

# Laue Polaroid Cassette System

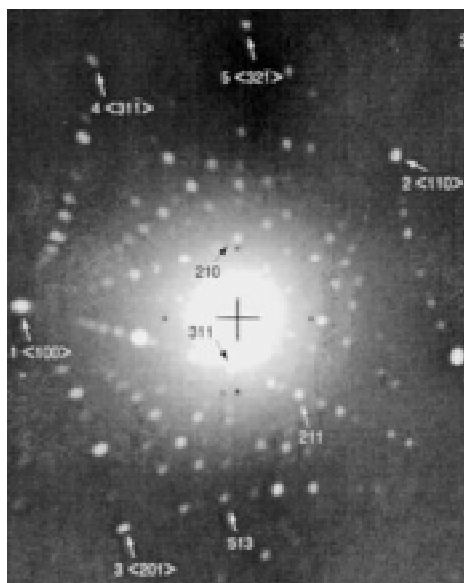


Crystal  
Orientation



## The Model 220 Laue Polaroid Cassette System

This system is used in conjunction with SBT Goniometers for recording back reflection Laue patterns. The Model 220 Laue Polaroid Cassette System makes it easy to produce high quality, accurate, instant photographs for crystallographic analysis. The Polaroid film produces 4 x 5 inch black and white photographs in 15 seconds. The system consists of a Laue Polaroid Cassette, A Laue Adapter to hold the cassette on an x-ray track and a 0.75mm collimator. The Laue Polaroid Cassette is designed for use with most x-ray diffraction units and cameras and can be easily adapted for use with special equipment.



## Operation

An x-ray beam is transmitted through a hole in the cassette's picture area which is designed to prevent scattering of the beam. The x-ray beam is directed through the collimator and the cassette and hits the surface of a sample mounted on a goniometer. The X-ray beam reflects back onto the cassette's rare earth intensifying screen. The high resolution, super high-speed phosphor coating on the screen's surface fluoresces and converts the x-ray signal to visible light. This in turn exposes the 4 x 5 inch negative.

A unique air-filled pillow holds the negative in perfect contact with the screen and evenly distributes a pressure of 20 psi over the entire picture area to ensure maximum acuity of the photographic image. And, since the photographic process is a reversal system, there is a quantitative relationship between image density and radiation. The degree of image "lightness" is determined directly by the amount of radiation received. Processing is accomplished by pulling the exposed film packet through two stainless steel rollers. Development of the image is complete in as little as 15 seconds.

## Specifications

X-ray track compatibility:	1.99" or 2.19"
Optional collimators:	0.25mm, 0.50mm and 1.0mm
Center hole:	9.5mm
Print size:	4" x 5"
Image size:	3.5" x 4.5"
Cassette orientation:	left, right or vertical
Film:	Polaroid Type 57

**Note:** when ordering, please specify x-ray generator manufacturer, tube shield diameter and track width.



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