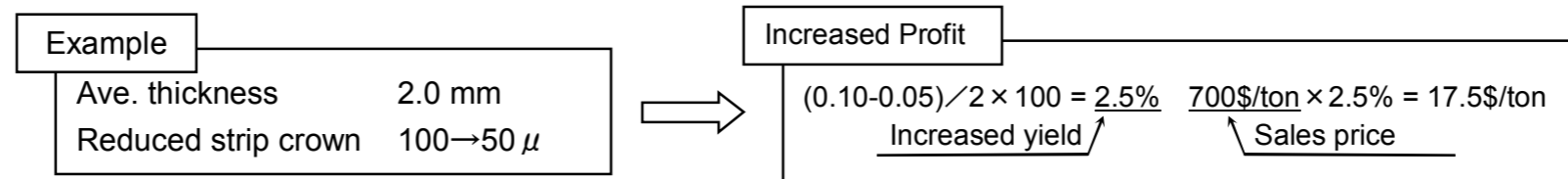


1. Why the reduction technology of strip crown is important ?

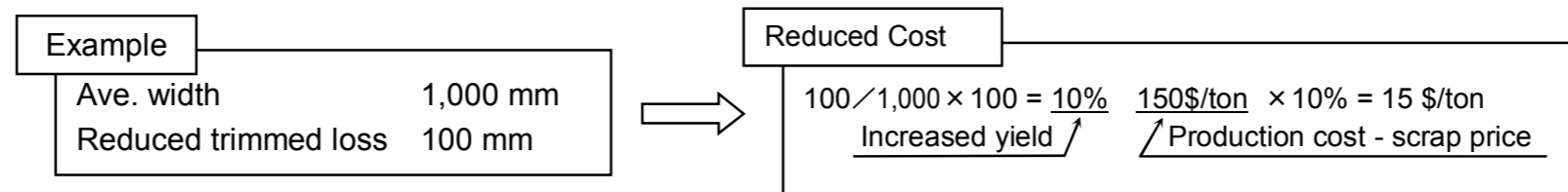
Background 1 : Reduced cost by decreased loss and/or Increased quality competitiveness

Background 2 : Recent trend of automotive industries to demand tight thickness tolerance (small strip crown) for high tensile steel

CASE 1 : If pricing by length assuring minimum thickness



CASE 2 : Reduced trimmed edge for steels with extra small thickness tolerance and/or crown



CASE 3 : Better product yield at customer's plant ⇒ Increased quality competitiveness

2. Reduced strip crown without new investment and/or with new investment

Without new investment

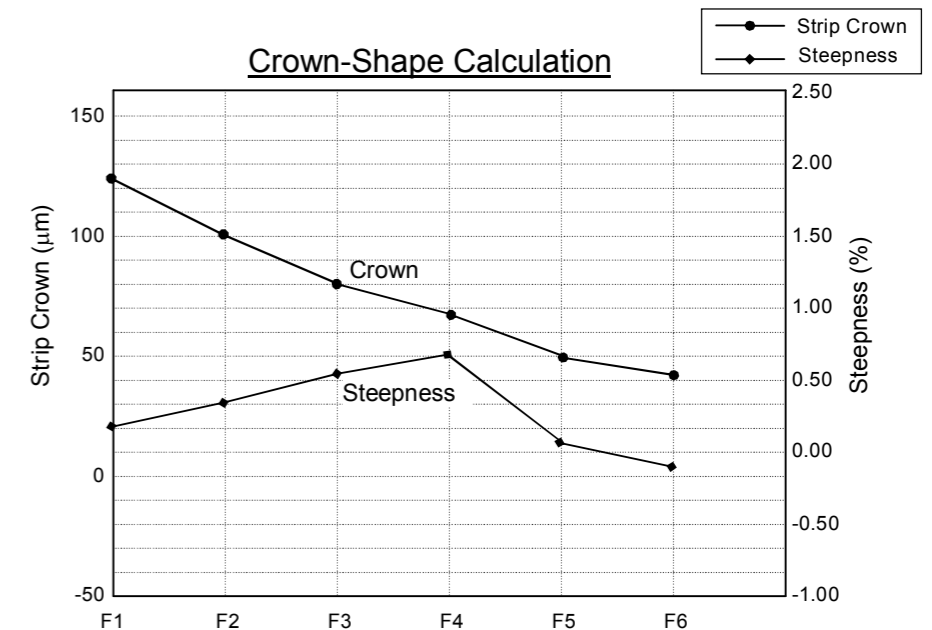
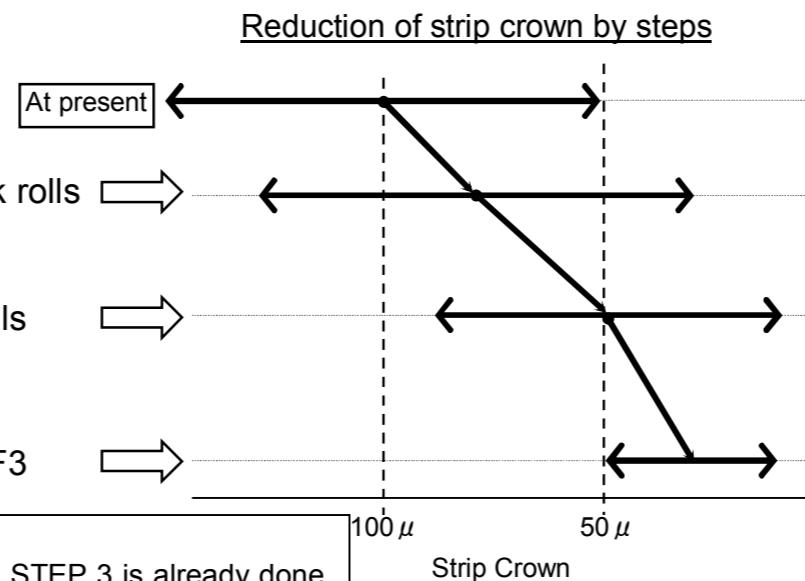
STEP 1 : Adoption of optimum crown line-up of work rolls by Crown-Shape Calculation ⇒

STEP 2 : Adoption of taper crown line-up of work rolls ⇒

With new investment

STEP 3 : Installation of WR shift in stands F2 and F3 ⇒

* Special WR curve such as CVC and so on
 * If your mill already has WR shift more than 2 stands, STEP 3 is already done.
 Stable operation can be achieved by Crown-Shape calculation.



3. Special approach

If there are some specified ordered material with small crown tolerance, special roll crown line-up and rolling method can be adopted.