

Figure 4.1: - A conventional hypereutectic microstructure. The primary carbides appear as either needles or hollow hexagons.

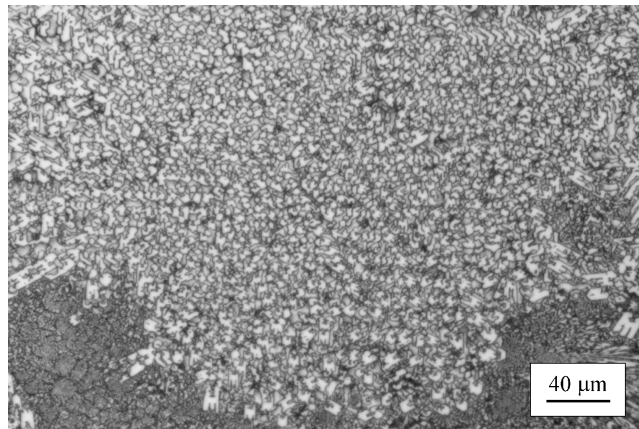


Figure 4.2: - A complex regular microstructure. The carbides appear in clusters exhibiting three-fold rotational symmetry.

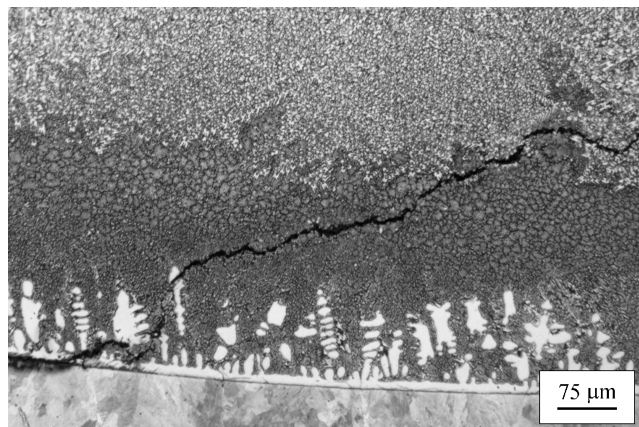


Figure 4.3: - The existence of an unmixed zone. Dendrites of austenite are present near the fusion line despite the bulk microstructure being hypereutectic. A check crack is also present, following the fusion line before deviating into the weld metal.