

§ 9.3 船舶制造的主要工艺流程

船舶制造的特点

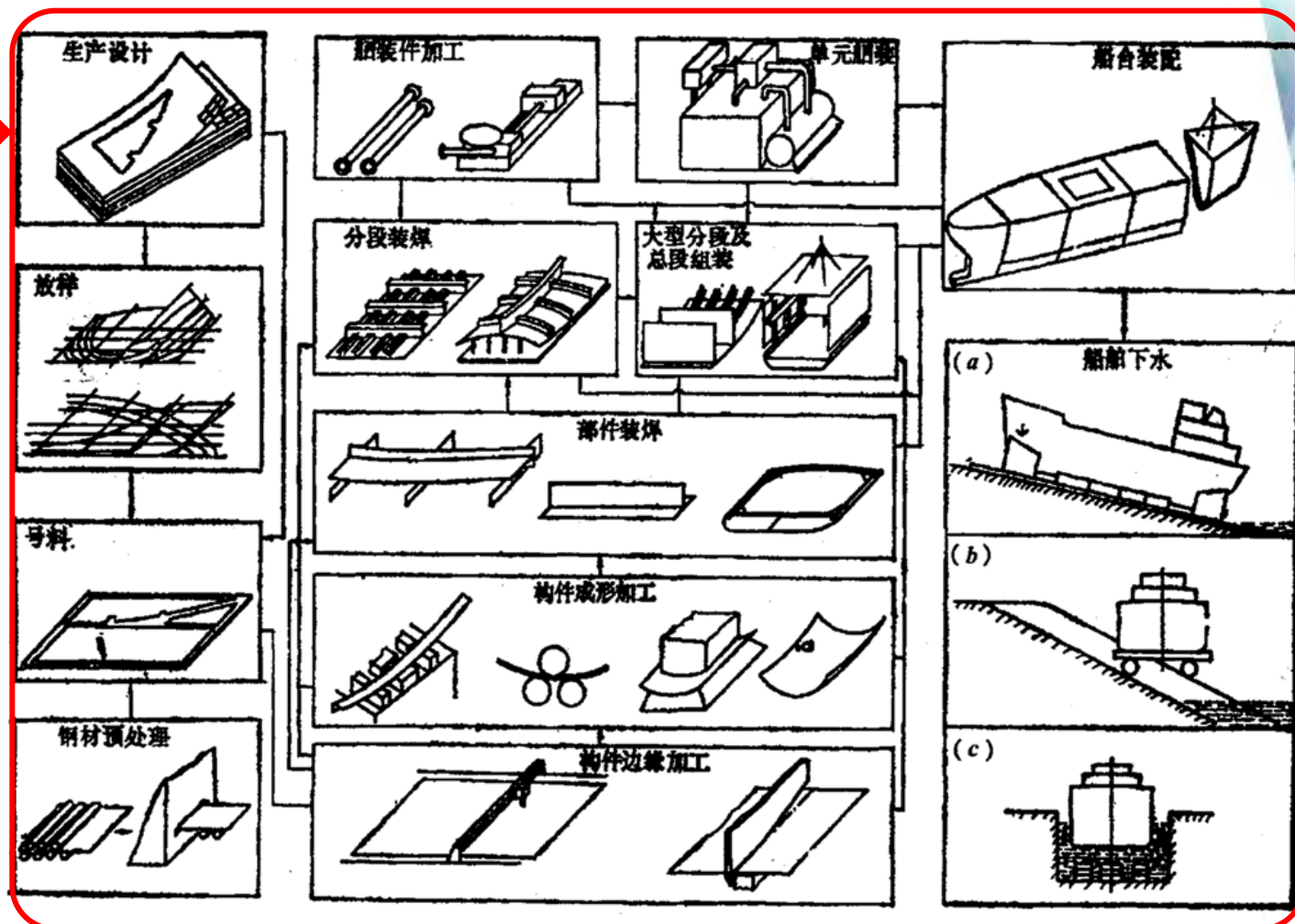
- 涉及广泛的资源环境
- 各种作业的共同参与
- 综合多类技术和工程
- 设计制造管理一体化

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造船技术的内涵

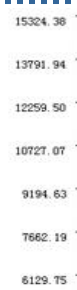
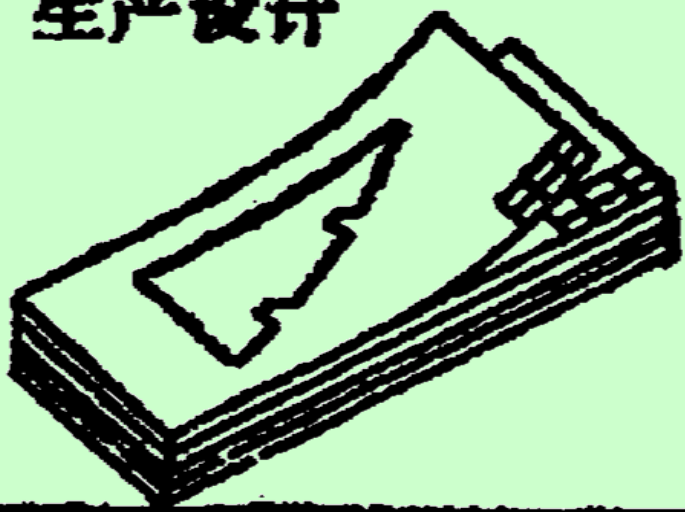
- **生产设计**——计划、工艺、流程、装备、物流、工时
- **制造工艺**——船体建造、舾装工艺、涂装工艺
- **基础设备**——船台、船坞、车间、堆场、吊车、加工设备

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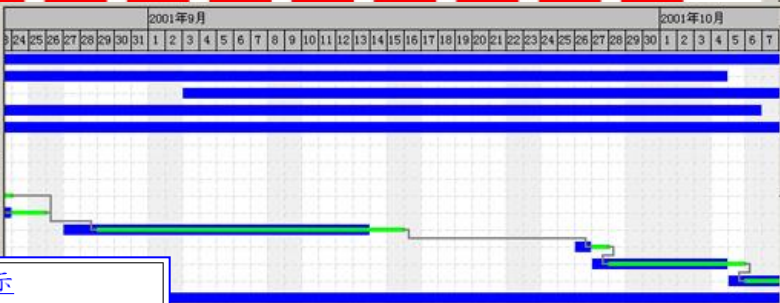


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生产设计

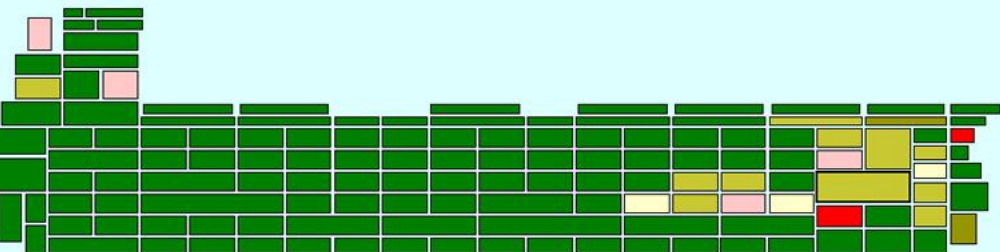
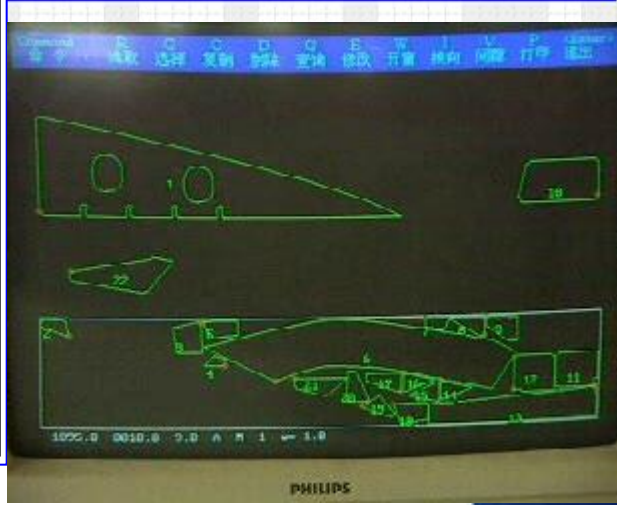
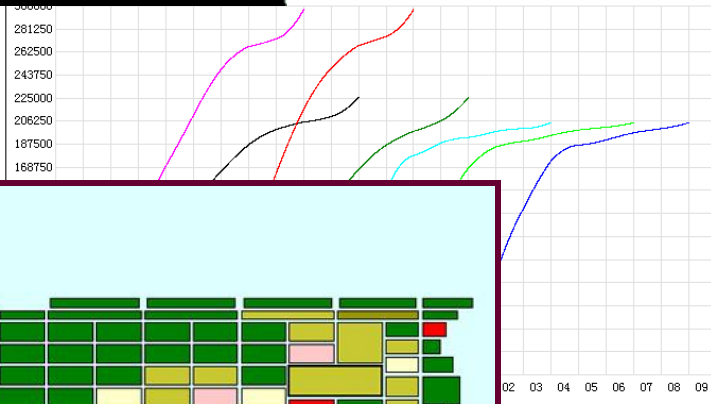


生产对象	阶段
M1290A	
E04FS	
E05FS	
E06FS	
E07FS	
E501	
	分段总组
	分段吊装
	加工
	卸装
	拼装
	分段制造
	分段验收



部 预测工时累计曲线显示

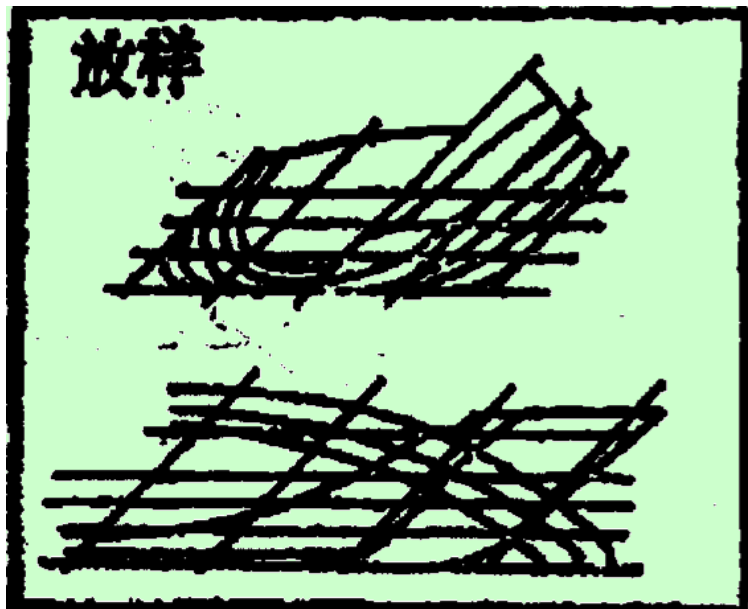
17147EU 4# H1260A 3500 吨客货轮 H1261A 71000吨 1#
74500吨 3# H1279A 74500吨 4#



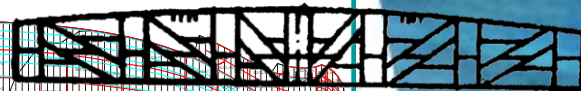
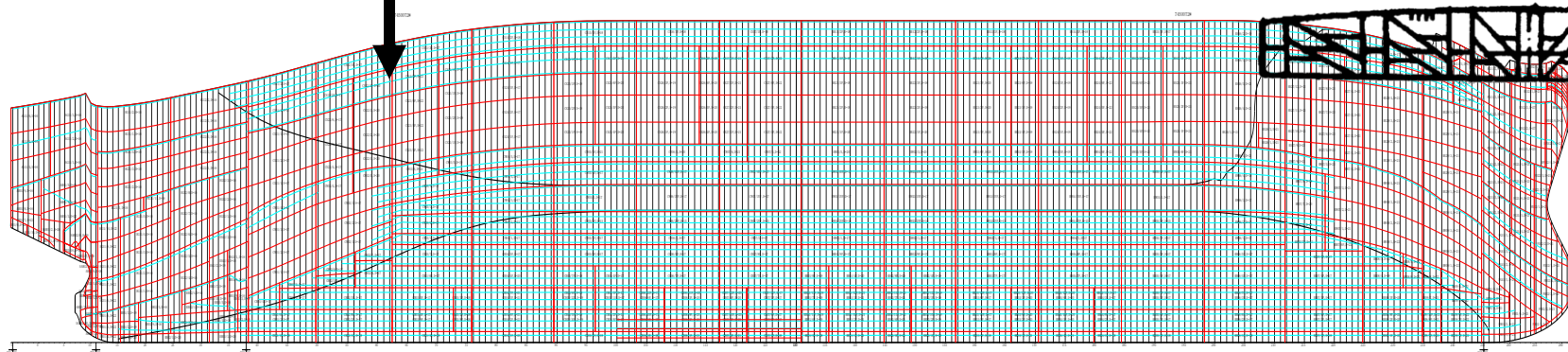
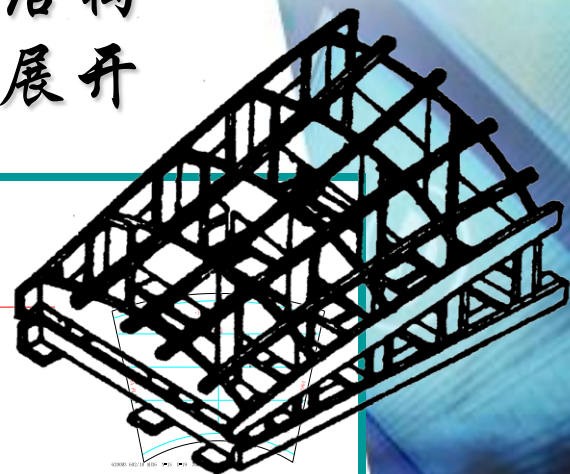
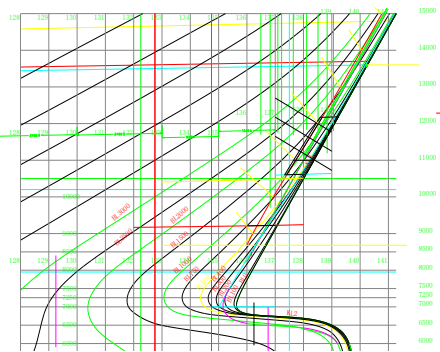
■ 按期完工
 ■ 未到开工期
 ■ 开工脱期, 未到完工期
 ■ 开工, 完工均脱期, 已开工
■ 开工, 完工均脱期
■ 开工, 完工均脱期, 未开工

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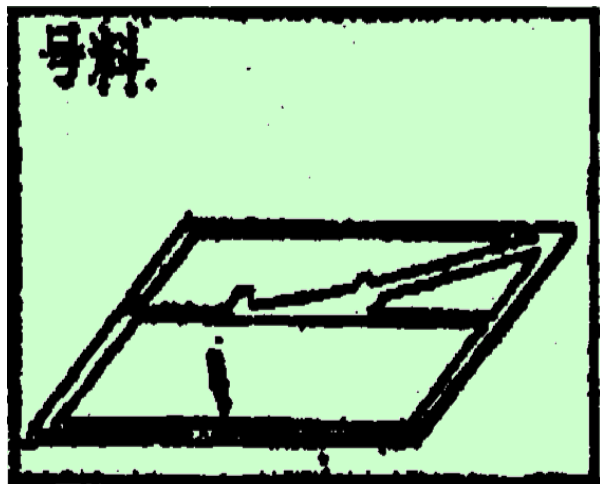
放样



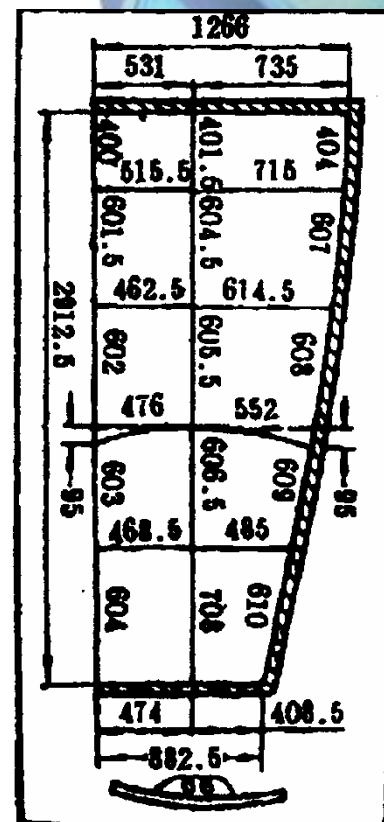
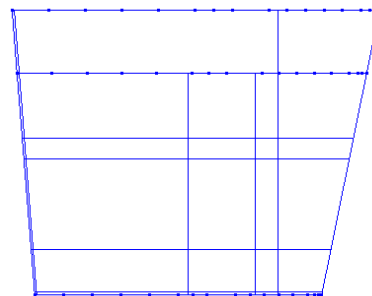
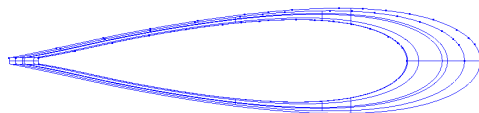
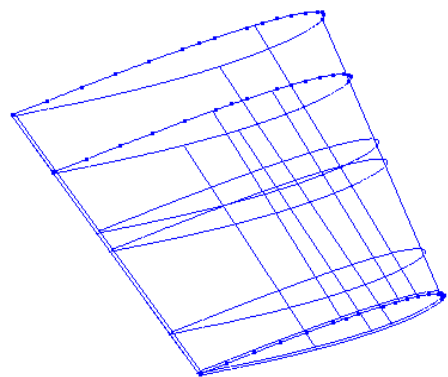
型线光顺、结构
线生成、构件展开



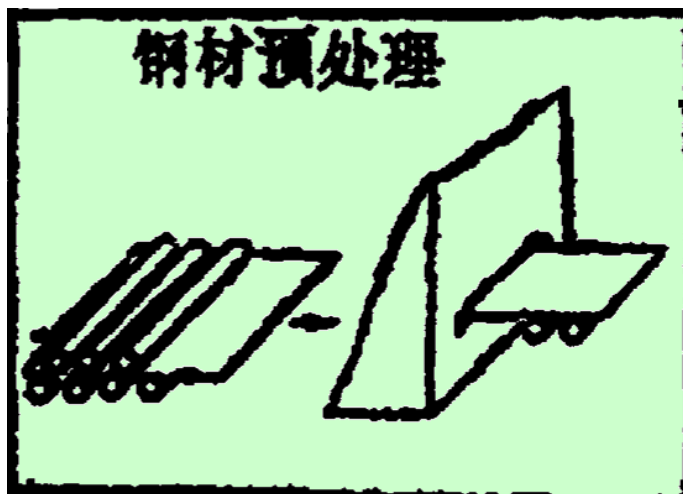
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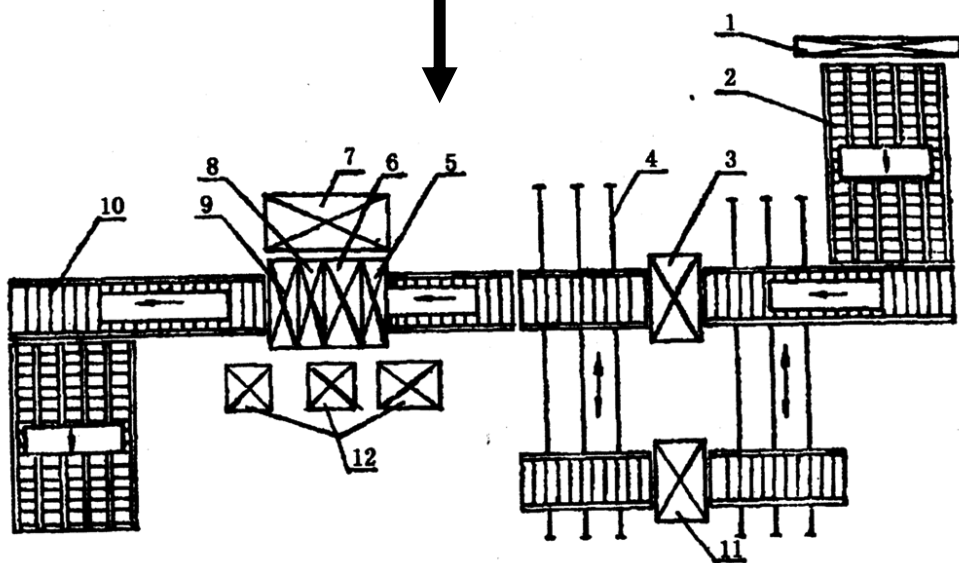
按样棒、样板或草图在钢板或型钢上画出船体构件展开后的真实形状，标注船名、构件名称、加工及装配符号等



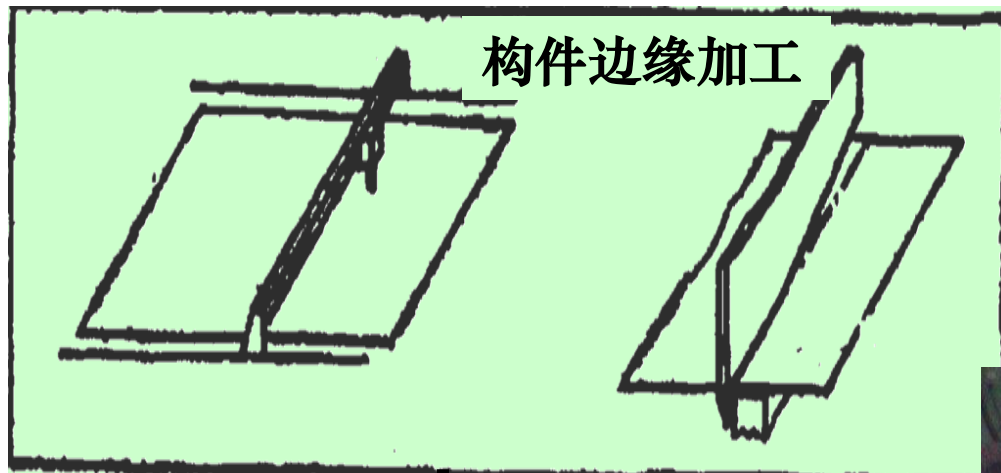
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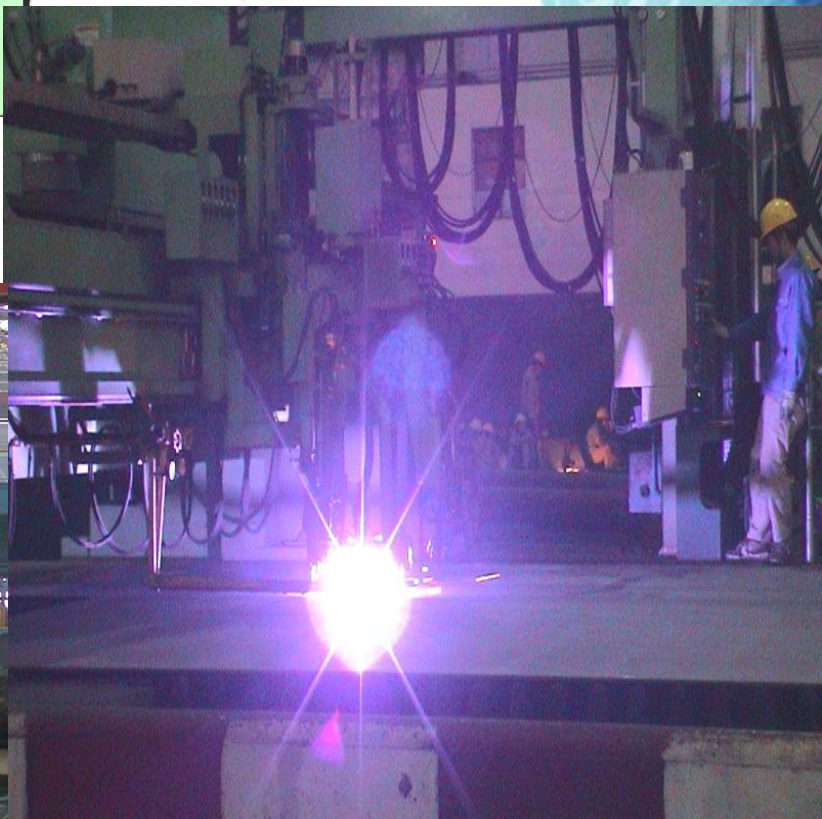
钢材矫正
钢材表面清理
防护处理



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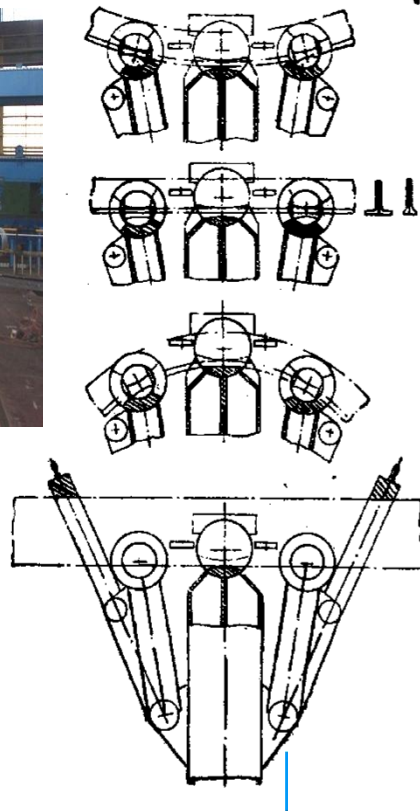
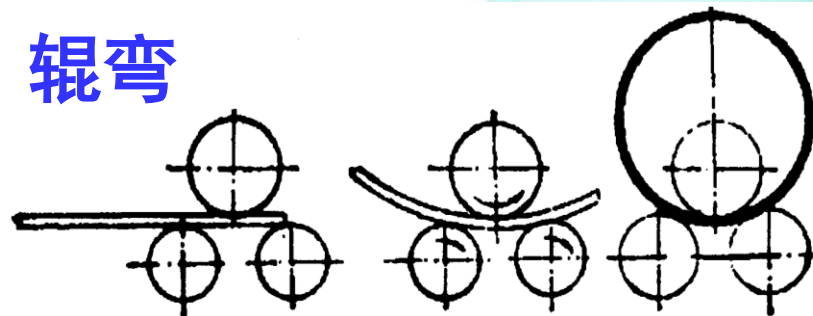
→ 直边切割
曲边切割
坡口



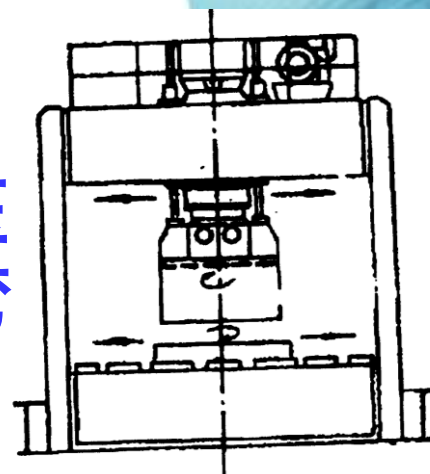
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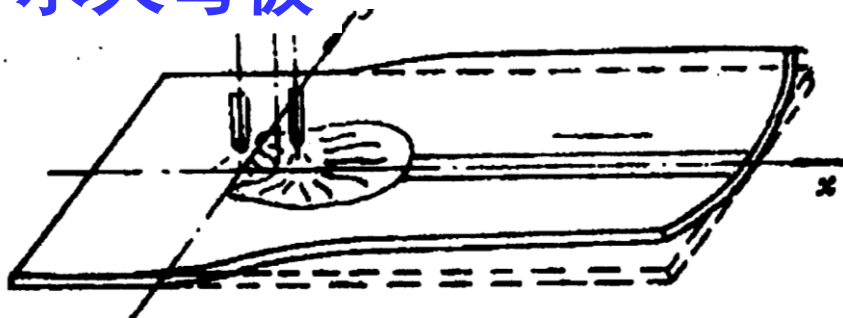
辊弯



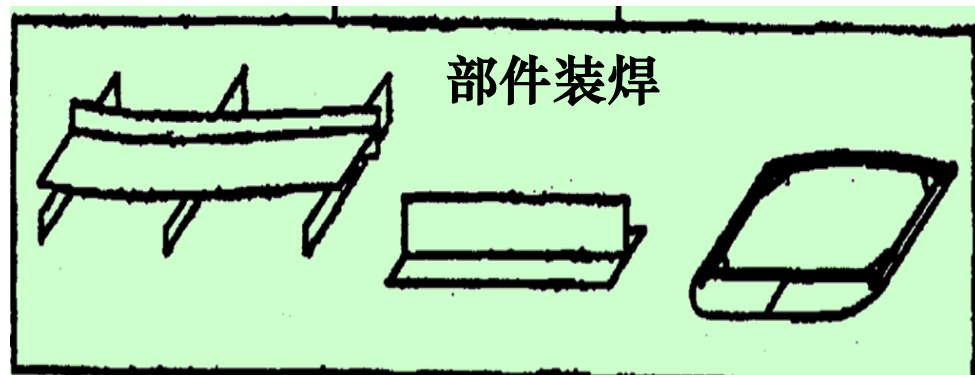
压弯



水火弯板



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俗称小合拢
小组立

