

7. Axles of railroad and street vehicles

Axles of railroad vehicles are preferentially deep rolled with the hydrostatic tool ballpoint HG13-9E270°-SLxx (Fig. 7-1) or the corresponding driven variation HG13-5E270°-VDIxx. (see Fig. 3-1, page 6)

A solution with lower investment, but also inferior reproduction security shows (Fig. 7-2). It is t the mechanical tool EG45 with leaf springs, program controlled rolling force via a machine in-feed and force monitoring by dial gage.

The critical fillets radiuses at **rear axle housings** are deep rolled in two zones by means of two differently positioned HG6 tools (Fig. 7-3 until 7-5).



Fig. 7-1: HG 6-9

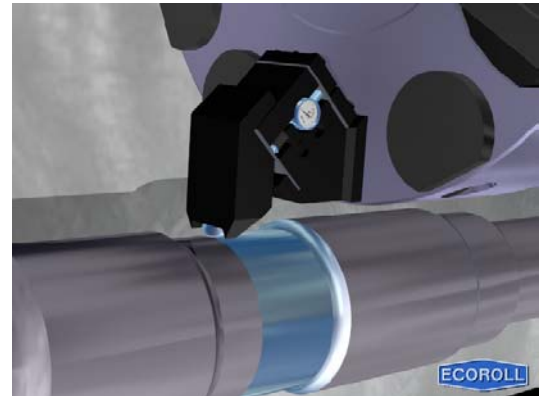


Fig. 7-2: deep rolling with EG45

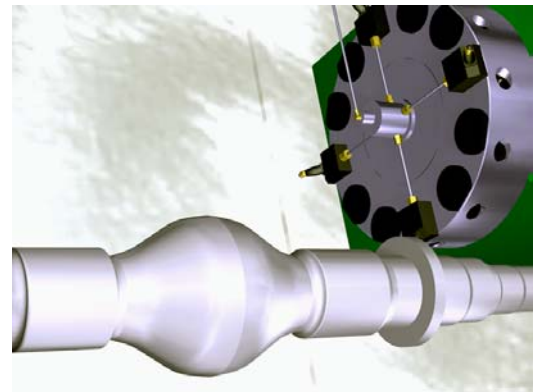


Fig. 7-3: deep rolling of rear axle housing

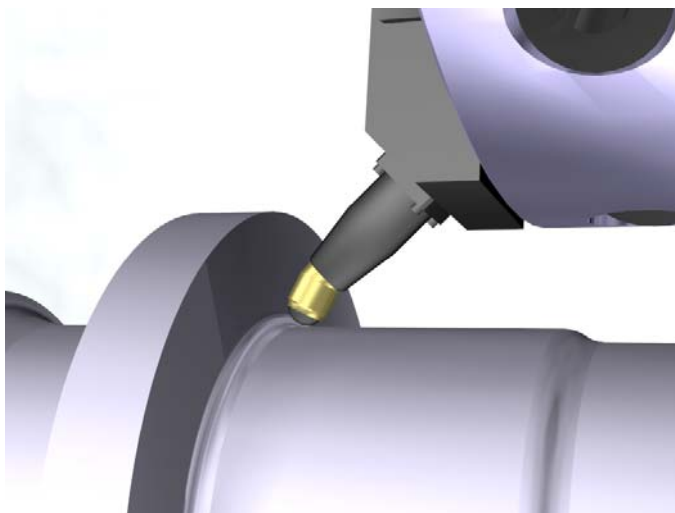


Fig. 7-4: rear axle housing (zone 1)

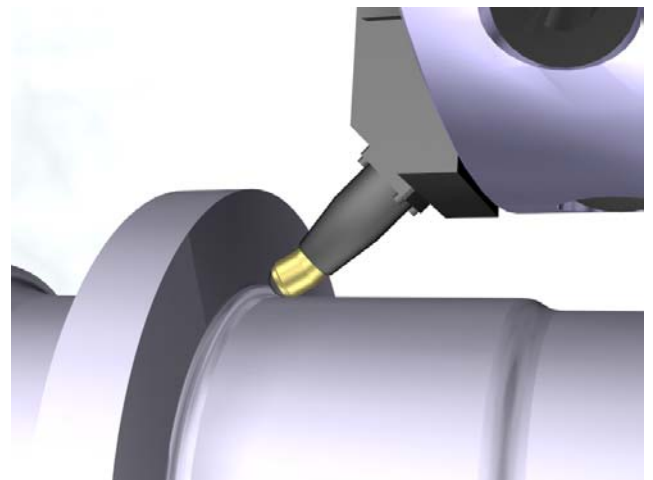


Fig. 7-5: rear axle housing (zone 2)