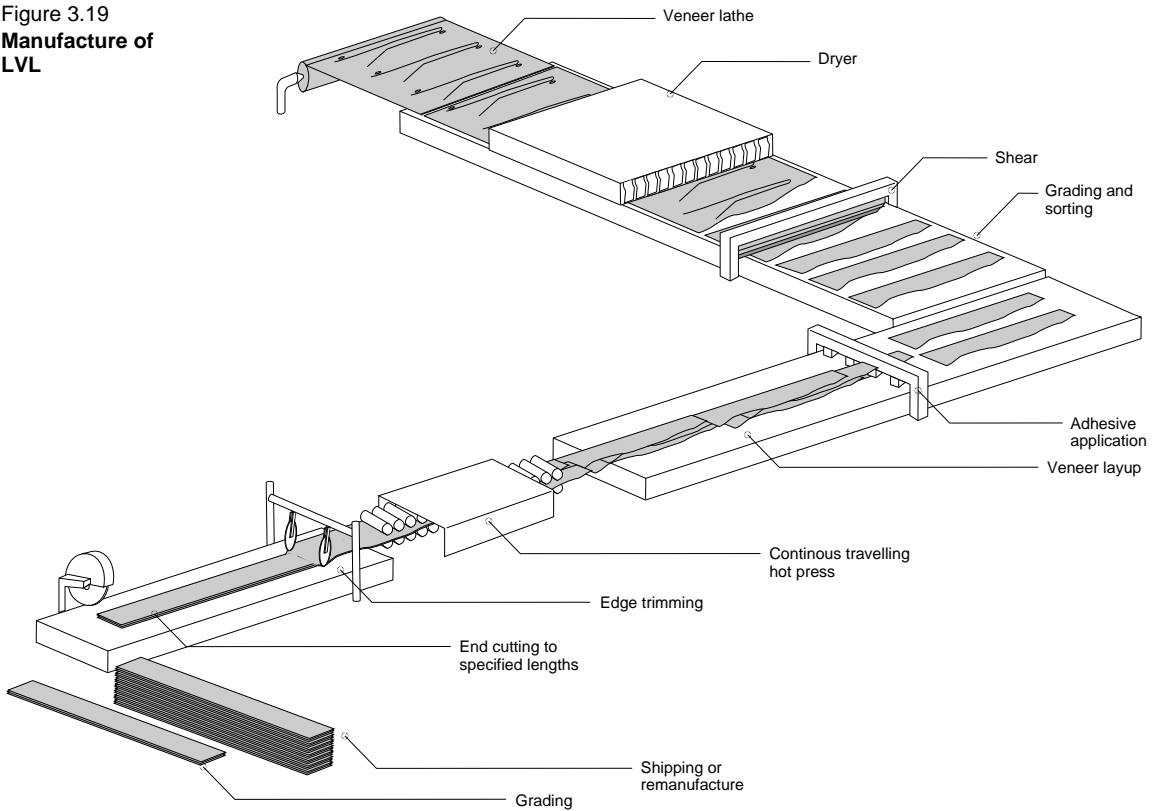


Figure 3.19  
**Manufacture of LVL**



The veneer lengths are coated with a waterproof phenol-formaldehyde resin adhesive. The assembled billets are subjected simultaneously to pressure to consolidate the veneers, and to heat to accelerate curing of the adhesive. Once again, this aspect of the process is similar to that for plywood except that rather than being in a thin flat panel shape, the LVL material is formed into long billets up to 25m (80') in length.

Once cured, the billets are sawn to custom lengths and widths as desired for the product end use.

### Sizes Available

LVL is available in lengths up to 24.4m (80'), while more common lengths are 14.6m (48'), 17m (56'), 18.3m (60') and 20.1m (66').

LVL is manufactured in thicknesses from 19mm (3/4") to 64mm (2-1/2"). One manufacturer also offers an 89mm (3-1/2") thickness.

The most common thickness used in construction is 45mm (1-3/4"), from which wider beams can be easily constructed by gun-nailing the plies together on site.

LVL is manufactured in billet widths of 610mm (24") or 1220mm (48"). The desired LVL beam depth may be cut from these billet widths. Commonly used LVL beam depths, as shown in Table 3.15 (→ 170), are 241mm (9-1/2"), 302mm (11-7/8"), 356mm (14"), 406mm (16") and 476mm (18-3/4"). Depths of 140mm (5-1/2"), 184mm (7-1/4") and 610mm (24") are also available.