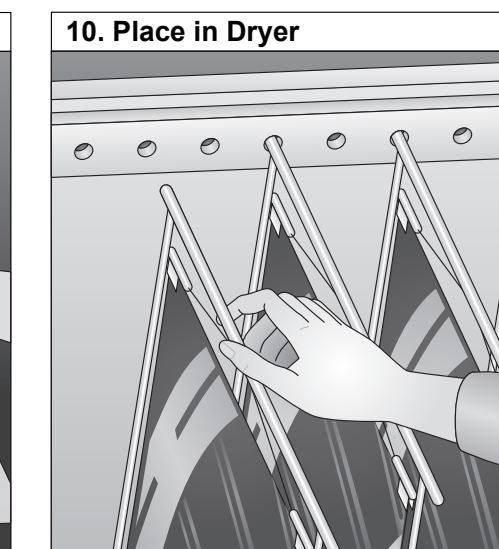
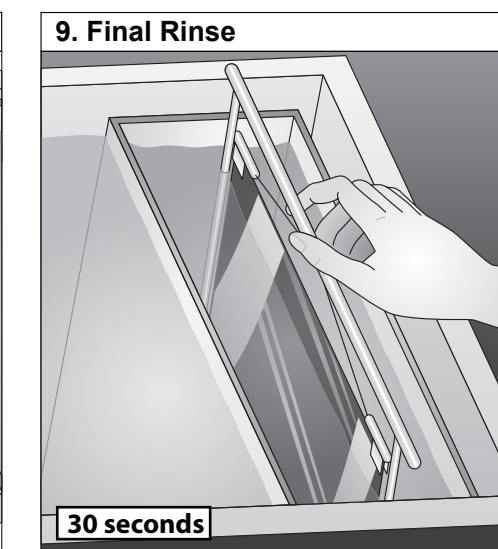
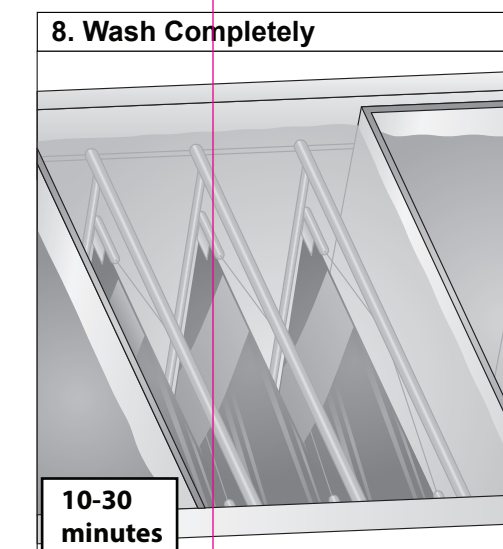
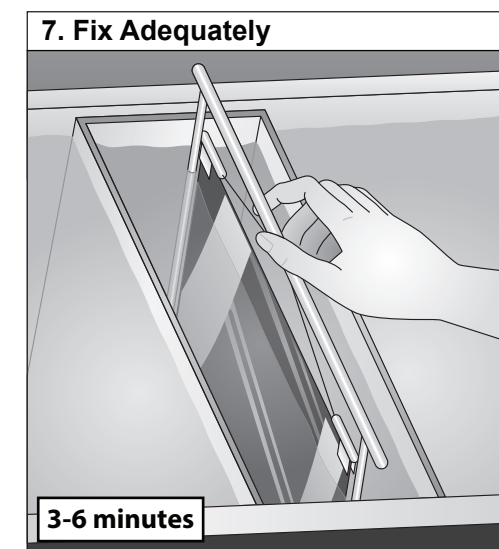
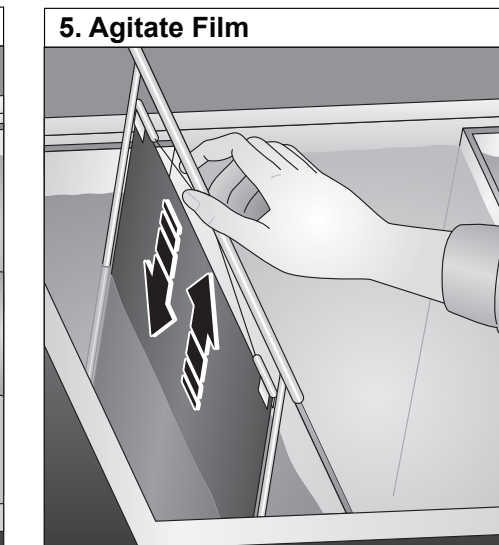
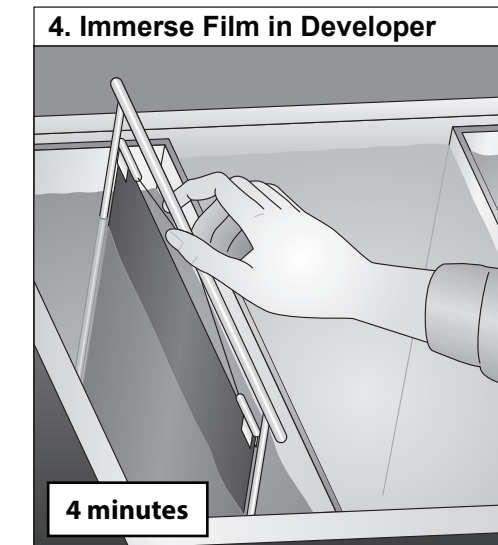
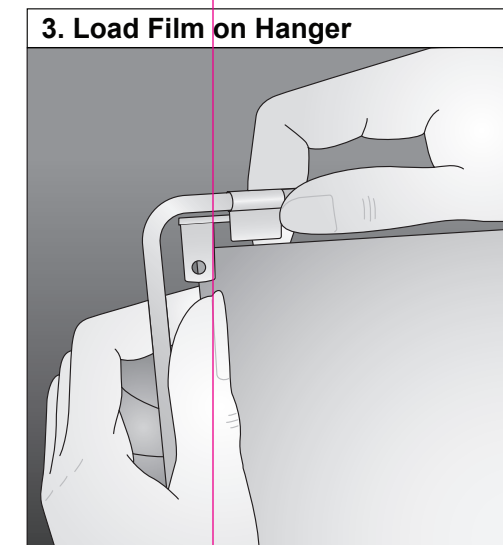
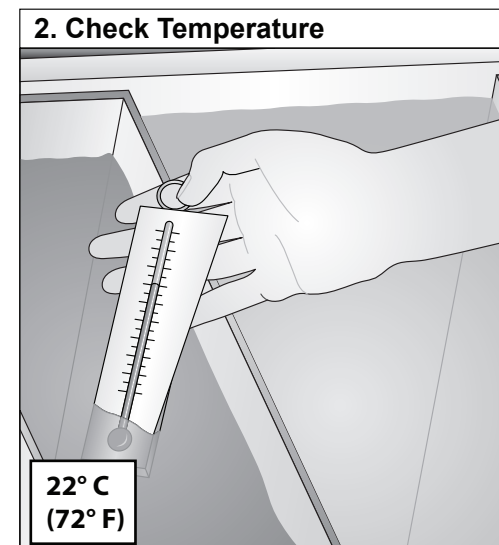
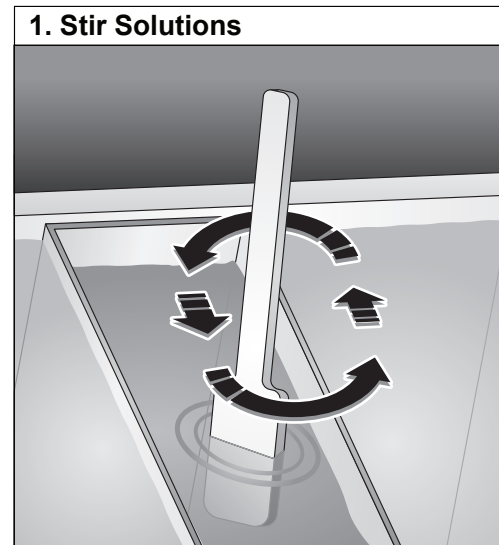


## Reference Guide to the Manual Processing of INDUSTREX Films

### Recommended Chemicals

	Dilution Concentrate + H <sub>2</sub> O	Replenishment Rate	pH Working Strength	Specific Gravity Working Strength	To Make Working Strength Solution
Developer					
Use INDUSTREX Manual Developer and INDUSTREX Manual Developer Replenisher.	1 + 3	665mL/m <sup>2</sup> (e.g., 100 mL per 14 x 17 inch sheet)	10.55 +/- 0.10 (25° C, 77° F)	1.078 +/- 0.005 (20° C, 68° F)	
Stop Bath					
Use INDUSTREX Manual Stop Bath. This stop bath rapidly halts development, preventing most spotting and streaking and prolongs the life of the fixing bath. This odorless stop bath features an indicator that changes color (from orange-yellow to magenta-red) at pH 5.2 to alert the user of declining activity, so that the solution can be changed or additional concentrate added.	1 + 19	No replenishment required.  Add water to compensate for carryover and evaporation. Change out the solution when a color change occurs, or add more concentrate.	2.20 +/- 0.10 (25° C, 77° F)	— —	
Fixer					
Use INDUSTREX Manual Fixer and INDUSTREX Manual Fixer Replenisher.	1 + 3	1200mL/m <sup>2</sup> (e.g., 180mL per 14 x 17 inch sheet)  It may be necessary to discard some used solution before adding the proper volume of replenisher.	5.80 +/- 0.10 (25° C, 77° F)	1.095 +/- 0.005 (20° C, 68° F)	
Final Rinse					
Use INDUSTREX Manual Rinse Solution. This solution is a wetting agent that effectively reduces water spots and drying marks.	1 + 19	No replenishment required.  Add water to compensate for carryover and evaporation. Change out the solution when other solutions are changed.	— —	— —	



### Manual Processing Cycle

	Developer	Stop Bath	Fixer	Wash	Rinse Solution
Time/Temperature	5 minutes - 20°C (68°F) <b>4 minutes - 22°C (72°F)*</b> 3 minutes - 24°C (75°F) 2 minutes - 26°C (79°F)	30 seconds	3 to 6 minutes or twice the time to clear film	10 to 30 minutes in running water (8 volume changes per hour)	30 seconds
Notes	<p><b>Important: Agitate 15 seconds at immersion, then intermittent - 5 seconds every 30 seconds.</b></p> <p>Use floating covers on the developer tank to reduce oxidation and evaporation; store developer replenisher in a closed airtight container.</p> <p>Fill the developer tank to its original level each day (topping off) with developer replenisher solution.</p>	<p><b>Important: PULL AND PLUNGE FILM DIRECTLY FROM DEVELOPER INTO STOP BATH. DO NOT ALLOW EXCESS DEVELOPER TO DRAIN BACK INTO DEVELOPER TANK.</b></p> <p>Continuous moderate agitation.</p> <p>Fill the stop bath tank to its original level each day (topping off) with water.</p>	<p><b>Important: Agitate the film for 5 seconds every 30 seconds.</b></p> <p>Fill the fixer tank to its original level each day (topping off) with fixer replenisher solution.</p>	Fill the final rinse tank to its original level each day (topping off) with water.	
	Stir solutions after each addition.				
	Discard solutions after adding two tank volumes of replenisher to the tank, or at least once per month, and then refill with fresh solution.				

\* Recommended

### Ensuring Process Quality

Test kits may be used to ensure archival characteristics for processed radiographs. These kits will indicate whether film has been adequately washed and when a fixing bath should be discarded. Information on the Residual Thiosulfate Test, Residual Silver Test, and the Fixer Test Solution can be found on the CARESTREAM website and in publication TI-6K7080, *INDUSTREX Films*.

### Exposure Film Factor (R)

Film Type	Density Desired			
	2.0	2.5	3.0	3.5
<b>HS800</b>	0.8	1.1	1.3	1.6
<b>AA400</b>	1.3	1.7	2.0	2.6
<b>T200</b>	2.2	2.8	3.4	4.0
<b>MX125</b>	4.4	4.8	5.3	5.9
<b>M100</b>	7.6	8.0	8.6	9.1