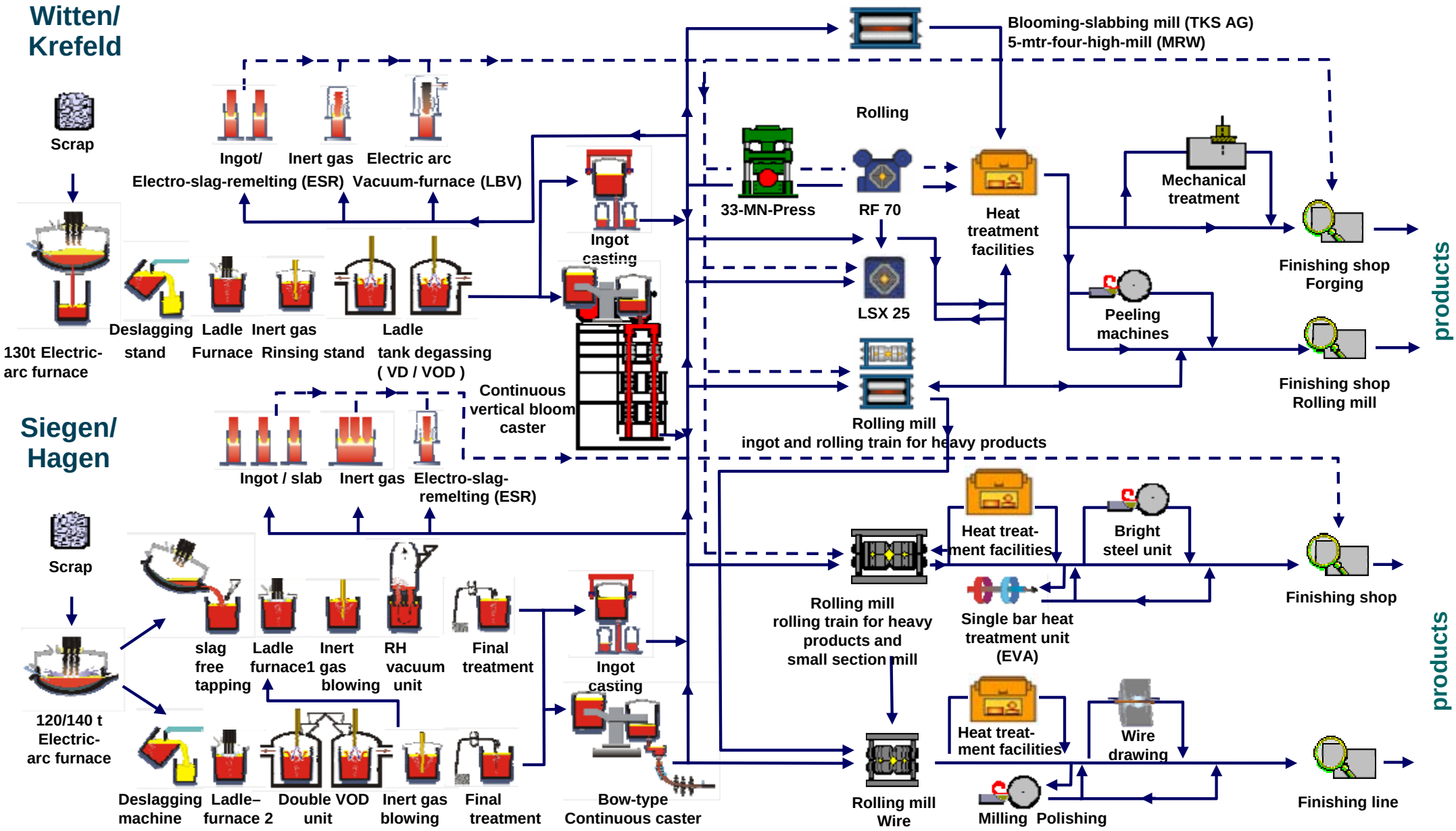Manufacturing workflow EWK and EWS