, RECYCLED OR VIRGIN MATERIALS.

--- FADE TO BLACK ---