

SHOTLIST OF FOOTAGE PHS-DIRECTFORM, DIRECT PROCESS SCHWÄBISCH-GMÜND, GERMANY

TITLE OF PRODUCTION	phs-directform, Direct Process Schwäbisch-Gmünd, Germany
CONTACT	mediarelations@voestalpine.com
DATE OF PRODUCTION	June 2016
AVAILABLE FORMATS	<ul style="list-style-type: none"> » TV Europa (50i): mov, 1920x1080, Full HD » TV USA (59i): mov, 1920x1080, Full HD » Web (H.264): mp4, 1920x1080, Full HD » 4K available on request
KEYWORDS	<ul style="list-style-type: none"> » Direct hot-forming process » Corrosion protection » Lightweight construction solution » Automotive lightweight construction » High-strength components » Cathodic corrosion protection » Optimize process cause » Crash performance » Pre-cooling to avoid micro cracks in the galvanized layer » Direct forming process for galvanized material

SCENE	TIME FROM	TIME TO	CAMERA PERSPECTIVE	SCENE DESCRIPTION
1	00:00	00:10	Medium Long Shot	Forklift drives through the shot

SCENE	TIME FROM	TIME TO	CAMERA PERSPECTIVE	SCENE DESCRIPTION
2	00:10	00:21	Medium Long Shot	De-stacking of the blanks by means of robot as well as double piece sensor and laying on the furnace chain
3	00:21	00:27	Close up	Laying of the blanks on the furnace chain
4	00:27	00:40	Medium Long Shot	Marking/Double sheet sensor prior to laying of the blanks on the furnace chain
5	00:40	00:54	High-angle Shot	Laying of the blanks on the furnace chain/double sheet control prior to laying the blank on the furnace chain
6	00:55	01:01	Medium Long Shot	Employee monitors the drawing of the blanks from the furnace, red-hot blanks come from the furnace at about 920°C
7	01:02	01:06	Medium Close up	Red-hot blanks come from the furnace at about 920°C, are centered and then accepted by the transfer feeder
8	01:06	01:15	High-angle Shot	Red-hot blanks come from the furnace at about 920°C, are centered and then accepted by the transfer feeder and forwarded to the pre-cooling station
9	01:15	01:22	High-angle Shot	Red-hot blanks come from the furnace at about 920°C, are centered and then accepted by the transfer feeder and forwarded to the pre-cooling station
10	01:22	01:33	Medium Close up	View into the furnace discharge area; red-hot blanks are discharged from the furnace feeder and put on the centering device; received from the transfer feeder
11	01:33	01:40	Medium Close up	View into the furnace discharge area; red-hot blanks are discharged from the furnace feeder and put on the centering device; received from the transfer feeder